

2000 EMERGENCY RESPONSE GUIDEBOOK



A GUIDEBOOK FOR FIRST RESPONDERS
DURING THE INITIAL PHASE OF A
DANGEROUS GOODS/HAZARDOUS MATERIALS INCIDENT

SHIPPING DOCUMENTS (PAPERS)*

The shipping document provides vital information when responding to a hazardous materials/dangerous goods** incident. The shipping document contains information needed to identify the materials involved. Use this information to initiate protective actions for your own safety and the safety of the public. The shipping document contains the proper shipping name (see blue-bordered pages), the hazard class or division of the material(s), ID number (see yellow-bordered pages), and, where appropriate, the Packing Group. In addition, there must be information available that describes the hazards of the material which can be used in the mitigation of an incident. The information must be entered on or be with the shipping document. This requirement may be satisfied by attaching a guide from the ERG2000 to the shipping document, or by having the entire guidebook available for ready reference. Shipping documents are required for most dangerous goods in transportation. Shipping documents are kept in

- the cab of the motor vehicle,
- the possession of the train crew member,
- a holder on the bridge of a vessel, or
- an aircraft pilot's possession.

EMERGENCY CONTACT 1-000-000-0000		EXAMPLE OF EMERGENCY RESPONSE TELEPHONE NUMBER	
NO. & TYPE OF PACKAGES	DESCRIPTION OF ARTICLES	HAZARD CLASS OR DIVISION NO.	QUANTITY
1 TANK TRUCK	ISOPROPANOL	3 UN1219 II	3,000 LITERS
	SHIPPING NAME	ID NUMBER	PACKING GROUP

EXAMPLE OF PLACARD AND PANEL WITH ID NUMBER

The 4-digit ID Number may be shown on the diamond-shaped placard or on an adjacent orange panel displayed on the ends and sides of a cargo tank, vehicle or rail car.



A Numbered
Placard

or

A Placard
and an
Orange Panel



1219

* For the purposes of this book, the terms shipping document/shipping paper are synonymous.

** For the purposes of this book, the terms hazardous materials/dangerous goods are synonymous.

RESIST RUSHING IN !
APPROACH INCIDENT FROM UPWIND
STAY CLEAR OF ALL SPILLS, VAPORS, FUMES AND SMOKE

**HOW TO USE THIS GUIDEBOOK DURING AN INCIDENT INVOLVING
DANGEROUS GOODS**

- ONE** **IDENTIFY THE MATERIAL** BY FINDING ANY **ONE** OF THE FOLLOWING:
- THE 4-DIGIT ID NUMBER ON A PLACARD OR ORANGE PANEL
 - THE 4-DIGIT ID NUMBER (after UN/NA) ON A SHIPPING DOCUMENT OR PACKAGE
 - THE NAME OF THE MATERIAL ON A SHIPPING DOCUMENT, PLACARD OR PACKAGE
- IF AN **ID NUMBER** OR THE **NAME OF THE MATERIAL** CANNOT BE FOUND, SKIP TO THE NOTES BELOW.
- TWO** **LOOK UP THE MATERIAL'S 3-DIGIT GUIDE NUMBER** IN EITHER:
- THE ID NUMBER INDEX..(the yellow-bordered pages of the guidebook)
 - THE NAME OF MATERIAL INDEX..(the blue-bordered pages of the guidebook)
- If the guide number is supplemented with the letter "P", it indicates that the material may undergo violent polymerization if subjected to heat or contamination.
- If the index entry is highlighted (in either yellow or blue), it is a TIH (Toxic Inhalation Hazard) material or a Dangerous Water Reactive Material (produces toxic gas upon contact with water). **LOOK FOR THE ID NUMBER AND NAME OF THE MATERIAL** IN THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES (the green-bordered pages). Then, if necessary, **BEGIN PROTECTIVE ACTIONS IMMEDIATELY** (see Protective Actions on page 314). If protective action is not required, use the information jointly with the 3-digit guide.
- USE GUIDE 112 FOR ALL EXPLOSIVES EXCEPT FOR EXPLOSIVES 1.4 (EXPLOSIVES C) WHERE GUIDE 114 IS TO BE CONSULTED.**
- THREE** **TURN TO THE NUMBERED GUIDE** (the orange-bordered pages) **AND READ CAREFULLY.**
- NOTES** **IF A NUMBERED GUIDE CANNOT BE OBTAINED BY FOLLOWING THE ABOVE STEPS,** AND A PLACARD CAN BE SEEN, LOCATE THE PLACARD IN THE TABLE OF PLACARDS (pages 16-17), THEN GO TO THE 3-DIGIT GUIDE SHOWN NEXT TO THE SAMPLE PLACARD.

IF A REFERENCE TO A GUIDE CANNOT BE FOUND AND THIS INCIDENT IS BELIEVED TO INVOLVE DANGEROUS GOODS, TURN TO **GUIDE 111** NOW, AND USE IT UNTIL ADDITIONAL INFORMATION BECOMES AVAILABLE. If the shipping document lists an emergency response telephone number, call that number. If the shipping document is not available, or no emergency response telephone number is listed, **IMMEDIATELY CALL** the appropriate **emergency response agency listed on the inside back cover of this guidebook.** Provide as much information as possible, such as the name of the carrier (trucking company or railroad) and vehicle number. AS A LAST RESORT, CONSULT THE TABLE OF RAIL CAR AND ROAD TRAILER IDENTIFICATION CHART (pages 18-19). IF THE CONTAINER CAN BE IDENTIFIED, REMEMBER THAT THE INFORMATION ASSOCIATED WITH THESE CONTAINERS IS FOR THE WORST CASE POSSIBLE.

ERG2000 USER'S GUIDE

The 2000 Emergency Response Guidebook (ERG2000) was developed jointly by Transport Canada (TC), the U.S. Department of Transportation (DOT) and the Secretariat of Transport and Communications of Mexico (SCT) for use by fire fighters, police, and other emergency services personnel who may be the first to arrive at the scene of a transportation incident involving dangerous goods. **It is primarily a guide to aid first responders in quickly identifying the specific or generic hazards of the material(s) involved in the incident, and protecting themselves and the general public during the initial response phase of the incident.** For the purposes of this guidebook, the "initial response phase" is that period following arrival at the scene of an incident during which the presence and/or identification of dangerous goods is confirmed, protective actions and area securement are initiated, and assistance of qualified personnel is requested. It is not intended to provide information on the physical or chemical properties of dangerous goods.

This guidebook will assist responders in making initial decisions upon arriving at the scene of a dangerous goods incident. It should not be considered as a substitute for emergency response training, knowledge or sound judgment. ERG2000 does not address all possible circumstances that may be associated with a dangerous goods incident. It is primarily designed for use at a dangerous goods incident occurring on a highway or railroad. Be mindful that there may be limited value in its application at fixed facility locations.

ERG2000 incorporates dangerous goods lists from the most recent United Nations Recommendations as well as from other international and national regulations. Explosives are not listed individually by either proper shipping name or ID Number. They do, however, appear under the general heading "Explosives" on the first page of the ID Number index (yellow-bordered pages) and alphabetically in the Name of Material index (blue-bordered pages). Also, the letter "**P**" following the guide number in the yellow-bordered and blue-bordered pages identifies those materials which present a polymerization hazard under certain conditions; for example, Acrolein, inhibited, Guide **131P**.

First responders at the scene of a dangerous goods incident should seek additional specific information about any material in question as soon as possible. The information received by contacting the appropriate emergency response agency, the emergency response number on the shipping document, or by consulting the information on or accompanying the shipping document, may be more specific and accurate than this guidebook in providing guidance for the materials involved.

BECOME FAMILIAR WITH THIS GUIDEBOOK BEFORE USING IT DURING AN EMERGENCY! In the U.S., according to the requirements of the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA, 29 CFR 1910.120), and regulations issued by the U.S. Environmental Protection Agency (EPA, 40 CFR Part 311), first responders must be trained regarding the use of this guidebook.

GUIDEBOOK CONTENTS

1-Yellow-bordered pages: Index list of dangerous goods in numerical order of ID number. This section quickly identifies the guide to be consulted from the ID Number of the material involved. This list displays the 4-digit ID number of the material followed by its assigned emergency response guide and the material name.

For example:	ID No.	Guide No.	Name of Material
	1090	127	Acetone

2-Blue-bordered pages: Index list of dangerous goods in alphabetical order of material name. This section quickly identifies the guide to be consulted from the name of the material involved. This list displays the name of the material followed by its assigned emergency response guide and 4-digit ID number.

For example:	Name of Material	Guide No.	ID No.
	Sulfuric acid	137	1830

3-Orange-bordered pages: This section is the most important section of the guidebook because it is where all safety recommendations are provided. It comprises a total of 62 individual guides, presented in a two-page format. Each guide provides safety recommendations and emergency response information to protect yourself and the public. The left hand page provides safety related information whereas the right hand page provides emergency response guidance and activities for fire situations, spill or leak incidents and first aid. Each guide is designed to cover a group of materials which possess similar chemical and toxicological characteristics.

The guide title identifies the general hazards of the dangerous goods covered.

For example: **Guide 124** - Gases-Toxic and/or Corrosive-Oxidizing.

Each guide is divided into three main sections: the first section describes **potential hazards** that the material may display in terms of fire/explosion and health effects upon exposure. The highest potential is listed first. The emergency responder should consult this section first. This allows the responder to make decisions regarding the protection of the emergency response team as well as the surrounding population.

The second section outlines suggested **public safety** measures based on the situation at hand. It provides general information regarding immediate isolation of the incident site, recommended type of protective clothing and respiratory protection. Suggested evacuation distances are listed for small and large spills and for fire situations (fragmentation hazard). It also directs the reader to consult the tables listing Toxic Inhalation Hazard materials (TIH) and water-reactive materials (green-bordered pages) when the material name is highlighted in the yellow-bordered and blue-bordered pages.

The third section covers **emergency response** actions, including first aid. It outlines special precautions for incidents which involve fire, spill or chemical exposure. Several recommendations are listed under each part which will further assist in the decision making process. The information on first aid is general guidance prior to seeking medical care.

4-Green-bordered pages: This section contains a table which lists, by ID number, TIH materials, including certain chemical warfare agents, and water-reactive materials which produce toxic gases upon contact with water. The table provides two different types of recommended safe distances which are "Initial isolation distances" and "Protective action distances." The materials are highlighted for easy identification in both numeric (yellow-bordered pages) and alphabetic (blue-bordered pages) lists of the guidebook. The table provides distances for both small (approximately 200 liters or less) and large spills (more than 200 liters) for all highlighted materials. The list is further subdivided into daytime and nighttime situations. This is necessary due to varying atmospheric conditions which greatly affect the size of the hazardous area. The distances change from daytime to nighttime due to different mixing and dispersion conditions in the air. During the night, the air is generally calmer and this causes the chemical to disperse less and therefore create a toxicity zone which is greater than would usually occur during the day. During the day, the chemical is generally dispersed by a more active atmosphere. The chemical will be present in a larger area; however, the actual area where toxic levels are reached will be smaller (due to increased dispersion). It is the quantity of the chemical that poses problems not its mere presence.

The "Initial Isolation Distance" is a distance within which all persons should be considered for evacuation in all directions from the actual spill/leak source. It is a distance (radius) which defines a circle (Initial Isolation Zone) within which persons may be exposed to dangerous concentrations upwind of the source and may be exposed to life threatening concentrations downwind of the source. For example, in the case of Compressed gas, toxic, n.o.s., ID No. 1955, Inhalation Hazard Zone A, the isolation distance for small spills is 430 meters, therefore, representing an evacuation circle of 860 meters in diameter.

For the same material, the "Protective Action Distance" is 4.2 kilometers for a daytime incident and 8.4 kilometers for a nighttime incident, these distances represent a downwind distance from the spill/leak source within which Protective Actions could be implemented. Protective Actions are those steps taken to preserve the health and safety of emergency responders and the public. People in this area could be evacuated and/or sheltered in-place. For more information, consult the INTRODUCTION TO THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES (pages 311-312).

What is a TIH?

It is a liquid or a gas which is known to be so toxic to humans as to pose a hazard to health during transportation, or in the absence of adequate data on human toxicity, is presumed to be toxic to humans because when tested on laboratory animals it has an LC50 value of not more than 5000 ppm.

It is important to note that even though the term zone is used, the hazard zones do not represent any actual area or distance. The assignment of the zones is strictly a function of their Lethal Concentration 50 (LC50); for example, TIH Zone A is more toxic than Zone D. All distances which are listed in the green-bordered pages are calculated by the use of mathematical models for each TIH material.

Assignment of hazard zones:

HAZARD ZONE A: LC50 of less than or equal to 200 ppm,

HAZARD ZONE B: LC50 greater than 200 ppm and less than or equal to 1000 ppm,

HAZARD ZONE C: LC50 greater than 1000 ppm and less than or equal to 3000 ppm,

HAZARD ZONE D: LC50 greater than 3000 ppm and less than or equal to 5000 ppm.

ISOLATION AND EVACUATION DISTANCES

Isolation or evacuation distances are shown in the guides (orange-bordered pages) and in the Table of Initial Isolation and Protective Action Distances (green-bordered pages). This may confuse users not thoroughly familiar with ERG2000.

It is important to note that some guides refer to non-TIH materials only (40 guides) and some refer to both TIH and non-TIH materials (22 guides). A guide refers to both TIH and non-TIH materials only when the following sentence appears under the title EVACUATION-SPILLS: "See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under 'PUBLIC SAFETY.'" If this sentence does not appear in the guide, then this particular guide refers to non-TIH materials only.

If you are dealing with a TIH material (highlighted entries in the index lists), the isolation and evacuation distances are found directly in the green-bordered pages. The guides (orange-bordered pages) also remind the user to refer to the green-bordered pages for evacuation specific information involving highlighted materials.

If you are dealing with a non-TIH material but the guide refers to both TIH and non-TIH materials, an immediate isolation distance is provided under the heading PUBLIC SAFETY. It applies to the non-TIH materials only. In addition, for evacuation purposes, the guide informs the user under the title EVACUATION-SPILLS to increase, for non-highlighted substances, in the downwind direction, if necessary, the immediate isolation distance listed under "Public Safety." For example, Guide 124 - Gases-Toxic and/or Corrosive-Oxidizing, instructs the user to: Isolate the spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions. In case of a large spill, the isolation area could be expanded from 100 meters to a distance deemed as safe by the On-scene-commander and emergency responders.

If you are dealing with a non-TIH material and the guide refers only to non-TIH materials, the immediate isolation and evacuation distances are specified as actual distances in the guide (orange-bordered pages) and are not referenced in the green-bordered pages.

SAFETY PRECAUTIONS

APPROACH CAUTIOUSLY FROM UPWIND. Resist the urge to rush in; others cannot be helped until the situation has been fully assessed.

SECURE THE SCENE. Without entering the immediate hazard area, isolate the area and assure the safety of people and the environment, keep people away from the scene and outside the safety perimeter. Allow enough room to move and remove your own equipment.

IDENTIFY THE HAZARDS. Placards, container labels, shipping documents, material safety data sheets, Rail Car and Road Trailer Identification Charts, and/or knowledgeable persons on the scene are valuable information sources. Evaluate all available information and consult the recommended guide to reduce immediate risks. **Additional information, provided by the shipper or obtained from another authoritative source, may change some of the emphasis or details found in the guide.** Remember, the guide provides only the most important and worst case scenario information for the initial response in relation to a family or class of dangerous goods. As more material-specific information becomes available, the response should be tailored to the situation.

ASSESS THE SITUATION. Consider the following:

- Is there a fire, a spill or a leak?
- What are the weather conditions?
- What is the terrain like?
- Who/what is at risk: people, property or the environment?
- What actions should be taken: Is an evacuation necessary? Is diking necessary? What resources (human and equipment) are required and are readily available?
- What can be done immediately?

OBTAIN HELP. Advise your headquarters to notify responsible agencies and call for assistance from qualified personnel.

DECIDE ON SITE ENTRY. Any efforts made to rescue persons, protect property or the environment must be weighed against the possibility that you could become part of the problem. Enter the area only when wearing appropriate protective gear (see PROTECTIVE CLOTHING, page 364).

RESPOND. Respond in an appropriate manner. Establish a command post and lines of communication. Rescue casualties where possible and evacuate if necessary. Maintain control of the site. Continually reassess the situation and modify the response accordingly. The first duty is to consider the safety of people in the immediate area, including your own.

ABOVE ALL – Do not walk into or touch spilled material. Avoid inhalation of fumes, smoke and vapors, even if no dangerous goods are known to be involved. Do not assume that gases or vapors are harmless because of lack of a smell– odorless gases or vapors may be harmful.

WHO TO CALL FOR ASSISTANCE

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Follow the steps outlined in your organization's standard operating procedures and/or local emergency response plan for obtaining qualified assistance. Generally, the notification sequence and requests for technical information beyond what is available in this guidebook should occur in the following order:

1. ORGANIZATION/AGENCY

Notify your organization/agency. This will set in motion a series of events based upon the information provided. Actions may range from dispatching additional trained personnel to the scene to activating the local emergency response plan. Ensure that local fire and police departments have been notified.

2. EMERGENCY RESPONSE TELEPHONE NUMBER

Locate and call the telephone number listed on the shipping document. The person answering the phone at the listed emergency response number must be knowledgeable of the materials and mitigation actions to be taken, or must have immediate access to a person who has the required knowledge.

3. NATIONAL ASSISTANCE

Contact the appropriate emergency response agency listed on the inside back cover of this guidebook when the emergency response telephone number is not available. Upon receipt of a call describing the nature of the incident, the agency will provide immediate advice on handling the early stages of the incident. The agency will also contact the shipper or manufacturer of the material for more detailed information and request on-scene assistance when necessary.

Collect and provide as much of the following information as can safely be obtained to your chain-of-command and specialists contacted for technical guidance:

- Your name, call back telephone number, FAX number
- Location and nature of problem (spill, fire, etc.)
- Name and identification number of material(s) involved
- Shipper/consignee/point of origin
- Carrier name, rail car or truck number
- Container type and size
- Quantity of material transported/released
- Local conditions (weather, terrain, proximity to schools, hospitals, waterways, etc.)
- Injuries and exposures
- Local emergency services that have been notified

CANADA

1. **CANUTEC**

CANUTEC is the **Canadian Transport Emergency Centre** operated by the Transport Dangerous Goods Directorate of Transport Canada.

CANUTEC provides a national bilingual (French and English) advisory service and is staffed by professional chemists experienced and trained in interpreting technical information and providing emergency response advice.

**In an emergency, CANUTEC may be called collect at
613-996-6666 (24 hours)
*666 cellular (Press Star 666, Canada only)**

In a non-emergency situation, please call the information line at 613-992-4624 (24 hours).

2. **PROVINCIAL AGENCIES**

Although technical information and emergency response assistance can be obtained from **CANUTEC**, there are federal and provincial regulations requiring the reporting of dangerous goods incidents to certain authorities.

The following list of provincial agencies is supplied for your convenience.

Province	Emergency Authority and/or Telephone Number
Alberta	Local Police and Provincial Authorities 1-800-272-9600*
British Columbia	Local Police or 1-800-663-3456
Manitoba	Local Police or fire brigade, as appropriate, or 204-945-4888
New Brunswick	Local Police or 1-800-565-1633** or 902-426-6030
Newfoundland	Local Police or 709-772-2083
Northwest Territories	867-920-8130
Nova Scotia	Local Police or 1-800-565-1633** or 902-426-6030
Nunavut	867-920-8130
Ontario	Local Police
Prince Edward Island	Local Police or 1-800-565-1633** or 902-426-6030
Quebec	Local Police
Saskatchewan	Local Police or 1-800-667-7525
Yukon Territory	867-667-7244

* This number is not accessible from outside Alberta.

** This number is not accessible from outside of New Brunswick, Nova Scotia or Prince Edward Island.

NOTE:

1. The appropriate federal agency must be notified in the case of rail, air or marine incidents.
2. The nearest police department must be notified in the case of lost, stolen or misplaced explosives, radioactive materials or infectious substances.
3. **CANUTEC must** be notified in the case of:
 - a. lost, stolen or misplaced infectious substances;
 - b. an incident involving infectious substances;
 - c. an incident where the shipping documents display **CANUTEC's** telephone number 613-996-6666 as the emergency telephone number; or
 - d. a dangerous goods incident in which a railway vehicle is involved.

UNITED STATES

1. **CHEMTREC®**, a 24-hour emergency response communication service, can be reached as follows:

CALL **CHEMTREC®** (24 hours)
1-800-424-9300
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
For calls originating elsewhere:
703-527-3887 (Collect calls are accepted)
or

2. **CHEM-TEL, INC.**, a 24-hour emergency response communication service, can be reached as follows:

CALL **CHEM-TEL, INC.** (24 hours)
1-800-255-3924
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
For calls originating elsewhere:
813-248-0585 (Collect calls are accepted)
or

3. **INFOTRAC**, a 24-hour emergency response communication service, can be reached as follows:

CALL **INFOTRAC** (24 hours)
1-800-535-5053
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
For calls originating elsewhere:
352-323-3500 (Collect calls are accepted)
or

4. **3E COMPANY**, a 24-hour emergency response communication service, can be reached as follows:

CALL **3E COMPANY** (24 hours)
1-800-451-8346
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
For calls originating elsewhere:
760-602-8703 (Collect calls are accepted)

The emergency response information services shown above have requested to be listed as providers of emergency response information and have agreed to provide emergency response information to all callers. They maintain periodically updated lists of state and Federal radiation authorities who provide information and technical assistance on handling incidents involving radioactive materials.

5. **NATIONAL RESPONSE CENTER (NRC)**

The NRC, which is operated by the U.S. Coast Guard, receives reports required when dangerous goods and hazardous substances are spilled. After receiving notification of an incident, the NRC will immediately notify the appropriate Federal On-Scene Coordinator and concerned Federal agencies. Federal law requires that anyone who releases into the environment a reportable quantity of a hazardous substance (including oil when water is, or may be affected) or a material identified as a marine pollutant, must **immediately** notify the NRC. When in doubt as to whether the amount released equals the required reporting levels for these materials, the NRC should be notified.

CALL **NRC** (24 hours)

1-800-424-8802

(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)

202-267-2675 in the District of Columbia

Calling the emergency response telephone number, CHEMTREC®, CHEM-TEL, INC., INFOTRAC or 3E COMPANY, does not constitute compliance with regulatory requirements to call the NRC.

6. **MILITARY SHIPMENTS**

For assistance at incidents involving materials being shipped by, for, or to the Department of Defense (DOD), call one of the following numbers (24 hours):

703-697-0218 (call collect) (U.S. Army Operations Center) for incidents involving explosives and ammunition.

1-800-851-8061 (toll free in the U.S.) (Defense Logistics Agency) for incidents involving dangerous goods other than explosives and ammunition.

The above numbers are for **emergencies** only.

MEXICO

1. **SETIQ** (Emergency Transportation System for the Chemical Industry), a service of the National Association of Chemical Industries (ANIQ), can be reached as follows:

Call **SETIQ** (24 hours)
01-800-00-214-00 in the Mexican Republic
For calls originating in Mexico City and the Metropolitan Area
5559-1588
For calls originating elsewhere, call
0-11-52-5-559-1588

2. **CECOM**, the National Center for Communications of the Civil Protection Agency, can be reached as follows:

CALL **CECOM** (24 hours)
01-800-00-413-00 in the Mexican Republic
For calls originating in Mexico City and the Metropolitan Area
5550-1496, 5550-1552, 5550-1485, or 5550-4885
For calls originating elsewhere, call
0-11-52-5-550-1496, or 0-11-52-5-550-1552
0-11-52-5-550-1485, or 0-11-52-5-550-4885

HAZARD CLASSIFICATION SYSTEM

The hazard class of dangerous goods is indicated either by its class (or division) number or name. For a placard corresponding to the primary hazard class of a material, the hazard class or division number must be displayed in the lower corner of the placard. However, no hazard class or division number may be displayed on a placard representing the subsidiary hazard of a material. For other than Class 7 or the OXYGEN placard, text indicating a hazard (for example, "CORROSIVE") is not required. Text is shown only in the U.S. The hazard class or division number must appear on the shipping document after each shipping name.

Class 1 - Explosives

Division 1.1	Explosives with a mass explosion hazard
Division 1.2	Explosives with a projection hazard
Division 1.3	Explosives with predominantly a fire hazard
Division 1.4	Explosives with no significant blast hazard
Division 1.5	Very insensitive explosives; blasting agents
Division 1.6	Extremely insensitive detonating articles

Class 2 - Gases

Division 2.1	Flammable gases
Division 2.2	Non-flammable, non-toxic* compressed gases
Division 2.3	Gases toxic* by inhalation
Division 2.4	Corrosive gases (Canada)

Class 3 - Flammable liquids (and Combustible liquids [U.S.])

Class 4 - Flammable solids; Spontaneously combustible materials; and Dangerous when wet materials

Division 4.1	Flammable solids
Division 4.2	Spontaneously combustible materials
Division 4.3	Dangerous when wet materials

Class 5 - Oxidizers and Organic peroxides

Division 5.1	Oxidizers
Division 5.2	Organic peroxides

Class 6 - Toxic* materials and Infectious substances

Division 6.1	Toxic* materials
Division 6.2	Infectious substances

Class 7 - Radioactive materials

Class 8 - Corrosive materials

Class 9 - Miscellaneous dangerous goods

Division 9.1	Miscellaneous dangerous goods (Canada)
Division 9.2	Environmentally hazardous substances (Canada)
Division 9.3	Dangerous wastes (Canada)

* The words "poison" or "poisonous" are synonymous with the word "toxic".

NOTES

INTRODUCTION TO THE TABLE OF PLACARDS

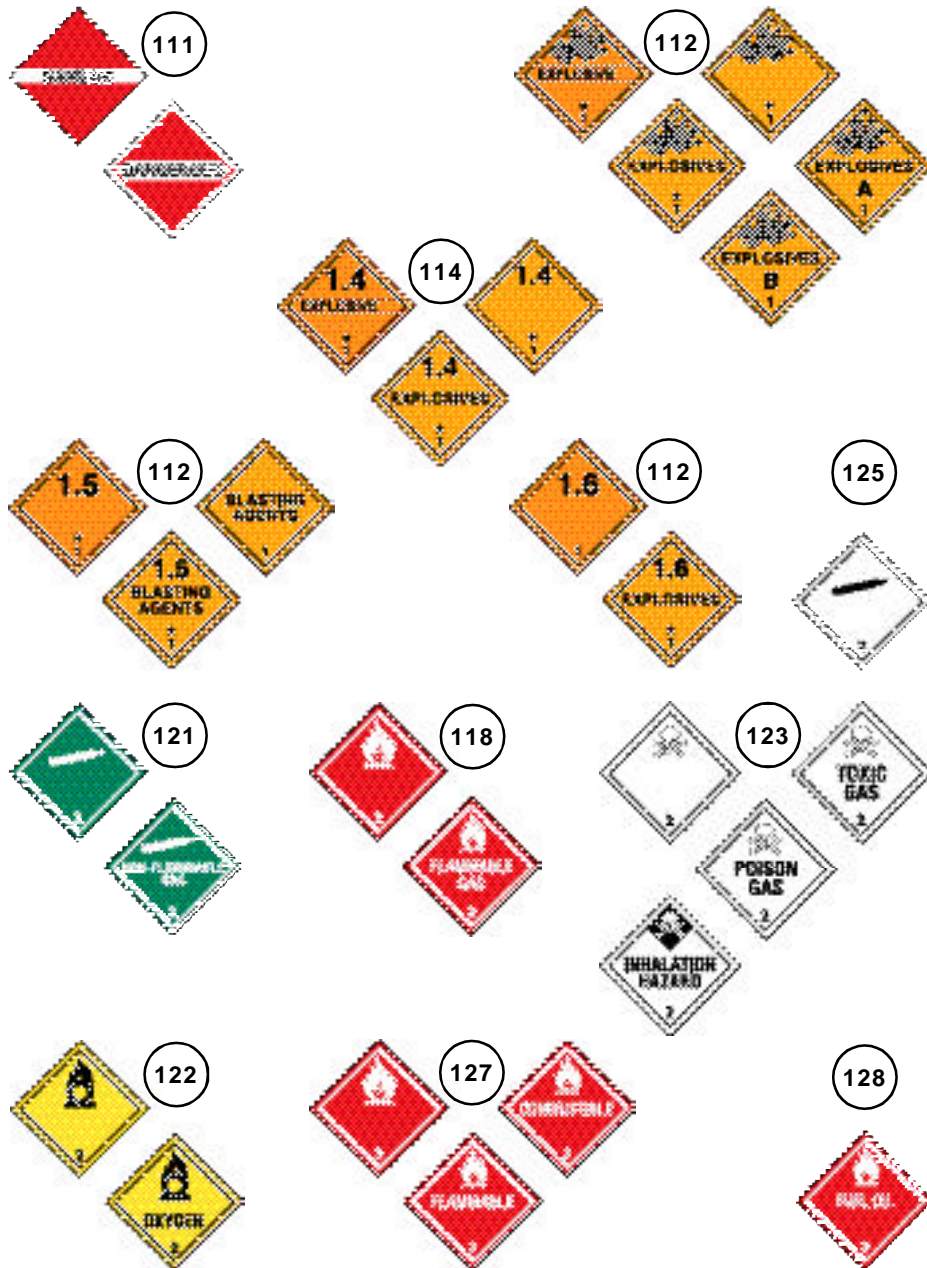
USE THIS TABLE ONLY IF YOU HAVE NOT BEEN ABLE TO IDENTIFY THE MATERIAL(S) IN TRANSPORT BY ID NUMBER OR NAME

The next two pages display the placards used on transport vehicles carrying dangerous goods. As you approach a reported or suspected dangerous goods incident involving a placarded vehicle:

- 1. Approach the incident cautiously from upwind to a point from which you can safely identify and/or read the placard or orange panel information.** If wind direction allows, consider approaching the incident from uphill. Use binoculars, if available.
- 2. Match the vehicle placard(s) with one of the placards displayed on the following pages.**
- 3. Consult the numbered guide associated with the sample placard. Use that information for now.** For example, a FLAMMABLE (Class 3) placard leads to Guide **127**. A CORROSIVE (Class 8) placard leads to Guide **153**. If multiple placards point to more than one guide, initially use the most conservative guide (i.e., the guide requiring the greatest degree of protective actions).
- 4. Remember that the guides associated with the placards provide the most significant risk and/or hazard information.**
- 5. When specific information, such as ID number or shipping name, becomes available, the more specific guide recommended for that material must be consulted.**
- 6. If Guide 111 is being used because only the DANGER/DANGEROUS placard is displayed or the nature of the spilled, leaking, or burning material is not known, as soon as possible, get more specific information concerning the material(s) involved.**
- 7. Asterisks (*) on orange placards represent explosives "Compatibility Group" letters; refer to the Glossary (page 372).**

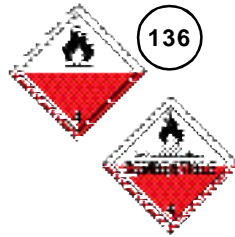
TABLE OF PLACARDS AND INITIAL

USE THIS TABLE ONLY IF MATERIALS CANNOT BE SPECIFICALLY IDENTIFIED BY

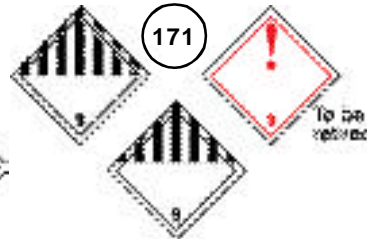
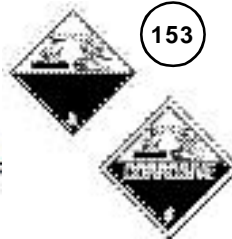
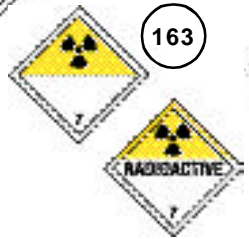


RESPONSE GUIDES TO USE ON-SCENE

USING THE SHIPPING DOCUMENT, NUMBERED PLACARD, OR ORANGE PANEL NUMBER



158



RAIL CAR IDENTIFICATION CHART*



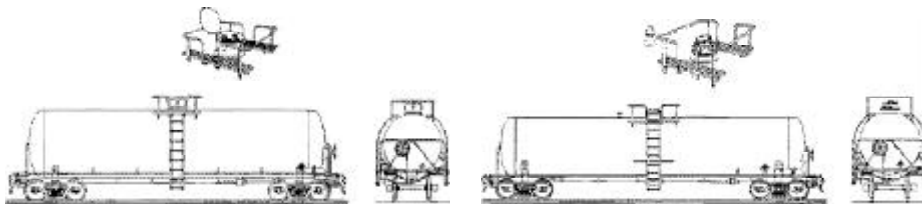
Hopper car
Dry bulk

140



Box car
Mixed cargo

111



Pressurized tank car
Compressed
liquefied gases

117

Low pressure
tank car
Liquids

131



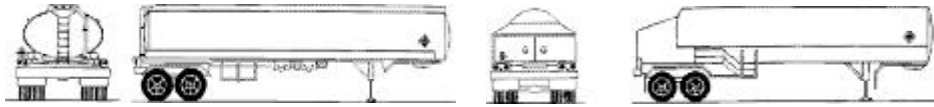
CAUTION: Emergency response personnel must be aware that rail tank cars vary widely in construction, fittings and purpose. Tank cars could transport products that may be solids, liquids or gases. The products may be under pressure. It is essential that products be identified by consulting shipping documents or train consist or contacting dispatch centers before emergency response is initiated.

The information stenciled on the sides or ends of tank cars, as illustrated above, may be used to identify the product utilizing:

- a. the commodity name shown; or
- b. the other information shown, especially reporting marks and car number which, when supplied to a dispatch center, will facilitate the identification of the product.

* The recommended guides should be considered as last resort if product cannot be identified by any other means.

ROAD TRAILER IDENTIFICATION CHART*

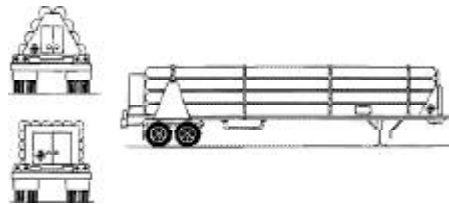


MC306 Nonpressure Liquid Tank (131)

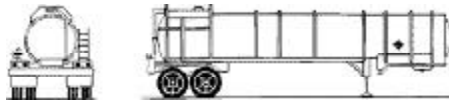
MC-338 Cryogenic Liquid Tank (117)



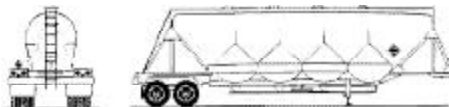
MC307 Low Pressure Chemical Tank (137)



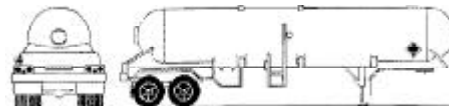
Compressed Gas/Tube Trailer (117)



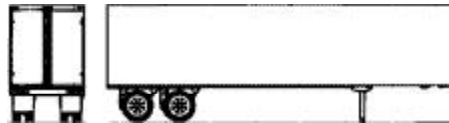
MC-312 Corrosive Liquid Tank (137)



Dry Bulk Cargo Tanker (134)



MC-331 High Pressure Tank (117)



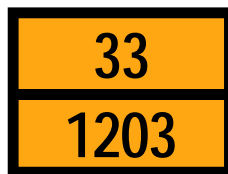
Mixed Cargo (111)

CAUTION: This chart depicts only the most general shapes of road trailers. Emergency response personnel must be aware that there are many variations of road trailers, not illustrated above, that are used for shipping chemical products. The suggested guides are for the most hazardous products that may be transported in these trailer types.

* The recommended guides should be considered as last resort if product cannot be identified by any other means.

HAZARD IDENTIFICATION CODES
DISPLAYED ON SOME INTERMODAL CONTAINERS

Hazard identification codes, referred to as "hazard identification numbers" under European and some South American regulations, may be found in the top half of an orange panel on some intermodal bulk containers. The 4-digit identification number is in the bottom half of the orange panel.



The hazard identification code in the top half of the orange panel consists of two or three figures. In general, the figures indicate the following hazards:

- 2 - EMISSION OF GAS DUE TO PRESSURE OR CHEMICAL REACTION
 - 3 - FLAMMABILITY OF LIQUIDS (VAPORS) AND GASES OR SELF-HEATING LIQUID
 - 4 - FLAMMABILITY OF SOLIDS OR SELF-HEATING SOLID
 - 5 - OXIDIZING (FIRE-INTENSIFYING) EFFECT
 - 6 - TOXICITY OR RISK OF INFECTION
 - 7 - RADIOACTIVITY
 - 8 - CORROSIVITY
 - 9 - RISK OF SPONTANEOUS VIOLENT REACTION
- Doubling of a figure indicates an intensification of that particular hazard (i.e. 33, 66, 88).
 - Where the hazard associated with a material can be adequately indicated by a single figure, the figure is followed by a zero (i.e. 30, 40, 50).
 - A hazard identification code prefixed by the letter "X" indicates that the material will react dangerously with water (i.e. X88).

HAZARD IDENTIFICATION CODES
DISPLAYED ON SOME INTERMODAL CONTAINERS

The hazard identification codes listed below have the following meanings:

20	Inert gas
22	Refrigerated gas
223	Refrigerated gas, flammable
225	Refrigerated gas, oxidizing (fire-intensifying)
23	Flammable gas
236	Flammable gas, toxic
239	Flammable gas which can spontaneously lead to violent reaction
25	Oxidizing (fire-intensifying) gas
26	Toxic gas
263	Toxic gas, flammable
265	Toxic gas, oxidizing (fire-intensifying)
266	Highly toxic gas
268	Toxic gas, corrosive
<hr/>	
30	Flammable liquid
323	Flammable liquid which reacts with water, emitting flammable gas
X323	Flammable liquid which reacts dangerously with water, emitting flammable gas
33	Highly flammable liquid
333	Pyrophoric liquid
X333	Pyrophoric liquid which reacts dangerously with water
336	Highly flammable liquid, toxic
338	Highly flammable liquid, corrosive
X338	Highly flammable liquid, corrosive, which reacts dangerously with water
339	Highly flammable liquid which can spontaneously lead to violent reaction
36	Flammable liquid, toxic, or self-heating liquid, toxic
362	Flammable liquid, toxic, which reacts with water, emitting flammable gas
X362	Flammable liquid, toxic, which reacts dangerously with water, emitting flammable gas
368	Flammable liquid, toxic, corrosive
38	Flammable liquid, corrosive
382	Flammable liquid, corrosive, which reacts with water, emitting flammable gas
X382	Flammable liquid, corrosive, which reacts dangerously with water, emitting flammable gas
39	Flammable liquid which can spontaneously lead to violent reaction
<hr/>	
40	Flammable solid, or self-reactive material, or self-heating material
423	Solid which reacts with water, emitting flammable gas

HAZARD IDENTIFICATION CODES
DISPLAYED ON SOME INTERMODAL CONTAINERS

X423	Flammable solid which reacts dangerously with water, emitting flammable gas
43	Spontaneously flammable (pyrophoric) solid
44	Flammable solid, in the molten state at an elevated temperature
446	Flammable solid, toxic, in the molten state at an elevated temperature
46	Flammable solid, toxic, or self-heating solid, toxic
462	Toxic solid which reacts with water, emitting flammable gas
X462	Solid which reacts with water, emitting toxic gas
48	Flammable or self-heating solid, corrosive
482	Corrosive solid which reacts with water, emitting flammable gas
X482	Solid which reacts dangerously with water, emitting corrosive gas
<hr/>	
50	Oxidizing (fire-intensifying) substance
539	Flammable organic peroxide
55	Strongly oxidizing (fire-intensifying) substance
556	Strongly oxidizing (fire-intensifying) substance, toxic
558	Strongly oxidizing (fire-intensifying) substance, corrosive
559	Strongly oxidizing (fire-intensifying) substance which can spontaneously lead to violent reaction
56	Oxidizing (fire-intensifying) substance, toxic
568	Oxidizing (fire-intensifying) substance, toxic, corrosive
58	Oxidizing (fire-intensifying) substance, corrosive
59	Oxidizing (fire intensifying) substance which can spontaneously lead to violent reaction
<hr/>	
60	Toxic material
606	Infectious substance
623	Toxic liquid which reacts with water, emitting flammable gas
63	Toxic liquid, flammable
638	Toxic liquid, flammable, corrosive
639	Toxic liquid, flammable, which can spontaneously lead to violent reaction
64	Toxic solid, flammable or self-heating
642	Toxic solid which reacts with water, emitting flammable gas
65	Toxic material, oxidizing (fire-intensifying)
66	Highly toxic material
663	Highly toxic liquid, flammable
664	Highly toxic solid, flammable or self-heating
665	Highly toxic material, oxidizing (fire-intensifying)
668	Highly toxic material, corrosive

HAZARD IDENTIFICATION CODES
DISPLAYED ON SOME INTERMODAL CONTAINERS

669	Highly toxic material which can spontaneously lead to violent reaction
68	Toxic material, corrosive
69	Toxic material which can spontaneously lead to violent reaction
<hr/>	
70	Radioactive material
72	Radioactive gas
723	Radioactive gas, flammable
73	Radioactive liquid, flammable
74	Radioactive solid, flammable
75	Radioactive material, oxidizing (fire-intensifying)
76	Radioactive material, toxic
78	Radioactive material, corrosive
<hr/>	
80	Corrosive material
X80	Corrosive material which reacts dangerously with water
823	Corrosive liquid which reacts with water, emitting flammable gas
83	Corrosive liquid, flammable
X83	Corrosive liquid, flammable, which reacts dangerously with water
839	Corrosive liquid, flammable, which can spontaneously lead to violent reaction
X839	Corrosive liquid, flammable, which can spontaneously lead to violent reaction and which reacts dangerously with water
84	Corrosive solid, flammable or self-heating
842	Corrosive solid which reacts with water, emitting flammable gas
85	Corrosive material, oxidizing (fire-intensifying)
856	Corrosive material, oxidizing and toxic
86	Corrosive material, toxic
88	Highly corrosive material
X88	Highly corrosive material which reacts dangerously with water
883	Highly corrosive liquid, flammable
884	Highly corrosive solid, flammable or self-heating
885	Highly corrosive material, oxidizing (fire-intensifying)
886	Highly corrosive material, toxic
X886	Highly corrosive material, toxic, which reacts dangerously with water
89	Corrosive material which can spontaneously lead to violent reaction
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90	Miscellaneous dangerous substance; environmentally hazardous substance
99	Miscellaneous dangerous substance transported at elevated temperature

Note: If an entry is highlighted in either the yellow-bordered or blue-bordered pages AND THERE IS NO FIRE, go directly to the Table of Initial Isolation and Protective Action Distances (green-bordered pages) and look up the ID number and name of material to obtain initial isolation and protective action distances. IF THERE IS A FIRE, or IF A FIRE IS INVOLVED, go directly to the appropriate guide (orange-bordered pages) and use the evacuation information shown under PUBLIC SAFETY.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
--	112	Ammonium nitrate-fuel oil mixtures	--	159	Methylbromoacetone
--	158	Biological agents	--	135	p-Nitrosodiethylaniline
--	112	Blasting agent, n.o.s.	--	171	Plastic molding material
--	171	Cargo transport unit under fumigation	--	171P	Polymerizable material, stabilized with dry ice
--	154	Chemical kits (containing corrosive substances)	--	153	Toxins
--	128	Chemical kits (containing flammable liquids)	--	133	Wool waste, wet
--	133	Chemical kits (containing flammable solids)	1001	116	Acetylene
--	140	Chemical kits (containing oxidizing substances)	1001	116	Acetylene, dissolved
--	153	Chemical kits (containing poisonous liquids)	1002	122	Air, compressed
--	154	Chemical kits (containing poisonous solids)	1003	122	Air, refrigerated liquid (cryogenic liquid)
--	153	Chemical kits (containing toxic liquids)	1003	122	Air, refrigerated liquid (cryogenic liquid), non-pressurized
--	154	Chemical kits (containing toxic solids)	1005	125	Ammonia, anhydrous
--	129	1-Chloroheptane	1005	125	Ammonia, anhydrous, liquefied
--	129	1-Chlorohexane	1005	125	Ammonia solution, with more than 50% Ammonia
--	152	m-Dichlorobenzene	1005	125	Anhydrous ammonia
--	136	p-Diethylnitrosoaniline	1005	125	Anhydrous ammonia, liquefied
--	153	2-Ethyl-3-propylacrolein	1006	121	Argon
--	112	Explosive A	1006	121	Argon, compressed
--	112	Explosive B	1008	125	Boron trifluoride
--	114	Explosive C	1008	125	Boron trifluoride, compressed
--	112	Explosives, division 1.1, 1.2, 1.3, 1.5 or 1.6	1009	126	Bromotrifluoromethane
--	114	Explosives, division 1.4	1009	126	Refrigerant gas R-13B1
--	133	Fibres, animal or vegetable, burnt, wet or damp	1010	116P	Butadienes, inhibited
--	133	Fibres, vegetable, dry	1011	115	Butane
			1011	115	Butane mixture
			1012	115	Butylene
			1013	120	Carbon dioxide
			1013	120	Carbon dioxide, compressed
			1014	122	Carbon dioxide and Oxygen mixture

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1014	122	Carbon dioxide and Oxygen mixture, compressed	1030	115	1,1-Difluoroethane
1014	122	Oxygen and Carbon dioxide mixture	1030	115	Difluoroethane
1014	122	Oxygen and Carbon dioxide mixture, compressed	1030	115	Refrigerant gas R-152a
1015	126	Carbon dioxide and Nitrous oxide mixture	1032	118	Dimethylamine, anhydrous
1015	126	Nitrous oxide and Carbon dioxide mixture	1033	115	Dimethyl ether
1016	119	Carbon monoxide	1035	115	Ethane
1016	119	Carbon monoxide, compressed	1035	115	Ethane, compressed
1017	124	Chlorine	1036	118	Ethylamine
1018	126	Chlorodifluoromethane	1037	115	Ethyl chloride
1018	126	Refrigerant gas R-22	1038	115	Ethylene, refrigerated liquid (cryogenic liquid)
1020	126	Chloropentafluoroethane	1039	115	Ethyl methyl ether
1020	126	Refrigerant gas R-115	1039	115	Methyl ethyl ether
1021	126	1-Chloro-1,2,2,2-tetrafluoroethane	1040	119P	Ethylene oxide
1021	126	Chlorotetrafluoroethane	1040	119P	Ethylene oxide with Nitrogen
1021	126	Refrigerant gas R-124	1041	115	Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide
1022	126	Chlorotrifluoromethane	1041	115	Carbon dioxide and Ethylene oxide mixtures, with more than 6% Ethylene oxide
1022	126	Refrigerant gas R-13	1041	115	Ethylene oxide and Carbon dioxide mixture, with more than 9% but not more than 87% Ethylene oxide
1023	119	Coal gas	1041	115	Ethylene oxide and Carbon dioxide mixtures, with more than 6 % Ethylene oxide
1023	119	Coal gas, compressed	1043	125	Fertilizer, ammoniating solution, with free Ammonia
1026	119	Cyanogen	1044	126	Fire extinguishers with compressed gas
1026	119	Cyanogen, liquefied	1044	126	Fire extinguishers with liquefied gas
1026	119	Cyanogen gas	1045	124	Fluorine
1027	115	Cyclopropane			
1027	115	Cyclopropane, liquefied			
1028	126	Dichlorodifluoromethane			
1028	126	Refrigerant gas R-12			
1029	126	Dichlorofluoromethane			
1029	126	Refrigerant gas R-21			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1045	124	Fluorine, compressed	1060	116P	Methylacetylene and Propadiene mixture, stabilized
1046	121	Helium	1060	116P	Propadiene and Methylacetylene mixture, stabilized
1046	121	Helium, compressed	1061	118	Methylamine, anhydrous
1048	125	Hydrogen bromide, anhydrous	1062	123	Methyl bromide
1049	115	Hydrogen	1063	115	Methyl chloride
1049	115	Hydrogen, compressed	1063	115	Refrigerant gas R-40
1050	125	Hydrogen chloride, anhydrous	1064	117	Methyl mercaptan
1051	117	AC	1065	121	Neon
1051	117	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide	1065	121	Neon, compressed
1051	117	Hydrocyanic acid, liquefied	1066	121	Nitrogen
1051	117	Hydrogen cyanide, anhydrous, stabilized	1066	121	Nitrogen, compressed
1051	117	Hydrogen cyanide, stabilized	1067	124	Dinitrogen tetroxide
1052	125	Hydrogen fluoride, anhydrous	1067	124	Dinitrogen tetroxide, liquefied
1053	117	Hydrogen sulfide	1067	124	Nitrogen dioxide
1053	117	Hydrogen sulfide, liquefied	1067	124	Nitrogen dioxide, liquefied
1053	117	Hydrogen sulphide	1067	124	Nitrogen peroxide, liquid
1053	117	Hydrogen sulphide, liquefied	1067	124	Nitrogen tetroxide, liquid
1055	115	Isobutylene	1069	125	Nitrosyl chloride
1056	121	Krypton	1070	122	Nitrous oxide
1056	121	Krypton, compressed	1070	122	Nitrous oxide, compressed
1057	115	Cigarette lighter, with flammable gas	1071	119	Oil gas
1057	115	Flammable gas in lighter for cigars, cigarettes, etc.	1071	119	Oil gas, compressed
1057	115	Lighter refills (cigarettes) (flammable gas)	1072	122	Oxygen
1057	115	Lighters (cigarettes) (flammable gas)	1072	122	Oxygen, compressed
1058	121	Liquefied gas (nonflammable)	1073	122	Oxygen, refrigerated liquid (cryogenic liquid)
1058	121	Liquefied gases, non-flammable, charged with Nitrogen, Carbon dioxide or Air	1075	115	Butane
			1075	115	Butane mixture
			1075	115	Butylene
			1075	115	Isobutane

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1075	115	Isobutane mixture	1089	129	Acetaldehyde
1075	115	Isobutylene	1090	127	Acetone
1075	115	Liquefied petroleum gas	1091	127	Acetone oils
1075	115	LPG	1092	131P	Acrolein, inhibited
1075	115	Petroleum gases, liquefied	1093	131P	Acrylonitrile, inhibited
1075	115	Propane	1098	131	Allyl alcohol
1075	115	Propane mixture	1099	131	Allyl bromide
1075	115	Propylene	1100	131	Allyl chloride
1076	125	CG	1104	129	Amyl acetates
1076	125	Diphosgene	1105	129	Amyl alcohols
1076	125	DP	1105	129	Pentanol
1076	125	Phosgene	1106	132	Amylamines
1077	115	Propylene	1107	129	Amyl chloride
1078	126	Dispersant gas, n.o.s.	1108	127	n-Amylene
1078	126	Refrigerant gas, n.o.s.	1108	127	1-Pentene
1079	125	Sulfur dioxide	1109	129	Amyl formates
1079	125	Sulfur dioxide, liquefied	1110	127	n-Amyl methyl ketone
1079	125	Sulphur dioxide	1110	127	Amyl methyl ketone
1079	125	Sulphur dioxide, liquefied	1110	127	Methyl amyl ketone
1080	126	Sulfur hexafluoride	1111	130	Amyl mercaptan
1080	126	Sulphur hexafluoride	1112	140	Amyl nitrate
1081	116P	Tetrafluoroethylene, inhibited	1113	129	Amyl nitrite
1082	119P	Trifluorochloroethylene	1114	130	Benzene
1082	119P	Trifluorochloroethylene, inhibited	1118	130	Brake fluid, hydraulic
1083	118	Trimethylamine, anhydrous	1120	129	Butanol
1085	116P	Vinyl bromide, inhibited	1120	129	Butyl alcohol
1086	116P	Vinyl chloride	1123	129	Butyl acetates
1086	116P	Vinyl chloride, inhibited	1125	132	n-Butylamine
1086	116P	Vinyl chloride, stabilized	1126	129	1-Bromobutane
1087	116P	Vinyl methyl ether	1126	129	n-Butyl bromide
1087	116P	Vinyl methyl ether, inhibited	1127	130	Butyl chloride
1088	127	Acetal	1127	130	Chlorobutanes
			1128	129	n-Butyl formate

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1129	129	Butyraldehyde	1149	127	Dibutyl ethers
1130	128	Camphor oil	1150	130P	1,2-Dichloroethylene
1131	131	Carbon bisulfide	1150	130P	Dichloroethylene
1131	131	Carbon bisulphide	1152	130	Dichloropentanes
1131	131	Carbon disulfide	1153	127	Ethylene glycol diethyl ether
1131	131	Carbon disulphide	1154	132	Diethylamine
1133	128	Adhesives (flammable)	1155	127	Diethyl ether
1133	128	Cement (flammable)	1155	127	Ethyl ether
1133	128	Cement, container, linoleum, tile or wallboard, liquid	1156	127	Diethyl ketone
1133	128	Cement, leather	1157	127	Diisobutyl ketone
1133	128	Cement, liquid, n.o.s.	1158	132	Diisopropylamine
1133	128	Cement, pyroxylin	1159	127	Diisopropyl ether
1133	128	Cement, roofing, liquid	1160	129	Dimethylamine, aqueous solution
1133	128	Cement, rubber	1160	129	Dimethylamine, solution
1134	130	Chlorobenzene	1161	129	Dimethyl carbonate
1135	131	Ethylene chlorohydrin	1162	155	Dimethyldichlorosilane
1136	128	Coal tar distillates, flammable	1163	131	1,1-Dimethylhydrazine
1137	128	Coal tar distillate	1163	131	Dimethylhydrazine, unsymmetrical
1139	127	Coating solution	1164	130	Dimethyl sulfide
1142	127	Compound, vulcanizing, liquid (flammable)	1164	130	Dimethyl sulphide
1142	127	Compounds, polishing, liquid, etc. (flammable)	1165	127	Dioxane
1142	127	Flammable liquid preparations, n.o.s.	1166	127	Dioxolane
1143	131P	Crotonaldehyde, inhibited	1167	131P	Divinyl ether, inhibited
1143	131P	Crotonaldehyde, stabilized	1168	127	Driers, paint or varnish, liquid, n.o.s.
1144	128	Crotonylene	1169	127	Extracts, aromatic, liquid
1145	128	Cyclohexane	1170	127	Ethanol
1146	128	Cyclopentane	1170	127	Ethanol, solution
1147	130	Decahydronaphthalene	1170	127	Ethyl alcohol
1148	129	Diacetone alcohol	1170	127	Ethyl alcohol, solution
1149	127	Butyl ethers	1171	127	Ethylene glycol monoethyl ether

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1172	129	Ethylene glycol monoethyl ether acetate	1199	132P	Furaldehydes
1173	129	Ethyl acetate	1199	132P	Furfural
1175	129	Ethylbenzene	1199	132P	Furfuraldehydes
1176	129	Ethyl borate	1201	127	Fusel oil
1177	129	2-Ethylbutyl acetate	1202	128	Diesel fuel
1177	129	Ethylbutyl acetate	1202	128	Fuel oil
1178	129	2-Ethylbutyraldehyde	1202	128	Fuel oil, no. 1,2,4,5,6
1179	127	Ethyl butyl ether	1202	128	Gas oil
1180	129	Ethyl butyrate	1202	128	Heating oil, light
1181	155	Ethyl chloroacetate	1203	128	Gasohol
1182	155	Ethyl chloroformate	1203	128	Gasoline
1183	139	Ethylchlorosilane	1203	128	Motor spirit
1184	129	Ethylene dichloride	1203	128	Petrol
1185	131P	Ethyleneimine, inhibited	1204	127	Nitroglycerin, solution in alcohol, with not more than 1% Nitroglycerin
1188	127	Ethylene glycol monomethyl ether	1204	127	Spirits of Nitroglycerin, not exceeding 1 % Nitroglycerin
1189	129	Ethylene glycol monomethyl ether acetate	1206	128	Heptanes
1190	129	Ethyl formate	1207	129	Hexaldehyde
1191	129	Ethylhexaldehydes	1208	128	Hexanes
1191	129	Octyl aldehydes	1208	128	Neohexane
1192	129	Ethyl lactate	1210	129	Ink, printer's, flammable
1193	127	Ethyl methyl ketone	1210	129	Printing ink, flammable
1193	127	Methyl ethyl ketone	1210	129	Printing ink related material
1194	131	Ethyl nitrite, solution	1212	129	Isobutanol
1195	129	Ethyl propionate	1212	129	Isobutyl alcohol
1196	155	Ethyltrichlorosilane	1213	129	Isobutyl acetate
1197	127	Extracts, flavoring, liquid	1214	132	Isobutylamine
1197	127	Extracts, flavouring, liquid	1216	128	Isooctene
1198	132	Formaldehyde, solution, flammable	1218	130P	Isoprene, inhibited
1198	132	Formaldehyde, solutions (Formalin)	1219	129	Isopropanol
			1219	129	Isopropyl alcohol

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1220	129	Isopropyl acetate	1244	131	Methylhydrazine
1221	132	Isopropylamine	1245	127	Methyl isobutyl ketone
1222	130	Isopropyl nitrate	1246	127P	Methyl isopropenyl ketone, inhibited
1223	128	Kerosene	1247	129P	Methyl methacrylate monomer, inhibited
1224	127	Ketones, liquid, n.o.s.	1247	129P	Methyl methacrylate monomer, uninhibited
1226	127	Cigarette lighter, with flammable liquid	1248	129	Methyl propionate
1226	127	Lighters for cigars, cigarettes etc. with lighter fluid	1249	127	Methyl propyl ketone
1226	127	Lighters for cigars, cigarettes (flammable liquid)	1250	155	Methyltrichlorosilane
1228	131	Mercaptan mixture, aliphatic	1251	131P	Methyl vinyl ketone
1228	131	Mercaptan mixture, liquid, flammable, poisonous, n.o.s.	1251	131P	Methyl vinyl ketone, stabilized
1228	131	Mercaptan mixture, liquid, flammable, toxic, n.o.s.	1255	128	Naphtha, petroleum
1228	131	Mercaptan mixtures, liquid, n.o.s.	1255	128	Petroleum naphtha
1228	131	Mercaptans, liquid, flammable, poisonous, n.o.s.	1256	128	Naphtha, solvent
1228	131	Mercaptans, liquid, flammable, toxic, n.o.s.	1257	128	Natural gasoline
1229	129	Mesityl oxide	1259	131	Nickel carbonyl
1230	131	Methanol	1261	129	Nitromethane
1230	131	Methyl alcohol	1262	128	Isooctane
1231	129	Methyl acetate	1262	128	Octanes
1232	127	Methyl acetone	1263	128	Paint (flammable)
1233	129	Methylamyl acetate	1263	128	Paint related material (flammable)
1234	127	Methylal	1264	129	Paraldehyde
1235	132	Methylamine, aqueous solution	1265	128	Isopentane
1237	129	Methyl butyrate	1265	128	n-Pentane
1238	155	Methyl chloroformate	1265	128	Pentanes
1239	131	Methyl chloromethyl ether	1266	127	Perfumery products, with flammable solvents
1242	139	Methyldichlorosilane	1267	128	Petroleum crude oil
1243	129	Methyl formate	1268	128	Petroleum distillates, n.o.s.
			1268	128	Petroleum products, n.o.s.
			1270	128	Oil, petroleum, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1270	128	Petroleum oil	1298	155	Trimethylchlorosilane
1271	128	Petroleum ether	1299	128	Turpentine
1271	128	Petroleum spirit	1300	128	Turpentine substitute
1272	129	Pine oil	1301	129P	Vinyl acetate
1274	129	n-Propanol	1301	129P	Vinyl acetate, inhibited
1274	129	normal Propyl alcohol	1302	127P	Vinyl ethyl ether
1274	129	Propyl alcohol, normal	1302	127P	Vinyl ethyl ether, inhibited
1275	129	Propionaldehyde	1303	129P	Vinylidene chloride, inhibited
1276	129	n-Propyl acetate	1304	127P	Vinyl isobutyl ether
1277	132	Monopropylamine	1304	127P	Vinyl isobutyl ether, inhibited
1277	132	Propylamine	1305	155	Vinyltrichlorosilane
1278	129	1-Chloropropane	1305	155	Vinyltrichlorosilane, inhibited
1278	129	Propyl chloride	1306	129	Wood preservatives, liquid
1279	130	1,2-Dichloropropane	1307	130	Xylenes
1279	130	Dichloropropane	1308	170	Zirconium metal, liquid, suspension
1279	130	Propylene dichloride	1308	170	Zirconium suspended in a flammable liquid
1280	127P	Propylene oxide	1308	170	Zirconium suspended in a liquid (flammable)
1281	129	Propyl formates	1309	170	Aluminum powder, coated
1282	129	Pyridine	1310	113	Ammonium picrate, wetted with not less than 10% water
1286	127	Rosin oil	1312	133	Borneol
1287	127	Rubber solution	1313	133	Calcium resinate
1288	128	Shale oil	1314	133	Calcium resinate, fused
1289	132	Sodium methylate, alcohol mixture	1318	133	Cobalt resinate, precipitated
1289	132	Sodium methylate, solution in alcohol	1320	113	Dinitrophenol, wetted with not less than 15% water
1292	132	Ethyl silicate	1321	113	Dinitrophenolates, wetted with not less than 15% water
1292	132	Tetraethyl silicate	1322	113	Dinitroresorcinol, wetted with not less than 15% water
1293	127	Tinctures, medicinal	1323	170	Ferrocium
1294	130	Toluene	1324	133	Film
1295	139	Trichlorosilane			
1296	132	Triethylamine			
1297	132	Trimethylamine, aqueous solution			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1324	133	Films, nitrocellulose base	1336	113	Nitroguanidine (Picrite), wetted with not less than 20% water
1325	133	Air bag inflators	1336	113	Nitroguanidine, wetted with not less than 20% water
1325	133	Air bag modules	1336	113	Picrite, wetted
1325	133	Antimony sulfide, solid	1337	113	Nitrostarch, wet, with not less than 30% alcohol or solvent
1325	133	Antimony sulphide, solid	1337	113	Nitrostarch, wetted with not less than 20% water
1325	133	Burnt cotton, not picked	1337	113	Nitrostarch, wetted with not less than 30% solvent
1325	133	Cosmetics, n.o.s.	1338	133	Phosphorus, amorphous
1325	133	Drugs, n.o.s.	1338	133	Phosphorus, amorphous, red
1325	133	Flammable solid, n.o.s.	1338	133	Red phosphorus
1325	133	Flammable solid, organic, n.o.s.	1338	133	Red phosphorus, amorphous
1325	133	Fusee (rail or highway)	1339	139	Phosphorus heptasulfide, free from yellow and white Phosphorus
1325	133	Medicines, flammable, solid, n.o.s.	1339	139	Phosphorus heptasulphide, free from yellow and white Phosphorus
1325	133	N-Methyl-N'-Nitro-N-Nitrosoguanidine	1340	139	Phosphorus pentasulfide, free from yellow and white Phosphorus
1325	133	Pyroxylin plastic, rod, sheet, roll, tube or scrap	1340	139	Phosphorus pentasulphide, free from yellow and white Phosphorus
1325	133	Smokeless powder for small arms	1341	139	Phosphorus sesquisulfide, free from yellow and white Phosphorus
1326	170	Hafnium powder, wetted with not less than 25% water	1341	139	Phosphorus sesquisulphide, free from yellow and white Phosphorus
1327	133	Bhusa, wet, damp or contaminated with oil	1343	139	Phosphorus trisulfide, free from yellow and white Phosphorus
1327	133	Hay, wet, damp or contaminated with oil	1343	139	Phosphorus trisulphide, free from yellow and white Phosphorus
1327	133	Straw, wet, damp or contaminated with oil			
1328	133	Hexamethylenetetramine			
1328	133	Hexamine			
1330	133	Manganese resinate			
1331	133	Matches, "strike anywhere"			
1332	133	Metaldehyde			
1333	170	Cerium, slabs, ingots or rods			
1334	133	Naphthalene, crude			
1334	133	Naphthalene, refined			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1344	113	Picric acid, wet, with not less than 10% water	1357	113	Urea nitrate, wetted with not less than 20% water
1344	113	Trinitrophenol, wetted with not less than 30% water	1358	170	Zirconium metal, powder, wet
1345	133	Rubber scrap, powdered or granulated	1358	170	Zirconium powder, wetted with not less than 25% water
1345	133	Rubber shoddy, powdered or granulated	1360	139	Calcium phosphide
1346	170	Silicon powder, amorphous	1361	133	Carbon, animal or vegetable origin
1347	113	Silver picrate, wetted with not less than 30% water	1361	133	Charcoal
1348	113	Sodium dinitro-o-cresolate, wetted with not less than 15% water	1361	133	Charcoal, briquettes
1348	113	Sodium dinitro-ortho-cresolate, wetted	1361	133	Charcoal, shell
1349	113	Sodium picramate, wetted with not less than 20% water	1361	133	Charcoal, wood, ground, crushed, granulated or pulverized
1350	133	Sulfur	1361	133	Charcoal screenings, made from "Pinon" wood
1350	133	Sulphur	1361	133	Charcoal screenings, other than "Pinon" wood screenings
1352	170	Titanium powder, wetted with not less than 25% water	1362	133	Carbon, activated
1353	133	Fabrics impregnated with weakly nitrated Nitrocellulose, n.o.s.	1363	135	Copra
1353	133	Fibers impregnated with weakly nitrated Nitrocellulose, n.o.s.	1364	133	Cotton waste, oily
1353	133	Fibres impregnated with weakly nitrated Nitrocellulose, n.o.s.	1365	133	Cotton
1353	133	Toe puffs, nitrocellulose base	1365	133	Cotton, wet
1354	113	Trinitrobenzene, wetted with not less than 30% water	1366	135	Diethylzinc
1355	113	Trinitrobenzoic acid, wetted with not less than 30% water	1369	135	p-Nitrosodimethylaniline
1356	113	TNT, wetted with not less than 30% water	1370	135	Dimethylzinc
1356	113	Trinitrotoluene, wetted with not less than 30% water	1372	133	Fiber, animal or vegetable, n.o.s., burnt, wet or damp
			1372	133	Fibers
			1373	133	Fabrics, animal, synthetic or vegetable, n.o.s., with oil
			1373	133	Fiber, animal, synthetic or vegetable, n.o.s., with oil
			1373	133	Fibres, animal, synthetic or vegetable, n.o.s., with oil
			1374	133	Fish meal, unstabilized

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1374	133	Fish meal containing less than 6% or more than 12% water	1384	135	Sodium hydrosulfite
1374	133	Fish scrap, unstabilized	1384	135	Sodium hydrosulphite
1374	133	Fish scrap containing less than 6% or more than 12% water	1385	135	Sodium sulfide, anhydrous
1376	135	Iron oxide, spent	1385	135	Sodium sulfide, with less than 30% water of crystallization
1376	135	Iron sponge, spent	1385	135	Sodium sulphide, anhydrous
1378	170	Metal catalyst, wetted	1385	135	Sodium sulphide, with less than 30% water of crystallization
1379	133	Paper, unsaturated oil treated	1386	135	Seed cake, with more than 1.5% oil and not more than 11% moisture
1380	135	Pentaborane	1389	138	Alkali metal amalgam
1381	136	Phosphorus, white, dry or under water or in solution	1389	138	Alkali metal amalgam, liquid
1381	136	Phosphorus, yellow, dry or under water or in solution	1389	138	Alkali metal amalgam, solid
1381	136	White phosphorus, dry	1390	139	Alkali metal amides
1381	136	White phosphorus, in solution	1391	138	Alkali metal dispersion
1381	136	White phosphorus, under water	1391	138	Alkaline earth metal dispersion
1381	136	Yellow phosphorus, dry	1392	138	Alkaline earth metal amalgam
1381	136	Yellow phosphorus, in solution	1393	138	Alkaline earth metal alloy, n.o.s.
1381	136	Yellow phosphorus, under water	1394	138	Aluminum carbide
1382	135	Potassium sulfide, anhydrous	1395	139	Aluminum ferrosilicon powder
1382	135	Potassium sulfide, with less than 30% water of crystallization	1396	138	Aluminum powder, uncoated
1382	135	Potassium sulfide, with less than 30% water of hydration	1397	139	Aluminum phosphide
1382	135	Potassium sulphide, anhydrous	1398	138	Aluminum silicon powder, uncoated
1382	135	Potassium sulphide, with less than 30% water of crystallization	1400	138	Barium
1382	135	Potassium sulphide, with less than 30% water of hydration	1401	138	Calcium
1383	135	Aluminum powder, pyrophoric	1401	138	Calcium metal, crystalline
1383	135	Pyrophoric alloy, n.o.s.	1402	138	Calcium carbide
1383	135	Pyrophoric metal, n.o.s.	1403	138	Calcium cyanamide, with more than 0.1% Calcium carbide
1384	135	Sodium dithionite	1404	138	Calcium hydride
			1405	138	Calcium silicide
			1406	138	Calcium silicon

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1407	138	Caesium	1435	138	Zinc residue
1407	138	Cesium	1435	138	Zinc skimmings
1408	139	Ferrosilicon	1436	138	Zinc dust
1409	138	Hydrides, metal, n.o.s.	1436	138	Zinc powder
1409	138	Metal hydrides, water-reactive, n.o.s.	1437	138	Zirconium hydride
1410	138	Lithium aluminum hydride	1438	140	Aluminum nitrate
1411	138	Lithium aluminum hydride, ethereal	1439	141	Ammonium dichromate
1412	139	Lithium amide	1442	143	Ammonium perchlorate
1413	138	Lithium borohydride	1444	140	Ammonium persulfate
1414	138	Lithium hydride	1444	140	Ammonium persulphate
1415	138	Lithium	1445	141	Barium chlorate
1417	138	Lithium silicon	1445	141	Barium chlorate, wet
1418	138	Magnesium alloys powder	1446	141	Barium nitrate
1418	138	Magnesium powder	1447	141	Barium perchlorate
1419	139	Magnesium aluminum phosphide	1448	141	Barium permanganate
1420	138	Potassium, metal alloys	1449	141	Barium peroxide
1420	138	Potassium, metal liquid alloy	1450	141	Bromates, inorganic, n.o.s.
1421	138	Alkali metal alloy, liquid, n.o.s.	1451	140	Caesium nitrate
1422	138	Potassium sodium alloys	1451	140	Cesium nitrate
1422	138	Sodium potassium alloys	1452	140	Calcium chlorate
1423	138	Rubidium	1453	140	Calcium chlorite
1423	138	Rubidium metal	1454	140	Calcium nitrate
1426	138	Sodium borohydride	1455	140	Calcium perchlorate
1427	138	Sodium hydride	1456	140	Calcium permanganate
1428	138	Sodium	1457	140	Calcium peroxide
1431	138	Sodium methylate	1458	140	Borate and Chlorate mixtures
1431	138	Sodium methylate, dry	1458	140	Chlorate and Borate mixtures
1432	139	Sodium phosphide	1459	140	Chlorate and Magnesium chloride mixture
1433	139	Stannic phosphides	1459	140	Magnesium chloride and Chlorate mixture
1435	138	Zinc ashes	1461	140	Chlorate, n.o.s., wet
1435	138	Zinc dross	1461	140	Chlorates, inorganic, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1462	143	Chlorites, inorganic, n.o.s.	1481	140	Perchlorates, inorganic, n.o.s.
1463	141	Chromic acid, solid	1482	140	Permanganate, n.o.s.
1463	141	Chromic acid mixture, dry	1482	140	Permanganates, inorganic, n.o.s.
1463	141	Chromium trioxide, anhydrous	1483	140	Peroxides, inorganic, n.o.s.
1465	140	Didymium nitrate	1484	140	Potassium bromate
1466	140	Ferric nitrate	1485	140	Potassium chlorate
1467	143	Guanidine nitrate	1486	140	Potassium nitrate
1469	141	Lead nitrate	1487	140	Potassium nitrate and Sodium nitrite mixture
1470	141	Lead perchlorate	1487	140	Sodium nitrite and Potassium nitrate mixtures
1470	141	Lead perchlorate, solid	1487	140	Sodium nitrite mixture
1470	141	Lead perchlorate, solution	1488	140	Potassium nitrite
1471	140	Lithium hypochlorite, dry	1489	140	Potassium perchlorate
1471	140	Lithium hypochlorite mixture	1490	140	Potassium permanganate
1471	140	Lithium hypochlorite mixtures, dry	1491	144	Potassium peroxide
1472	143	Lithium peroxide	1492	140	Potassium persulfate
1473	140	Magnesium bromate	1492	140	Potassium persulphate
1474	140	Magnesium nitrate	1493	140	Silver nitrate
1475	140	Magnesium perchlorate	1494	141	Sodium bromate
1476	140	Magnesium peroxide	1495	140	Sodium chlorate
1477	140	Ammonium sulfate nitrate	1496	143	Sodium chlorite
1477	140	Ammonium sulphate nitrate	1498	140	Sodium nitrate
1477	140	Nitrate, n.o.s.	1499	140	Potassium nitrate and Sodium nitrate mixture
1477	140	Nitrates, inorganic, n.o.s.	1499	140	Sodium nitrate and Potassium nitrate mixture
1479	140	Compound, tree or weed killing, solid (oxidizer)	1500	140	Sodium nitrite
1479	140	Cosmetics, n.o.s.	1502	140	Sodium perchlorate
1479	140	Drugs, n.o.s.	1503	140	Sodium permanganate
1479	140	Medicines, oxidizing substances, solid, n.o.s.	1504	144	Sodium peroxide
1479	140	Oxidizing solid, n.o.s.	1505	140	Sodium persulfate
1479	140	Oxidizing substances, solid, n.o.s.	1505	140	Sodium persulphate
1481	140	Perchlorate, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1506	143	Strontium chlorate	1550	151	Antimony lactate
1506	143	Strontium chlorate, solid	1551	151	Antimony potassium tartrate
1506	143	Strontium chlorate, solution	1553	154	Arsenic acid, liquid
1507	140	Strontium nitrate	1554	154	Arsenic acid, solid
1508	140	Strontium perchlorate	1555	151	Arsenic bromide
1509	143	Strontium peroxide	1556	152	Arsenic compound, liquid, n.o.s.
1510	143	Tetranitromethane	1556	152	Arsenic compound, liquid, n.o.s., inorganic
1511	140	Urea hydrogen peroxide	1556	152	MD
1511	140	Urea peroxide	1556	152	Methyldichloroarsine
1512	140	Zinc ammonium nitrite	1556	152	PD
1513	140	Zinc chlorate	1556	152	Phenyldichloroarsine
1514	140	Zinc nitrate	1557	152	Arsenic compound, solid, n.o.s.
1515	140	Zinc permanganate	1557	152	Arsenic compound, solid, n.o.s., inorganic
1516	143	Zinc peroxide	1557	152	Arsenic iodide, solid
1517	113	Zirconium picramate, wetted with not less than 20% water	1557	152	Arsenic sulfide
1541	155	Acetone cyanohydrin, stabilized	1557	152	Arsenic sulphide
1544	151	Alkaloids, solid, n.o.s. (poisonous)	1557	152	Arsenic trisulfide
1544	151	Alkaloid salts, solid, n.o.s. (poisonous)	1557	152	Arsenic trisulphide
1545	155	Allyl isothiocyanate, inhibited	1558	152	Arsenic
1545	155	Allyl isothiocyanate, stabilized	1559	151	Arsenic pentoxide
1546	151	Ammonium arsenate	1560	157	Arsenic chloride
1547	153	Aniline	1560	157	Arsenic trichloride
1548	153	Aniline hydrochloride	1561	151	Arsenic trioxide
1549	157	Antimony compound, inorganic, n.o.s.	1562	152	Arsenical dust
1549	157	Antimony compound, inorganic, solid, n.o.s.	1564	154	Barium compound, n.o.s.
1549	157	Antimony tribromide, solid	1565	157	Barium cyanide
1549	157	Antimony tribromide, solution	1566	154	Beryllium chloride
1549	157	Antimony trifluoride, solid	1566	154	Beryllium compound, n.o.s.
1549	157	Antimony trifluoride, solution	1566	154	Beryllium fluoride
			1567	134	Beryllium powder
			1569	131	Bromoacetone

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1570	152	Brucine	1585	151	Copper acetoarsenite
1571	113	Barium azide, wetted with not less than 50% water	1586	151	Copper arsenite
1572	151	Cacodylic acid	1587	151	Copper cyanide
1573	151	Calcium arsenate	1588	157	Cyanides, inorganic, n.o.s.
1574	151	Calcium arsenate and Calcium arsenite mixture, solid	1588	157	Cyanides, inorganic, solid, n.o.s.
1574	151	Calcium arsenite, solid	1589	125	CK
1574	151	Calcium arsenite and Calcium arsenate mixture, solid	1589	125	Cyanogen chloride, inhibited
1575	157	Calcium cyanide	1590	153	Dichloroanilines
1577	153	Chlorodinitrobenzenes	1590	153	Dichloroanilines, liquid
1577	153	Dinitrochlorobenzene	1590	153	Dichloroanilines, solid
1578	152	Chloronitrobenzenes	1591	152	o-Dichlorobenzene
1578	152	Chloronitrobenzenes, liquid	1592	152	p-Dichlorobenzene
1578	152	Chloronitrobenzenes, solid	1593	160	Dichloromethane
1578	152	Nitrochlorobenzenes, liquid	1593	160	Methylene chloride
1578	152	Nitrochlorobenzenes, solid	1594	152	Diethyl sulfate
1579	153	4-Chloro-o-toluidine hydrochloride	1594	152	Diethyl sulphate
1580	154	Chloropicrin	1595	156	Dimethyl sulfate
1581	123	Chloropicrin and Methyl bromide mixture	1595	156	Dimethyl sulphate
1581	123	Methyl bromide and Chloropicrin mixtures	1596	153	Dinitroanilines
1581	123	Methyl bromide and more than 2% Chloropicrin mixture, liquid	1597	152	Dinitrobenzenes
1582	119	Chloropicrin and Methyl chloride mixture	1598	153	Dinitro-o-cresol
1582	119	Methyl chloride and Chloropicrin mixtures	1599	153	Dinitrophenol, solution
1583	154	Chloropicrin, absorbed	1600	152	Dinitrotoluenes, molten
1583	154	Chloropicrin mixture, n.o.s.	1601	151	Disinfectant, solid, poisonous, n.o.s.
1584	151	Cocculus	1601	151	Disinfectant, solid, toxic, n.o.s.
			1601	151	Disinfectants, solid, n.o.s. (poisonous)
			1602	151	Dye, liquid, poisonous, n.o.s.
			1602	151	Dye, liquid, toxic, n.o.s.
			1602	151	Dye intermediate, liquid, poisonous, n.o.s.
			1602	151	Dye intermediate, liquid, toxic, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1603	155	Ethyl bromoacetate	1627	141	Mercurous nitrate
1604	132	Ethylenediamine	1628	151	Mercurous sulfate
1605	154	Ethylene dibromide	1628	151	Mercurous sulphate
1606	151	Ferric arsenate	1629	151	Mercury acetate
1607	151	Ferric arsenite	1630	151	Mercury ammonium chloride
1608	151	Ferrous arsenate	1631	154	Mercury benzoate
1610	159	Halogenated irritating liquid, n.o.s.	1633	151	Mercury bisulfate
1611	151	Hexaethyl tetraphosphate	1633	151	Mercury bisulphate
1611	151	Hexaethyl tetraphosphate, liquid	1634	154	Mercuric bromide
1611	151	Hexaethyl tetraphosphate, solid	1634	154	Mercurous bromide
1612	123	Hexaethyl tetraphosphate and compressed gas mixture	1634	154	Mercury bromides
1613	154	Hydrocyanic acid, aqueous solution, with less than 5% Hydrogen cyanide	1636	154	Mercuric cyanide
1613	154	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide	1636	154	Mercury cyanide
1613	154	Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide	1637	151	Mercury gluconate
1614	131	Hydrogen cyanide, anhydrous, stabilized (absorbed)	1638	151	Mercury iodide
1614	131	Hydrogen cyanide, stabilized (absorbed)	1639	151	Mercury nucleate
1616	151	Lead acetate	1640	151	Mercury oleate
1617	151	Lead arsenates	1641	151	Mercury oxide
1618	151	Lead arsenites	1642	151	Mercuric oxycyanide
1620	151	Lead cyanide	1642	151	Mercury oxycyanide, desensitized
1621	151	London purple	1643	151	Mercury potassium iodide
1622	151	Magnesium arsenate	1644	151	Mercury salicylate
1623	151	Mercuric arsenate	1645	151	Mercuric sulfate
1624	154	Mercuric chloride	1645	151	Mercuric sulphate
1625	141	Mercuric nitrate	1645	151	Mercury sulfate
1626	157	Mercuric potassium cyanide	1645	151	Mercury sulphate
			1646	151	Mercury thiocyanate
			1647	151	Ethylene dibromide and Methyl bromide mixture, liquid
			1647	151	Methyl bromide and Ethylene dibromide mixture, liquid
			1648	131	Acetonitrile
			1648	131	Methyl cyanide

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1649	131	Motor fuel anti-knock compound	1673	153	Phenylenediamines
1649	131	Motor fuel anti-knock mixture	1674	151	Phenylmercuric acetate
1649	131	Tetraethyl lead, liquid	1677	151	Potassium arsenate
1650	153	beta-Naphthylamine	1678	154	Potassium arsenite
1650	153	Naphthylamine (beta)	1679	157	Potassium cuprocyanide
1651	153	Naphthylthiourea	1680	157	Potassium cyanide
1652	153	Naphthylurea	1683	151	Silver arsenite
1653	151	Nickel cyanide	1684	151	Silver cyanide
1654	151	Nicotine	1685	151	Sodium arsenate
1655	151	Nicotine compound, solid, n.o.s.	1686	154	Sodium arsenite, aqueous solution
1655	151	Nicotine preparation, solid, n.o.s.	1687	153	Sodium azide
1656	151	Nicotine hydrochloride	1688	152	Sodium cacodylate
1656	151	Nicotine hydrochloride, solution	1689	157	Sodium cyanide
1657	151	Nicotine salicylate	1690	154	Sodium fluoride
1658	151	Nicotine sulfate, solid	1690	154	Sodium fluoride, solid
1658	151	Nicotine sulfate, solution	1690	154	Sodium fluoride, solution
1658	151	Nicotine sulphate, solid	1691	151	Strontium arsenite
1658	151	Nicotine sulphate, solution	1692	151	Strychnine
1659	151	Nicotine tartrate	1692	151	Strychnine salts
1660	124	Nitric oxide	1693	159	Irritating agent, n.o.s.
1660	124	Nitric oxide, compressed	1693	159	ORM-A, n.o.s.
1661	153	Nitroanilines	1693	159	Tear gas devices
1662	152	Nitrobenzene	1693	159	Tear gas substance, liquid, n.o.s.
1663	153	Nitrophenols	1693	159	Tear gas substance, solid, n.o.s.
1664	152	Nitrotoluenes	1694	159	Bromobenzyl cyanides
1664	152	Nitrotoluenes, liquid	1694	159	CA
1664	152	Nitrotoluenes, solid	1695	131	Chloroacetone, stabilized
1665	152	Nitroxylenes	1697	153	Chloroacetophenone
1665	152	Nitroxylol	1697	153	Chloroacetophenone, liquid
1669	151	Pentachloroethane	1697	153	Chloroacetophenone, solid
1670	157	Perchloromethyl mercaptan	1697	153	CN
1671	153	Phenol, solid	1698	154	Adamsite
1672	151	Phenylcarbylamine chloride			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1698	154	Diphenylamine chloroarsine	1707	151	Thallium sulfate, solid
1698	154	DM	1707	151	Thallium sulphate, solid
1699	151	DA	1708	153	Toluidines
1699	151	Diphenylchloroarsine	1708	153	Toluidines, liquid
1699	151	Diphenylchloroarsine, liquid	1708	153	Toluidines, solid
1699	151	Diphenylchloroarsine, solid	1709	151	2,4-Toluenediamine
1700	159	Tear gas candles	1709	151	Toluenediamine
1700	159	Tear gas grenades	1709	151	2,4-Toluylenediamine
1701	152	Xylyl bromide	1710	160	Trichloroethylene
1702	151	1,1,2,2-Tetrachloroethane	1711	153	Xylidines
1702	151	Tetrachloroethane	1712	151	Zinc arsenate
1703	123	Tetraethyl dithiopyrophosphate and gases, in solution	1712	151	Zinc arsenate and Zinc arsenite mixture
1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures	1712	151	Zinc arsenite
1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 more than 200 ppm but not more than 5000 ppm)	1712	151	Zinc arsenite and Zinc arsenate mixture
1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 not more than 200 ppm)	1713	151	Zinc cyanide
1704	153	Tetraethyl dithiopyrophosphate	1714	139	Zinc phosphide
1704	153	Tetraethyl dithiopyrophosphate, mixture, dry or liquid	1715	137	Acetic anhydride
1705	123	Tetraethyl pyrophosphate and compressed gas mixtures	1716	156	Acetyl bromide
1705	123	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 more than 200 ppm but not more than 5000 ppm)	1717	132	Acetyl chloride
1705	123	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 not more than 200 ppm)	1718	153	Acid butyl phosphate
1707	151	Thallium compound, n.o.s.	1718	153	Butyl acid phosphate
			1719	154	Alkaline liquid, n.o.s.
			1719	154	Caustic alkali liquid, n.o.s.
			1722	155	Allyl chlorocarbonate
			1722	155	Allyl chloroformate
			1723	132	Allyl iodide
			1724	155	Allyltrichlorosilane, stabilized
			1725	137	Aluminum bromide, anhydrous
			1726	137	Aluminum chloride, anhydrous
			1727	154	Ammonium bifluoride, solid
			1727	154	Ammonium hydrogendifluoride, solid

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1727	154	Ammonium hydrogen fluoride, solid	1750	153	Chloroacetic acid, solution
1728	155	Amyltrimchlorosilane	1751	153	Chloroacetic acid, solid
1729	156	Anisoyl chloride	1752	156	Chloroacetyl chloride
1730	157	Antimony pentachloride, liquid	1753	156	Chlorophenyltrichlorosilane
1731	157	Antimony pentachloride, solution	1754	137	Chlorosulfonic acid
1732	157	Antimony pentafluoride	1754	137	Chlorosulfonic acid and Sulfur trioxide mixture
1733	157	Antimony trichloride	1754	137	Chlorosulphonic acid
1733	157	Antimony trichloride, liquid	1754	137	Chlorosulphonic acid and Sulphur trioxide mixture
1733	157	Antimony trichloride, solid	1754	137	Sulfur trioxide and Chlorosulfonic acid mixture
1733	157	Antimony trichloride, solution	1754	137	Sulphur trioxide and Chlorosulphonic acid mixture
1736	137	Benzoyl chloride	1755	154	Chromic acid, solution
1737	156	Benzyl bromide	1756	154	Chromic fluoride, solid
1738	156	Benzyl chloride	1757	154	Chromic fluoride, solution
1739	137	Benzyl chloroformate	1758	137	Chromium oxychloride
1740	154	Bifluorides, n.o.s.	1759	154	Corrosive solid, n.o.s.
1740	154	Hydrogendifluorides, n.o.s.	1759	154	Cosmetics, solid, n.o.s.
1741	125	Boron trichloride	1759	154	Drugs, solid, n.o.s.
1742	157	Boron trifluoride acetic acid complex	1759	154	Ferrous chloride, solid
1743	157	Boron trifluoride propionic acid complex	1759	154	Medicines, corrosive, solid, n.o.s.
1744	154	Bromine	1759	154	Stannous chloride, solid
1744	154	Bromine, solution	1760	154	Acid, liquid, n.o.s.
1745	144	Bromine pentafluoride	1760	154	Aluminum phosphate, solution
1746	144	Bromine trifluoride	1760	154	Aluminum sulfate, solution
1747	155	Butyltrichlorosilane	1760	154	Aluminum sulphate, solution
1748	140	Calcium hypochlorite, dry	1760	154	2-(2-Aminoethoxy)ethanol
1748	140	Calcium hypochlorite mixture, dry, with more than 39% available Chlorine (8.8% available Oxygen)	1760	154	Aminopropyl diethanolamine
1749	124	Chlorine trifluoride	1760	154	N-Aminopropylmorpholine
1750	153	Chloroacetic acid, liquid	1760	154	Chemical kit
			1760	154	Compound, rust preventing (corrosive)

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1760	154	Compound, rust removing (corrosive)	1768	154	Difluorophosphoric acid, anhydrous
1760	154	Compound, tree or weed killing, liquid (corrosive)	1769	156	Diphenyldichlorosilane
1760	154	Compound, vulcanizing, liquid (corrosive)	1770	153	Diphenylmethyl bromide
1760	154	Compounds, cleaning, liquid (corrosive)	1771	156	Dodecyltrichlorosilane
1760	154	Corrosive liquid, n.o.s.	1773	157	Ferric chloride
1760	154	Cosmetics, liquid, n.o.s.	1773	157	Ferric chloride, anhydrous
1760	154	2,2-Dichloropropionic acid	1774	154	Fire extinguisher charges, corrosive liquid
1760	154	Drugs, liquid, n.o.s.	1775	154	Fluoboric acid
1760	154	Ferrous chloride, solution	1775	154	Fluoroboric acid
1760	154	Flame retardant compound, liquid (corrosive)	1776	154	Fluorophosphoric acid, anhydrous
1760	154	Hexanoic acid	1777	137	Fluorosulfonic acid
1760	154	Isopentanoic acid	1777	137	Fluorosulphonic acid
1760	154	Medicines, corrosive, liquid, n.o.s.	1778	154	Fluorosilicic acid
1760	154	Morpholine, aqueous mixture	1778	154	Fluosilicic acid
1760	154	Nitric acid, 40% or less	1778	154	Hydrofluorosilicic acid
1760	154	ORM-B, n.o.s.	1778	154	Hydrofluosilicic acid
1760	154	Paint (corrosive)	1779	153	Formic acid
1760	154	Paint related material (corrosive)	1780	156	Fumaryl chloride
1760	154	Textile treating compound or mixture, liquid (corrosive)	1781	156	Hexadecyltrichlorosilane
1760	154	Titanium sulfate, solution	1782	154	Hexafluorophosphoric acid
1760	154	Titanium sulphate, solution	1783	153	Hexamethylenediamine, solution
1761	154	Cupriethylenediamine, solution	1784	156	Hexyltrichlorosilane
1762	156	Cyclohexenyltrichlorosilane	1786	157	Hydrofluoric acid and Sulfuric acid mixture
1763	156	Cyclohexyltrichlorosilane	1786	157	Hydrofluoric acid and Sulphuric acid mixture
1764	153	Dichloroacetic acid	1786	157	Sulfuric acid and Hydrofluoric acid mixtures
1765	156	Dichloroacetyl chloride	1786	157	Sulphuric acid and Hydrofluoric acid mixtures
1766	156	Dichlorophenyltrichlorosilane	1787	154	Hydriodic acid
1767	155	Diethyldichlorosilane			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1787	154	Hydriodic acid, solution	1805	154	Phosphoric acid
1788	154	Hydrobromic acid	1806	137	Phosphorus pentachloride
1788	154	Hydrobromic acid, solution	1807	137	Phosphoric anhydride
1789	157	Compound, cleaning liquid (containing Hydrochloric (muriatic) acid)	1807	137	Phosphorus pentoxide
1789	157	Hydrochloric acid	1808	137	Phosphorus tribromide
1789	157	Hydrochloric acid, mixture	1809	137	Phosphorus trichloride
1789	157	Hydrochloric acid, solution	1810	137	Phosphorus oxychloride
1789	157	Muriatic acid	1811	154	Potassium bifluoride
1790	157	Compound, cleaning liquid (containing Hydrofluoric acid)	1811	154	Potassium hydrogendifluoride
1790	157	Etching acid, liquid, n.o.s.	1811	154	Potassium hydrogen fluoride, solution
1790	157	Hydrofluoric acid	1812	154	Potassium fluoride
1790	157	Hydrofluoric acid, solution	1813	154	Battery
1791	154	Hypochlorite solution	1813	154	Caustic potash, dry, solid
1791	154	Hypochlorite solution, with more than 5% available Chlorine	1813	154	Potassium hydroxide, dry, solid
1792	157	Iodine monochloride	1813	154	Potassium hydroxide, flake
1793	153	Isopropyl acid phosphate	1813	154	Potassium hydroxide, solid
1794	154	Lead sulfate, with more than 3% free acid	1814	154	Caustic potash, liquid
1794	154	Lead sulphate, with more than 3% free acid	1814	154	Caustic potash, solution
1796	157	Nitrating acid mixture	1814	154	Potassium hydroxide, solution
1798	157	Aqua regia	1815	132	Propionyl chloride
1798	157	Nitrohydrochloric acid	1816	155	Propyltrichlorosilane
1799	156	Nonyltrichlorosilane	1817	137	Pyrosulfuryl chloride
1800	156	Octadecyltrichlorosilane	1817	137	Pyrosulphuryl chloride
1801	156	Octyltrichlorosilane	1818	157	Silicon tetrachloride
1802	140	Perchloric acid, with not more than 50% acid	1819	154	Sodium aluminate, solution
1803	153	Phenolsulfonic acid, liquid	1821	154	Sodium bisulfate, solid
1803	153	Phenolsulphonic acid, liquid	1821	154	Sodium bisulphate, solid
1804	156	Phenyltrichlorosilane	1821	154	Sodium hydrogen sulfate, solid
			1821	154	Sodium hydrogen sulphate, solid
			1823	154	Caustic soda, bead
			1823	154	Caustic soda, flake
			1823	154	Caustic soda, granular

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1823	154	Caustic soda, solid	1831	137	Oleum, with not less than 30% free Sulfur trioxide
1823	154	Sodium hydroxide, dry	1831	137	Oleum, with not less than 30% free Sulphur trioxide
1823	154	Sodium hydroxide, bead	1831	137	Sulfuric acid, fuming
1823	154	Sodium hydroxide, flake	1831	137	Sulfuric acid, fuming, with less than 30% free Sulfur trioxide
1823	154	Sodium hydroxide, granular	1831	137	Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide
1823	154	Sodium hydroxide, solid	1831	137	Sulphuric acid, fuming
1824	154	Caustic soda, solution	1831	137	Sulphuric acid, fuming, with less than 30% free Sulphur trioxide
1824	154	Sodium hydroxide, solution	1831	137	Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide
1825	157	Sodium monoxide	1832	137	Sulfuric acid, spent
1826	157	Nitrating acid, spent	1832	137	Sulphuric acid, spent
1826	157	Nitrating acid mixture, spent	1833	154	Sulfurous acid
1827	137	Stannic chloride, anhydrous	1833	154	Sulphurous acid
1827	137	Tin tetrachloride	1834	137	Sulfuryl chloride
1828	137	Sulfur chlorides	1834	137	Sulphuryl chloride
1828	137	Sulphur chlorides	1835	153	Tetramethylammonium hydroxide
1829	137	Sulfur trioxide	1836	137	Thionyl chloride
1829	137	Sulfur trioxide, inhibited	1837	157	Thiophosphoryl chloride
1829	137	Sulfur trioxide, stabilized	1838	137	Titanium tetrachloride
1829	137	Sulfur trioxide, uninhibited	1839	153	Trichloroacetic acid
1829	137	Sulphur trioxide	1840	154	Zinc chloride, solution
1829	137	Sulphur trioxide, inhibited	1841	171	Acetaldehyde ammonia
1829	137	Sulphur trioxide, stabilized	1843	141	Ammonium dinitro-o-cresolate
1829	137	Sulphur trioxide, uninhibited	1845	120	Carbon dioxide, solid
1830	137	Sulfuric acid	1845	120	Dry ice
1830	137	Sulfuric acid, with more than 51% acid	1846	151	Carbon tetrachloride
1830	137	Sulphuric acid			
1830	137	Sulphuric acid, with more than 51% acid			
1831	137	Oleum			
1831	137	Oleum, with less than 30% free Sulfur trioxide			
1831	137	Oleum, with less than 30% free Sulphur trioxide			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1847	153	Potassium sulfide, hydrated, with not less than 30% water of crystallization	1867	133	Cigarettes, self-lighting
1847	153	Potassium sulfide, hydrated, with not less than 30% water of hydration	1868	134	Decaborane
1847	153	Potassium sulphide, hydrated, with not less than 30% water of crystallization	1869	138	Magnesium
1847	153	Potassium sulphide, hydrated, with not less than 30% water of hydration	1869	138	Magnesium, in pellets, turnings or ribbons
1848	132	Propionic acid	1869	138	Magnesium alloys, with more than 50% Magnesium, in pellets, turnings or ribbons
1849	153	Sodium sulfide, hydrated, with not less than 30% water	1869	138	Magnesium scrap
1849	153	Sodium sulphide, hydrated, with not less than 30% water	1870	138	Potassium borohydride
1851	151	Medicine, liquid, poisonous, n.o.s.	1871	170	Titanium hydride
1851	151	Medicine, liquid, toxic, n.o.s.	1872	141	Lead dioxide
1854	135	Barium alloys, pyrophoric	1872	141	Lead peroxide
1855	135	Calcium, metal and alloys, pyrophoric	1873	143	Perchloric acid, with more than 50% but not more than 72% acid
1855	135	Calcium, pyrophoric	1884	157	Barium oxide
1855	135	Calcium alloys, pyrophoric	1885	153	Benzidine
1856	133	Rags, oily	1886	156	Benzylidene chloride
1858	126	Hexafluoropropylene	1887	160	Bromochloromethane
1858	126	Refrigerant gas R-1216	1888	151	Chloroform
1859	125	Silicon tetrafluoride	1889	157	Cyanogen bromide
1859	125	Silicon tetrafluoride, compressed	1891	131	Ethyl bromide
1860	116P	Vinyl fluoride, inhibited	1892	151	ED
1862	129	Ethyl crotonate	1892	151	Ethylidichloroarsine
1863	128	Fuel, aviation, turbine engine	1894	151	Phenylmercuric hydroxide
1864	128	Gas drips, hydrocarbon	1895	151	Phenylmercuric nitrate
1865	131	n-Propyl nitrate	1897	160	Perchloroethylene
1866	127	Resin solution	1897	160	Tetrachloroethylene
			1898	156	Acetyl iodide
			1902	153	Di-(2-ethylhexyl)phosphoric acid
			1902	153	Diisooctyl acid phosphate
			1903	153	Disinfectant, liquid, corrosive, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1903	153	Disinfectants, corrosive, liquid, n.o.s.	1923	135	Calcium hydrosulphite
1905	154	Selenic acid	1928	135	Methyl magnesium bromide in Ethyl ether
1906	153	Acid, sludge	1929	135	Potassium dithionite
1906	153	Sludge acid	1929	135	Potassium hydrosulfite
1907	154	Soda lime, with more than 4% Sodium hydroxide	1929	135	Potassium hydrosulphite
1908	154	Chlorite solution	1931	171	Zinc dithionite
1908	154	Chlorite solution, with more than 5% available Chlorine	1931	171	Zinc hydrosulfite
1908	154	Sodium chlorite, solution, with more than 5% available Chlorine	1931	171	Zinc hydrosulphite
1910	157	Calcium oxide	1932	135	Zirconium scrap
1911	119	Diborane	1935	157	Cyanide solution, n.o.s.
1911	119	Diborane, compressed	1938	156	Bromoacetic acid
1911	119	Diborane mixtures	1938	156	Bromoacetic acid, solid
1912	115	Methyl chloride and Methylene chloride mixture	1938	156	Bromoacetic acid, solution
1912	115	Methylene chloride and Methyl chloride mixture	1939	137	Phosphorus oxybromide
1913	120	Neon, refrigerated liquid (cryogenic liquid)	1939	137	Phosphorus oxybromide, solid
1914	130	Butyl propionates	1940	153	Thioglycolic acid
1915	127	Cyclohexanone	1941	171	Dibromodifluoromethane
1916	152	2,2'-Dichlorodiethyl ether	1942	140	Ammonium nitrate, with not more than 0.2% combustible substances
1916	152	Dichloroethyl ether	1942	140	Ammonium nitrate, with organic coating
1917	129P	Ethyl acrylate, inhibited	1944	133	Matches, safety
1918	130	Cumene	1945	133	Matches, wax "vesta"
1918	130	Isopropylbenzene	1950	126	Aerosol dispensers
1919	129P	Methyl acrylate, inhibited	1950	126	Aerosols
1920	128	Nonanes	1951	120	Argon, refrigerated liquid (cryogenic liquid)
1921	131P	Propyleneimine, inhibited	1952	126	Carbon dioxide and Ethylene oxide mixtures, with not more than 6% Ethylene oxide
1922	132	Pyrrolidine	1952	126	Carbon dioxide and Ethylene oxide mixtures, with not more than 9% Ethylene oxide
1923	135	Calcium dithionite			
1923	135	Calcium hydrosulfite			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1952	126	Ethylene oxide and Carbon dioxide mixtures, with not more than 6% Ethylene oxide	1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)
1952	126	Ethylene oxide and Carbon dioxide mixtures, with not more than 9% Ethylene oxide	1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	1953	119	Compressed gas, toxic, flammable, n.o.s.
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	1953	119	Liquefied gas, flammable, poisonous, n.o.s.
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)
1953	119	Compressed gas, poisonous, flammable, n.o.s.	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	1953	119	Liquefied gas, flammable, toxic, n.o.s.
			1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)
1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	1955	123	Compressed gas, toxic, n.o.s.
1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)
1953	119	Poisonous gas, flammable, n.o.s.	1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)
1953	119	Poisonous liquid, flammable, n.o.s.	1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)
1954	115	Compressed gas, flammable, n.o.s.	1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)
1954	115	Dispersant gas, n.o.s. (flammable)	1955	123	Liquefied gas, poisonous, n.o.s.
1954	115	Insecticide gas, flammable, n.o.s.	1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)
1954	115	Liquefied gas, flammable, n.o.s.	1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)
1954	115	Refrigerant gas, n.o.s. (flammable)	1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)
1954	115	Refrigerating machines, containing flammable, liquefied gas	1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)
1954	115	Refrigerating machines, containing flammable, non-poisonous, non-corrosive, liquefied gas	1955	123	Liquefied gas, toxic, n.o.s.
1955	123	Chloropicrin and non-flammable, non-liquefied compressed gas mixture	1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)
1955	123	Compressed gas, poisonous, n.o.s.	1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	1955	123	Methyl bromide and nonflammable, nonliquefied compressed gas mixture
			1955	123	Organic phosphate compound mixed with compressed gas
			1955	123	Organic phosphate mixed with compressed gas

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1955	123	Organic phosphorus compound mixed with compressed gas	1966	115	Hydrogen, refrigerated liquid (cryogenic liquid)
1955	123	Poisonous gas, n.o.s.	1967	123	Insecticide, liquefied gas, containing Poison A or Poison B material
1955	123	Poisonous liquid, n.o.s.	1967	123	Insecticide gas, poisonous, n.o.s.
1956	126	Accumulators, pressurized, pneumatic or hydraulic	1967	123	Insecticide gas, toxic, n.o.s.
1956	126	Compressed gas, n.o.s.	1967	123	Parathion and compressed gas mixture
1956	126	Hexafluoropropylene oxide	1968	126	Insecticide, liquefied gas
1956	126	Liquefied gas, n.o.s.	1968	126	Insecticide gas, n.o.s.
1956	126	Water pump system	1969	115	Isobutane
1957	115	Deuterium	1969	115	Isobutane mixture
1957	115	Deuterium, compressed	1970	120	Krypton, refrigerated liquid (cryogenic liquid)
1958	126	1,2-Dichloro-1,1,2,2-tetrafluoroethane	1971	115	Methane
1958	126	Dichlorotetrafluoroethane	1971	115	Methane, compressed
1958	126	Refrigerant gas R-114	1971	115	Natural gas, compressed
1959	116P	1,1-Difluoroethylene	1972	115	Liquefied natural gas (cryogenic liquid)
1959	116P	Refrigerant gas R-1132a	1972	115	LNG (cryogenic liquid)
1960	115	Engine starting fluid	1972	115	Methane, refrigerated liquid (cryogenic liquid)
1961	115	Ethane, refrigerated liquid	1972	115	Natural gas, refrigerated liquid (cryogenic liquid)
1961	115	Ethane-Propane mixture, refrigerated liquid	1973	126	Chlorodifluoromethane and Chloropentafluoroethane mixture
1961	115	Propane-Ethane mixture, refrigerated liquid	1973	126	Chloropentafluoroethane and Chlorodifluoromethane mixture
1962	116P	Ethylene	1973	126	Refrigerant gas R-502
1962	116P	Ethylene, compressed	1974	126	Bromochlorodifluoromethane
1963	120	Helium, refrigerated liquid (cryogenic liquid)	1974	126	Chlorodifluorobromomethane
1964	115	Hydrocarbon gas, compressed, n.o.s.	1974	126	Refrigerant gas R-12B1
1964	115	Hydrocarbon gas mixture, compressed, n.o.s.			
1965	115	Hydrocarbon gas, liquefied, n.o.s.			
1965	115	Hydrocarbon gas mixture, liquefied, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1975	124	Dinitrogen tetroxide and Nitric oxide mixture	1982	126	Tetrafluoromethane, compressed
1975	124	Nitric oxide and Dinitrogen tetroxide mixture	1983	126	1-Chloro-2,2,2-trifluoroethane
1975	124	Nitric oxide and Nitrogen dioxide mixture	1983	126	Chlorotrifluoroethane
1975	124	Nitric oxide and Nitrogen tetroxide mixture	1983	126	Refrigerant gas R-133a
1975	124	Nitrogen dioxide and Nitric oxide mixture	1984	126	Refrigerant gas R-23
1975	124	Nitrogen tetroxide and Nitric oxide mixture	1984	126	Trifluoromethane
1976	126	Octafluorocyclobutane	1986	131	Alcohols, flammable, poisonous, n.o.s.
1976	126	Refrigerant gas RC-318	1986	131	Alcohols, flammable, toxic, n.o.s.
1977	120	Nitrogen, refrigerated liquid (cryogenic liquid)	1986	131	Alcohols, poisonous, n.o.s.
1978	115	Propane	1986	131	Alcohols, toxic, n.o.s.
1978	115	Propane mixture	1986	131	Denatured alcohol (toxic)
1979	121	Rare gases mixture	1986	131	Propargyl alcohol
1979	121	Rare gases mixture, compressed	1987	127	Alcohols, n.o.s.
1980	122	Helium-Oxygen mixture	1987	127	Denatured alcohol
1980	122	Oxygen and Rare gases mixture	1988	131	Aldehydes, flammable, poisonous, n.o.s.
1980	122	Oxygen and Rare gases mixture, compressed	1988	131	Aldehydes, flammable, toxic, n.o.s.
1980	122	Rare gases and Oxygen mixture	1988	131	Aldehydes, poisonous, n.o.s.
1980	122	Rare gases and Oxygen mixture, compressed	1988	131	Aldehydes, toxic, n.o.s.
1981	121	Nitrogen and Rare gases mixture	1989	129	Aldehydes, n.o.s.
1981	121	Nitrogen and Rare gases mixture, compressed	1989	129	Benzaldehyde
1981	121	Rare gases and Nitrogen mixture	1990	129	Benzaldehyde
1981	121	Rare gases and Nitrogen mixture, compressed	1991	131P	Chloroprene, inhibited
1982	126	Refrigerant gas R-14, compressed	1992	131	Flammable liquid, poisonous, n.o.s.
1982	126	Tetrafluoromethane	1992	131	Flammable liquid, toxic, n.o.s.
			1993	128	Combustible liquid, n.o.s.
			1993	128	Compound, tree or weed killing, liquid (flammable)
			1993	128	Compounds, cleaning, liquid (flammable)
			1993	128	Cosmetics, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1993	128	Diesel fuel	2010	138	Magnesium hydride
1993	128	Disinfectant, liquid, n.o.s.	2011	139	Magnesium phosphide
1993	128	Drugs, n.o.s.	2012	139	Potassium phosphide
1993	128	Ethyl nitrate	2013	139	Strontium phosphide
1993	128	Flammable liquid, n.o.s.	2014	140	Hydrogen peroxide, aqueous solution, with not less than 20% but not more than 60% Hydrogen peroxide (stabilized as necessary)
1993	128	Fuel oil	2015	143	Hydrogen peroxide, aqueous solution, stabilized, with more than 60% Hydrogen peroxide
1993	128	Heater for refrigerator car, liquid fuel type	2015	143	Hydrogen peroxide, stabilized
1993	128	Medicines, flammable, liquid, n.o.s.	2016	151	Ammunition, poisonous, non-explosive
1993	128	Refrigerating machine	2016	151	Ammunition, toxic, non-explosive
1994	131	Iron pentacarbonyl	2017	159	Ammunition, tear-producing, non-explosive
1999	130	Asphalt	2017	159	Grenade, tear gas
1999	130	Asphalt, cutback	2018	152	Chloroanilines, solid
1999	130	Tars, liquid	2019	152	Chloroanilines, liquid
2000	133	Celluloid, in blocks, rods, rolls, sheets, tubes, etc., except scrap	2020	153	Chlorophenols, solid
2001	133	Cobalt naphthenates, powder	2020	153	Trichlorophenol
2002	135	Celluloid, scrap	2021	153	Chlorophenols, liquid
2003	135	Metal alkyls, n.o.s.	2022	153	Cresylic acid
2003	135	Metal alkyls, water-reactive, n.o.s.	2022	153	Mining reagent, liquid
2003	135	Metal aryls, n.o.s.	2023	131P	1-Chloro-2,3-epoxypropane
2003	135	Metal aryls, water-reactive, n.o.s.	2023	131P	Epichlorohydrin
2004	135	Magnesium diamide	2024	151	Mercury compound, liquid, n.o.s.
2005	135	Magnesium diphenyl	2025	151	Mercury compound, solid, n.o.s.
2006	135	Plastic, nitrocellulose-based, spontaneously combustible, n.o.s.	2026	151	Phenylmercuric compound, n.o.s.
2006	135	Plastics, nitrocellulose-based, self-heating, n.o.s.	2027	151	Sodium arsenite, solid
2008	135	Zirconium powder, dry	2028	153	Bombs, smoke, non-explosive, with corrosive liquid, without initiating device
2009	135	Zirconium, dry, finished sheets, strips or coiled wire			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2029	132	Hydrazine, anhydrous	2049	130	Diethylbenzene
2029	132	Hydrazine, aqueous solutions, with more than 64% Hydrazine	2050	127	Diisobutylene, isomeric compounds
2030	153	Hydrazine, aqueous solution, with not less than 37% but not more than 64% Hydrazine	2051	132	2-Dimethylaminoethanol
2030	153	Hydrazine, aqueous solutions, with not more than 64% Hydrazine	2051	132	Dimethylethanolamine
2030	153	Hydrazine hydrate	2052	128	Dipentene
2031	157	Nitric acid, other than red fuming	2053	129	Methylamyl alcohol
2032	157	Nitric acid, fuming	2053	129	Methyl isobutyl carbinol
2032	157	Nitric acid, red fuming	2053	129	M.I.B.C.
2033	154	Potassium monoxide	2054	132	Morpholine
2034	115	Hydrogen and Methane mixture, compressed	2054	132	Morpholine, aqueous mixture
2034	115	Methane and Hydrogen mixture, compressed	2055	128P	Styrene monomer, inhibited
2035	115	Refrigerant gas R-143a	2056	127	Tetrahydrofuran
2035	115	1,1,1-Trifluoroethane	2057	128	Tripropylene
2035	115	Trifluoroethane, compressed	2058	129	Valeraldehyde
2036	121	Xenon	2059	127	Collodion
2036	121	Xenon, compressed	2059	127	Nitrocellulose, block, wet, with not less than 25% alcohol
2037	115	Gas cartridges	2059	127	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% alcohol or solvent
2037	115	Receptacles, small, containing gas	2059	127	Nitrocellulose, solution, flammable
2038	152	Dinitrotoluenes	2059	127	Nitrocellulose, solution, in a flammable liquid
2038	152	Dinitrotoluenes, liquid	2067	140	Ammonium nitrate fertilizers
2038	152	Dinitrotoluenes, solid	2068	140	Ammonium nitrate fertilizers, with Calcium carbonate
2044	115	2,2-Dimethylpropane	2069	140	Ammonium nitrate fertilizers, with Ammonium sulfate
2045	129	Isobutyl aldehyde	2069	140	Ammonium nitrate fertilizers, with Ammonium sulphate
2045	129	Isobutyraldehyde	2069	140	Ammonium nitrate mixed fertilizers
2046	130	Cymenes			
2047	132	Dichloropropenes			
2048	129	Dicyclopentadiene			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2070	143	Ammonium nitrate fertilizers, with Phosphate or Potash	2091	145	tert-Butyl cumyl peroxide
2071	140	Ammonium nitrate fertilizer, with not more than 0.4% combustible material	2091	145	tert-Butyl isopropyl benzene hydroperoxide
2071	140	Ammonium nitrate fertilizers	2092	147	tert-Butyl hydroperoxide, not more than 80% in Di-tert-butyl peroxide and/or solvent
2072	140	Ammonium nitrate fertilizer, n.o.s.	2093	147	tert-Butyl hydroperoxide
2072	140	Ammonium nitrate fertilizers	2094	147	tert-Butyl hydroperoxide
2073	125	Ammonia, solution, with more than 35% but not more than 50% Ammonia	2095	146	tert-Butyl peroxyacetate
2074	153P	Acrylamide	2096	146	tert-Butyl peroxyacetate
2075	153	Chloral, anhydrous, inhibited	2097	146	tert-Butyl peroxybenzoate
2076	153	Cresols	2098	145	tert-Butyl peroxybenzoate
2077	153	alpha-Naphthylamine	2099	146	tert-Butyl monoperoxymaleate
2077	153	Naphthylamine (alpha)	2102	145	Di-tert-butyl peroxide
2078	156	Toluene diisocyanate	2103	146	tert-Butyl peroxyisopropyl carbonate
2079	154	Diethylenetriamine	2104	145	tert-Butyl peroxyisononanoate
2080	145	Acetyl acetone peroxide	2104	145	tert-Butyl peroxy-3,5,5-trimethylhexanoate
2081	147	Acetyl benzoyl peroxide	2106	146	Di-(tert-butylperoxy)phthalate
2082	148	Acetyl cyclohexanesulfonyl peroxide	2107	145	Di-(tert-butylperoxy)phthalate
2082	148	Acetyl cyclohexanesulphonyl peroxide	2108	145	Di-(tert-butylperoxy)phthalate
2083	148	Acetyl cyclohexanesulfonyl peroxide	2110	148	tert-Butyl peroxy-pivalate
2083	148	Acetyl cyclohexanesulphonyl peroxide	2111	146	2,2-Di-(tert-butylperoxy)butane
2084	148	Acetyl peroxide	2112	145	1,3-Di-(2-tert-butylperoxy-isopropyl)benzene and 1,4-Di-(2-tert-butylperoxy-isopropyl)benzene mixtures
2085	146	Benzoyl peroxide	2112	145	1,4-Di-(2-tert-butylperoxy-isopropyl)benzene and 1,3-Di-(2-tert-butylperoxy-isopropyl)benzene mixtures
2087	146	Benzoyl peroxide	2113	146	p-Chlorobenzoyl peroxide
2088	146	Benzoyl peroxide	2114	145	p-Chlorobenzoyl peroxide
2089	145	Benzoyl peroxide	2115	145	p-Chlorobenzoyl peroxide
2090	146	Benzoyl peroxide	2116	147	Cumene hydroperoxide
2091	145	tert-Butyl cumene peroxide			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2118	147	Cyclohexanone peroxide, not more than 72% in solution	2142	148	tert-Butyl peroxyisobutyrate
2119	147	Cyclohexanone peroxide, not more than 90%, with not less than 10% water	2143	148	tert-Butyl peroxy-2-ethylhexanoate
2120	148	Decanoyl peroxide	2144	148	tert-Butyl peroxydiethylacetate
2121	145	Dicumyl peroxide	2145	146	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
2122	148	Di-(2-ethylhexyl)-peroxydicarbonate	2146	145	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
2123	148	Di-(2-ethylhexyl)-peroxydicarbonate	2147	145	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
2124	145	Lauroyl peroxide	2148	145	Di-(1-hydroxycyclohexyl)-peroxide
2125	147	p-Menthane hydroperoxide	2149	148	Dibenzyl peroxydicarbonate
2126	147	Methyl isobutyl ketone peroxide	2150	148	Di-(sec-butyl)peroxydicarbonate
2128	148	Isononanoyl peroxide	2151	148	Di-(sec-butyl)peroxydicarbonate
2129	148	Caprylyl peroxide	2152	148	Dicyclohexyl peroxydicarbonate
2129	148	Caprylyl peroxide, solution	2153	148	Dicyclohexyl peroxydicarbonate
2129	148	Octanoyl peroxide	2154	148	Di-(4-tert-butylcyclohexyl)-peroxydicarbonate
2130	148	Pelargonyl peroxide	2155	145	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane
2131	147	Peracetic acid, solution	2156	145	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane
2131	147	Peroxyacetic acid, solution	2157	148	2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy)hexane
2132	148	Propionyl peroxide	2158	146	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3
2133	148	Isopropyl percarbonate, unstabilized	2159	145	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3, with not more than 52% Peroxide in inert solid
2133	148	Isopropyl peroxydicarbonate	2160	145	1,1,3,3-Tetramethylbutyl hydroperoxide
2134	148	Isopropyl peroxydicarbonate	2161	148	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate
2135	146	Succinic acid peroxide	2162	147	Pinane hydroperoxide
2136	145	Tetralin hydroperoxide	2163	148	Diacetone alcohol peroxides
2137	146	2,4-Dichlorobenzoyl peroxide			
2138	145	2,4-Dichlorobenzoyl peroxide			
2139	145	2,4-Dichlorobenzoyl peroxide			
2140	146	n-Butyl-4,4-di-(tert-butylperoxy)valerate			
2141	145	n-Butyl-4,4-di-(tert-butylperoxy)valerate			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2164	148	Dicetyl peroxydicarbonate	2186	125	Hydrogen chloride, refrigerated liquid
2165	146	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane	2187	120	Carbon dioxide, refrigerated liquid
2166	145	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane	2188	119	Arsine
2167	145	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane	2188	119	SA
2168	145	2,2-Di-(4,4-di-tert-butylperoxycyclohexyl)propane	2189	119	Dichlorosilane
2169	148	Butyl peroxydicarbonate	2190	124	Oxygen difluoride
2170	148	Butyl peroxydicarbonate	2190	124	Oxygen difluoride, compressed
2171	145	Diisopropylbenzene hydroperoxide	2191	123	Sulfuryl fluoride
2172	146	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	2191	123	Sulphuryl fluoride
2173	145	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	2192	119	Germane
2174	146	2,5-Dimethyl-2,5-dihydroperoxy hexane, not more than 82% with water	2193	126	Hexafluoroethane
2174	146	Dimethylhexane dihydroperoxide, with 18% or more water	2193	126	Hexafluoroethane, compressed
2175	148	Diethyl peroxydicarbonate	2193	126	Refrigerant gas R-116, compressed
2176	148	Di-n-propyl peroxydicarbonate	2194	125	Selenium hexafluoride
2177	148	tert-Butyl peroxyneodecanoate	2195	125	Tellurium hexafluoride
2178	146	2,2-Dihydroperoxypropane	2196	125	Tungsten hexafluoride
2179	146	1,1-Di-(tert-butylperoxy)-cyclohexane	2197	125	Hydrogen iodide, anhydrous
2180	146	1,1-Di-(tert-butylperoxy)-cyclohexane	2198	125	Phosphorus pentafluoride
2182	148	Diisobutyl peroxide	2198	125	Phosphorus pentafluoride, compressed
2183	145	tert-Butyl peroxyacrylate	2199	119	Phosphine
2184	146	Ethyl-3,3-di-(tert-butylperoxy)butyrate	2200	116P	Propadiene, inhibited
2185	145	Ethyl-3,3-di-(tert-butylperoxy)butyrate, not more than 77% in solution	2201	122	Nitrous oxide, refrigerated liquid
			2202	117	Hydrogen selenide, anhydrous
			2203	116	Silane
			2203	116	Silane, compressed
			2204	119	Carbonyl sulfide
			2204	119	Carbonyl sulphide
			2205	153	Adiponitrile
			2206	155	Isocyanate solution, poisonous, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2206	155	Isocyanate solution, toxic, n.o.s.	2216	171	Fish scrap containing 6% to 12% water
2206	155	Isocyanate solutions, n.o.s.	2217	135	Seed cake, with not more than 1.5% oil and not more than 11% moisture
2206	155	Isocyanates, n.o.s.	2218	132P	Acrylic acid, inhibited
2206	155	Isocyanates, poisonous, n.o.s.	2219	129	Allyl glycidyl ether
2206	155	Isocyanates, toxic, n.o.s.	2222	127	Anisole
2207	155	Isocyanate solutions, n.o.s. (toxic)	2224	152	Benzonitrile
2207	155	Isocyanates, n.o.s. (toxic)	2225	156	Benzenesulfonyl chloride
2208	140	Bleaching powder	2225	156	Benzenesulphonyl chloride
2208	140	Calcium hypochlorite mixture, dry, with more than 10% but not more than 39% available Chlorine	2226	156	Benzotrichloride
2209	132	Formaldehyde, solutions (Formalin) (corrosive)	2227	129P	n-Butyl methacrylate
2210	135	Maneb	2227	129P	n-Butyl methacrylate, inhibited
2210	135	Maneb preparation, with not less than 60% Maneb	2228	153	Butylphenols, liquid
2210	135	Pesticide, water-reactive	2229	153	Butylphenols, solid
2211	133	Polymeric beads, expandable	2232	153	Chloroacetaldehyde
2211	133	Polystyrene beads, expandable	2232	153	2-Chloroethanal
2212	171	Asbestos	2233	152	Chloroanisidines
2212	171	Asbestos, blue	2234	130	Chlorobenzotrifluorides
2212	171	Asbestos, brown	2235	153	Chlorobenzyl chlorides
2212	171	Blue asbestos	2236	156	3-Chloro-4-methylphenyl isocyanate
2212	171	Brown asbestos	2237	153	Chloronitroanilines
2213	133	Paraformaldehyde	2238	130	Chlorotoluenes
2214	156	Phthalic anhydride	2239	153	Chlorotoluidines
2215	156	Maleic acid	2239	153	Chlorotoluidines, liquid
2215	156	Maleic anhydride	2239	153	Chlorotoluidines, solid
2216	171	Fish meal, stabilized	2240	154	Chromosulfuric acid
2216	171	Fish meal containing 6% to 12% water	2240	154	Chromosulphuric acid
2216	171	Fish scrap, stabilized	2241	128	Cycloheptane
			2242	128	Cycloheptene
			2243	130	Cyclohexyl acetate
			2244	129	Cyclopentanol

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2245	127	Cyclopentanone	2267	156	Dimethyl phosphorochloridothioate
2246	128	Cyclopentene	2267	156	Dimethyl thiophosphoryl chloride
2247	128	n-Decane	2269	153	3,3'-Iminodipropylamine
2248	132	Di-n-butylamine	2270	132	Ethylamine, aqueous solution, with not less than 50% but not more than 70% Ethylamine
2249	153	Dichlorodimethyl ether, symmetrical	2271	127	Ethyl amyl ketone
2250	156	Dichlorophenyl isocyanates	2272	153	N-Ethylaniline
2251	127P	Bicyclo[2.2.1]hepta-2,5-diene	2273	153	2-Ethylaniline
2251	127P	Bicyclo[2.2.1]hepta-2,5-diene, inhibited	2274	153	N-Ethyl-N-benzylaniline
2251	127P	Dicycloheptadiene	2275	129	2-Ethylbutanol
2251	127P	2,5-Norbornadiene	2276	132	2-Ethylhexylamine
2251	127P	2,5-Norbornadiene, inhibited	2277	129P	Ethyl methacrylate
2252	127	1,2-Dimethoxyethane	2277	129P	Ethyl methacrylate, inhibited
2253	153	N,N-Dimethylaniline	2278	128	n-Heptene
2254	133	Matches, fusee	2279	151	Hexachlorobutadiene
2255	146	Organic peroxides, samples, n.o.s	2280	153	Hexamethylenediamine, solid
2255	146	Polyester resin kit	2281	156	Hexamethylene diisocyanate
2256	130	Cyclohexene	2282	129	Hexanols
2257	138	Potassium	2283	130P	Isobutyl methacrylate
2257	138	Potassium, metal	2283	130P	Isobutyl methacrylate, inhibited
2258	132	1,2-Propylenediamine	2284	131	Isobutyronitrile
2258	132	1,3-Propylenediamine	2285	156	Isocyanatobenzotrifluorides
2259	153	Triethylenetetramine	2286	128	Pentamethylheptane
2260	132	Tripropylamine	2287	128	Isoheptene
2261	153	Xylenols	2288	128	Isohexene
2262	156	Dimethylcarbamoyl chloride	2289	153	Isophoronediamine
2263	128	Dimethylcyclohexanes	2290	156	IPDI
2264	132	Dimethylcyclohexylamine	2290	156	Isophorone diisocyanate
2265	129	N,N-Dimethylformamide	2291	151	Lead chloride
2266	132	Dimethyl-N-propylamine	2291	151	Lead compound, soluble, n.o.s.
2267	156	Dimethyl chlorothiophosphate	2291	151	Lead fluoborate

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2293	127	4-Methoxy-4-methyl-pentan-2-one	2318	135	Sodium hydrosulfide, solid, with less than 25% water of crystallization
2294	153	N-Methylaniline	2318	135	Sodium hydrosulfide, with less than 25% water of crystallization
2295	155	Methyl chloroacetate	2318	135	Sodium hydrosulphide, solid, with less than 25% water of crystallization
2296	128	Methylcyclohexane	2318	135	Sodium hydrosulphide, with less than 25% water of crystallization
2297	127	Methylcyclohexanone	2319	128	Terpene hydrocarbons, n.o.s.
2298	128	Methylcyclopentane	2320	153	Tetraethylenepentamine
2299	155	Methyl dichloroacetate	2321	153	Trichlorobenzenes, liquid
2300	153	2-Methyl-5-ethylpyridine	2322	152	Trichlorobutene
2301	127	2-Methylfuran	2323	129	Triethyl phosphite
2302	127	5-Methylhexan-2-one	2324	128	Triisobutylene
2303	128	Isopropenylbenzene	2325	129	1,3,5-Trimethylbenzene
2304	133	Naphthalene, molten	2326	153	Trimethylcyclohexylamine
2305	153	Nitrobenzenesulfonic acid	2327	153	Trimethylhexamethylenediamines
2305	153	Nitrobenzenesulphonic acid	2328	156	Trimethylhexamethylene diisocyanate
2306	152	Nitrobenzotrifluorides	2329	129	Trimethyl phosphite
2307	152	3-Nitro-4-chlorobenzotrifluoride	2330	128	Undecane
2308	157	Nitrosylsulfuric acid	2331	154	Zinc chloride, anhydrous
2308	157	Nitrosylsulphuric acid	2332	129	Acetaldehyde oxime
2309	128P	Octadiene	2333	131	Allyl acetate
2310	131	Pentan-2,4-dione	2334	131	Allylamine
2310	131	2,4-Pentanedione	2335	131	Allyl ethyl ether
2310	131	Pentane-2,4-dione	2336	131	Allyl formate
2311	153	Phenetidines	2337	131	Phenyl mercaptan
2312	153	Phenol, molten	2338	131	Benzotrifluoride
2313	130	Picolines	2339	130	2-Bromobutane
2315	171	Articles containing Polychlorinated biphenyls (PCB)	2340	130	2-Bromoethyl ethyl ether
2315	171	PCB			
2315	171	Polychlorinated biphenyls			
2315	171	Polychlorinated biphenyls, liquid			
2315	171	Polychlorinated biphenyls, solid			
2316	157	Sodium cuprocyanide, solid			
2317	157	Sodium cuprocyanide, solution			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2341	130	1-Bromo-3-methylbutane	2372	129	1,2-Di-(dimethylamino)ethane
2342	130	Bromomethylpropanes	2373	127	Diethoxymethane
2343	130	2-Bromopentane	2374	127	3,3-Diethoxypropene
2344	130	2-Bromopropane	2375	129	Diethyl sulfide
2344	130	Bromopropanes	2375	129	Diethyl sulphide
2345	129	3-Bromopropyne	2376	127	2,3-Dihydropyran
2346	127	Butanedione	2377	127	1,1-Dimethoxyethane
2346	127	Diacetyl	2378	131	2-Dimethylaminoacetonitrile
2347	130	Butyl mercaptan	2379	132	1,3-Dimethylbutylamine
2348	129P	Butyl acrylate	2380	127	Dimethyldiethoxysilane
2348	129P	Butyl acrylates, inhibited	2381	130	Dimethyl disulfide
2350	127	Butyl methyl ether	2381	130	Dimethyl disulphide
2351	129	Butyl nitrites	2382	131	1,2-Dimethylhydrazine
2352	127P	Butyl vinyl ether, inhibited	2382	131	Dimethylhydrazine, symmetrical
2353	132	Butyryl chloride	2383	132	Dipropylamine
2354	131	Chloromethyl ethyl ether	2384	127	Di-n-propyl ether
2356	129	2-Chloropropane	2384	127	Dipropyl ether
2357	132	Cyclohexylamine	2385	129	Ethyl isobutyrate
2358	128P	Cyclooctatetraene	2386	132	1-Ethylpiperidine
2359	132	Diallylamine	2387	130	Fluorobenzene
2360	131P	Diallyl ether	2388	130	Fluorotoluenes
2361	132	Diisobutylamine	2389	127	Furan
2362	130	1,1-Dichloroethane	2390	129	2-Iodobutane
2363	130	Ethyl mercaptan	2391	129	Iodomethylpropanes
2364	127	n-Propyl benzene	2392	129	Iodopropanes
2366	127	Diethyl carbonate	2393	132	Isobutyl formate
2367	130	alpha-Methylvaleraldehyde	2394	129	Isobutyl propionate
2367	130	Methyl valeraldehyde (alpha)	2395	132	Isobutyryl chloride
2368	127	alpha-Pinene	2396	131P	Methacrylaldehyde
2368	127	Pinene (alpha)	2396	131P	Methacrylaldehyde, inhibited
2369	152	Ethylene glycol monobutyl ether	2397	127	3-Methylbutan-2-one
2370	128	1-Hexene	2398	127	Methyl tert-butyl ether
2371	128	Isopentenenes	2399	132	1-Methylpiperidine

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2400	130	Methyl isovalerate	2427	140	Potassium chlorate, solution
2401	132	Piperidine	2428	140	Sodium chlorate, aqueous solution
2402	130	Isopropyl mercaptan	2429	140	Calcium chlorate, aqueous solution
2402	130	Propanethiols	2429	140	Calcium chlorate, solution
2402	130	Propyl mercaptan	2430	153	Alkyl phenols, solid, n.o.s. (including C2-C12 homologues)
2403	129P	Isopropenyl acetate	2431	153	Anisidines
2404	131	Propionitrile	2431	153	Anisidines, liquid
2405	129	Isopropyl butyrate	2431	153	Anisidines, solid
2406	131	Isopropyl isobutyrate	2432	153	N,N-Diethylaniline
2407	155	Isopropyl chloroformate	2433	152	Chloronitrotoluenes
2409	129	Isopropyl propionate	2433	152	Chloronitrotoluenes, liquid
2410	129	1,2,3,6-Tetrahydropyridine	2433	152	Chloronitrotoluenes, solid
2410	129	1,2,5,6-Tetrahydropyridine	2434	156	Dibenzylchlorosilane
2411	131	Butyronitrile	2435	156	Ethylphenylchlorosilane
2412	129	Tetrahydrothiophene	2436	129	Thioacetic acid
2413	128	Tetrapropyl orthotitanate	2437	156	Methylphenylchlorosilane
2414	130	Thiophene	2438	132	Trimethylacetyl chloride
2416	129	Trimethyl borate	2439	154	Sodium bifluoride, solid
2417	125	Carbonyl fluoride	2439	154	Sodium bifluoride, solution
2417	125	Carbonyl fluoride, compressed	2439	154	Sodium hydrogendifluoride
2418	125	Sulfur tetrafluoride	2439	154	Sodium hydrogen fluoride
2418	125	Sulphur tetrafluoride	2440	154	Stannic chloride, pentahydrate
2419	116	Bromotrifluoroethylene	2440	154	Tin tetrachloride, pentahydrate
2420	125	Hexafluoroacetone	2441	135	Titanium trichloride, pyrophoric
2421	124	Nitrogen trioxide	2441	135	Titanium trichloride mixture, pyrophoric
2422	126	Octafluorobut-2-ene	2442	156	Trichloroacetyl chloride
2422	126	Refrigerant gas R-1318	2443	137	Titanium tetrachloride and Vanadium oxytrichloride, mixture
2424	126	Octafluoropropane	2443	137	Vanadium oxytrichloride
2424	126	Refrigerant gas R-218			
2426	140	Ammonium nitrate, liquid (hot concentrated solution)			
2427	140	Potassium chlorate, aqueous solution			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2443	137	Vanadium oxytrichloride and Titanium tetrachloride, mixture	2465	140	Sodium dichloroisocyanurate
2444	137	Vanadium tetrachloride	2465	140	Sodium dichloro-s-triazinetrione
2445	135	Lithium alkyls	2466	143	Potassium superoxide
2446	153	Nitrocresols	2467	140	Sodium percarbonates
2447	136	Phosphorus, white, molten	2468	140	Trichloroisocyanuric acid, dry
2447	136	White phosphorus, molten	2468	140	Trichloro-s-triazinetrione, dry
2447	136	Yellow phosphorus, molten	2468	140	(mono)-(Trichloro)-tetra-(monopotassium dichloro)-penta-s-triazinetrione, dry
2448	133	Sulfur, molten	2469	140	Zinc bromate
2448	133	Sulphur, molten	2470	152	Phenylacetoneitrile, liquid
2449	154	Ammonium oxalate	2471	154	Osmium tetroxide
2449	154	Oxalates, water soluble	2473	154	Sodium arsanilate
2451	122	Nitrogen trifluoride	2474	157	Thiophosgene
2451	122	Nitrogen trifluoride, compressed	2475	157	Vanadium trichloride
2452	116P	Ethylacetylene, inhibited	2477	131	Methyl isothiocyanate
2453	115	Ethyl fluoride	2478	155	Isocyanate solution, flammable, poisonous, n.o.s.
2453	115	Refrigerant gas R-161	2478	155	Isocyanate solution, flammable, toxic, n.o.s.
2454	115	Methyl fluoride	2478	155	Isocyanate solutions, n.o.s.
2454	115	Refrigerant gas R-41	2478	155	Isocyanates, flammable, poisonous, n.o.s.
2455	116	Methyl nitrite	2478	155	Isocyanates, flammable, toxic, n.o.s.
2456	130P	2-Chloropropene	2478	155	Isocyanates, n.o.s.
2457	128	2,3-Dimethylbutane	2480	155	Methyl isocyanate
2458	130	Hexadiene	2481	155	Ethyl isocyanate
2459	127	2-Methyl-1-butene	2482	155	n-Propyl isocyanate
2460	127	2-Methyl-2-butene	2483	155	Isopropyl isocyanate
2461	127	Methylpentadiene	2484	155	tert-Butyl isocyanate
2462	128	Methyl pentane	2485	155	n-Butyl isocyanate
2463	138	Aluminum hydride	2486	155	Isobutyl isocyanate
2464	141	Beryllium nitrate	2487	155	Phenyl isocyanate
2465	140	Dichloroisocyanuric acid, dry			
2465	140	Dichloroisocyanuric acid salts			
2465	140	Potassium dichloro-s-triazinetrione, dry			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2488	155	Cyclohexyl isocyanate	2514	129	Bromobenzene
2489	156	Diphenylmethane-4,4'-diisocyanate	2515	159	Bromoform
2490	153	Dichloroisopropyl ether	2516	151	Carbon tetrabromide
2491	153	Ethanolamine	2517	115	1-Chloro-1,1-difluoroethane
2491	153	Ethanolamine, solution	2517	115	Chlorodifluoroethanes
2491	153	Monoethanolamine	2517	115	Difluorochloroethanes
2493	132	Hexamethyleneimine	2517	115	Refrigerant gas R-142b
2495	144	Iodine pentafluoride	2518	153	1,5,9-Cyclododecatriene
2496	156	Propionic anhydride	2520	130P	Cyclooctadienes
2497	153	Sodium phenolate, solid	2521	131P	Diketene, inhibited
2498	132	1,2,3,6-Tetrahydro-benzaldehyde	2522	153P	2-Dimethylaminoethyl methacrylate
2501	152	1-Aziridinyl phosphine oxide (Tris)	2522	153P	Dimethylaminoethyl methacrylate
2501	152	Tri-(1-aziridinyl)phosphine oxide, solution	2524	129	Ethyl orthoformate
2501	152	Tris-(1-aziridinyl)phosphine oxide, solution	2525	156	Ethyl oxalate
2502	132	Valeryl chloride	2526	132	Furfurylamine
2503	137	Zirconium tetrachloride	2527	130P	Isobutyl acrylate
2504	159	Acetylene tetrabromide	2527	130P	Isobutyl acrylate, inhibited
2504	159	Tetrabromoethane	2528	129	Isobutyl isobutyrate
2505	154	Ammonium fluoride	2529	132	Isobutyric acid
2506	154	Ammonium hydrogen sulfate	2530	132	Isobutyric anhydride
2506	154	Ammonium hydrogen sulphate	2531	153P	Methacrylic acid, inhibited
2507	154	Chloroplatinic acid, solid	2533	156	Methyl trichloroacetate
2508	156	Molybdenum pentachloride	2534	119	Methylchlorosilane
2509	154	Potassium hydrogen sulfate	2535	132	4-Methylmorpholine
2509	154	Potassium hydrogen sulphate	2535	132	N-Methylmorpholine
2511	153	2-Chloropropionic acid	2535	132	Methylmorpholine
2511	153	alpha-Chloropropionic acid	2536	127	Methyltetrahydrofuran
2512	152	Aminophenols	2538	133	Nitronaphthalene
2513	156	Bromoacetyl bromide	2541	128	Terpinolene
			2542	153	Tributylamine
			2545	135	Hafnium powder, dry

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2546	135	Titanium powder, dry	2565	153	Dicyclohexylamine
2547	143	Sodium superoxide	2567	154	Sodium pentachlorophenate
2548	124	Chlorine pentafluoride	2570	154	Cadmium compound
2550	147	Methyl ethyl ketone peroxide	2571	156	Alkylsulfuric acids
2551	145	tert-Butyl peroxydiethylacetate, with tert-Butyl peroxybenzoate	2571	156	Alkylsulphuric acids
2552	151	Hexafluoroacetone hydrate	2571	156	Ethylsulfuric acid
2553	128	Naphtha	2571	156	Ethylsulphuric acid
2554	129P	Methylallyl chloride	2572	153	Phenylhydrazine
2555	113	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% water	2573	141	Thallium chlorate
2555	113	Nitrocellulose with water, not less than 25% water	2574	151	Tricresyl phosphate
2556	113	Nitrocellulose, wet, with not less than 30% alcohol or solvent	2576	137	Phosphorus oxybromide, molten
2556	113	Nitrocellulose with alcohol	2577	156	Phenylacetyl chloride
2556	113	Nitrocellulose with not less than 25% alcohol	2578	157	Phosphorus trioxide
2557	133	Lacquer chips, dry	2579	153	Piperazine
2557	133	Nitrocellulose mixture, without plasticizer, without pigment	2580	154	Aluminum bromide, solution
2557	133	Nitrocellulose mixture, without plasticizer, with pigment	2581	154	Aluminum chloride, solution
2557	133	Nitrocellulose mixture, with plasticizer, without pigment	2582	154	Ferric chloride, solution
2557	133	Nitrocellulose mixture, with plasticizer, with pigment	2583	153	Alkyl sulfonic acids, solid, with more than 5% free Sulfuric acid
2557	133	Nitrocellulose with plasticizing substance	2583	153	Alkyl sulphonic acids, solid, with more than 5% free Sulphuric acid
2558	131	Epibromohydrin	2583	153	Aryl sulfonic acids, solid, with more than 5% free Sulfuric acid
2560	129	2-Methylpentan-2-ol	2583	153	Aryl sulphonic acids, solid, with more than 5% free Sulphuric acid
2561	127	3-Methyl-1-butene	2583	153	Toluene sulfonic acid, solid, with more than 5% free Sulfuric acid
2562	148	tert-Butyl peroxyisobutyrate	2583	153	Toluene sulphonic acid, solid, with more than 5% free Sulphuric acid
2564	153	Trichloroacetic acid, solution			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2584	153	Alkyl sulfonic acids, liquid, with more than 5% free Sulfuric acid	2586	153	Alkyl sulphonic acids, liquid, with not more than 5% free Sulphuric acid
2584	153	Alkyl sulphonic acids, liquid, with more than 5% free Sulphuric acid	2586	153	Aryl sulfonic acids, liquid, with not more than 5% free Sulfuric acid
2584	153	Aryl sulfonic acids, liquid, with more than 5% free Sulfuric acid	2586	153	Aryl sulphonic acids, liquid, with not more than 5% free Sulphuric acid
2584	153	Aryl sulphonic acids, liquid, with more than 5% free Sulphuric acid	2586	153	Toluene sulfonic acid, liquid, with not more than 5% free Sulfuric acid
2584	153	Dodecylbenzenesulfonic acid	2586	153	Toluene sulphonic acid, liquid, with not more than 5% free Sulphuric acid
2584	153	Dodecylbenzenesulphonic acid	2587	153	Benzoquinone
2584	153	Toluene sulfonic acid, liquid, with more than 5% free Sulfuric acid	2588	151	Insecticide, dry, n.o.s.
2584	153	Toluene sulphonic acid, liquid, with more than 5% free Sulphuric acid	2588	151	Pesticide, solid, poisonous
2585	153	Alkyl sulfonic acids, solid, with not more than 5% free Sulfuric acid	2588	151	Pesticide, solid, poisonous, n.o.s.
2585	153	Alkyl sulphonic acids, solid, with not more than 5% free Sulphuric acid	2588	151	Pesticide, solid, toxic, n.o.s.
2585	153	Aryl sulfonic acids, solid, with not more than 5% free Sulfuric acid	2589	155	Vinyl chloroacetate
2585	153	Aryl sulphonic acids, solid, with not more than 5% free Sulphuric acid	2590	171	Asbestos, white
2585	153	Toluene sulfonic acid, solid, with not more than 5% free Sulfuric acid	2590	171	White asbestos
2585	153	Toluene sulphonic acid, solid, with not more than 5% free Sulphuric acid	2591	120	Xenon, refrigerated liquid (cryogenic liquid)
2586	153	Alkyl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	2592	145	Distearyl peroxydicarbonate
			2593	148	Di-(2-methylbenzoyl)peroxide
			2594	148	tert-Butyl peroxyneodecanoate
			2595	148	Dimyristyl peroxydicarbonate
			2596	145	tert-Butyl peroxy-3-phenylphthalide
			2597	148	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide
			2598	145	Ethyl-3,3-di-(tert-butylperoxy)butyrate

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2599	126	Chlorotrifluoromethane and Trifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane	2602	126	Refrigerant gas R-12 and Refrigerant gas R-152a azeotropic mixture with 74% Refrigerant gas R-12
2599	126	Refrigerant gas R-13 and Refrigerant gas R-23 azeotropic mixture with 60% Refrigerant gas R-13	2602	126	Refrigerant gas R-152a and Refrigerant gas R-12 azeotropic mixture with 74% Refrigerant gas R-12
2599	126	Refrigerant gas R-23 and Refrigerant gas R-13 azeotropic mixture with 60% Refrigerant gas R-13	2602	126	Refrigerant gas R-500 (azeotropic mixture of Refrigerant gas R-12 and Refrigerant gas R-152a with approximately 74% Refrigerant gas R-12)
2599	126	Refrigerant gas R-503 (azeotropic mixture of Refrigerant gas R-13 and Refrigerant gas R-23 with approximately 60% Refrigerant gas R-13)	2603	131	Cycloheptatriene
2599	126	Trifluoromethane and Chlorotrifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane	2604	132	Boron trifluoride diethyl etherate
2600	119	Carbon monoxide and Hydrogen mixture	2605	155	Methoxymethyl isocyanate
2600	119	Carbon monoxide and Hydrogen mixture, compressed	2606	155	Methyl orthosilicate
2600	119	Hydrogen and Carbon monoxide mixture	2607	129P	Acrolein dimer, stabilized
2600	119	Hydrogen and Carbon monoxide mixture, compressed	2608	129	Nitropropanes
2601	115	Cyclobutane	2609	156	Triallyl borate
2602	126	Dichlorodifluoromethane and Difluoroethane azeotropic mixture with approximately 74% Dichlorodifluoromethane	2610	132	Triallylamine
2602	126	Difluoroethane and Dichlorodifluoromethane azeotropic mixture with approximately 74% dichlorodifluoromethane	2611	131	Propylene chlorohydrin
			2612	127	Methyl propyl ether
			2614	129	Methallyl alcohol
			2615	127	Ethyl propyl ether
			2616	129	Triisopropyl borate
			2617	129	Methylcyclohexanols
			2618	130P	Vinyltoluenes, inhibited
			2619	132	Benzyl dimethylamine
			2620	130	Amyl butyrates
			2621	127	Acetyl methyl carbinol
			2622	131P	Glycidaldehyde
			2623	133	Firelighters, solid, with flammable liquid
			2624	138	Magnesium silicide

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2626	140	Chloric acid	2658	152	Selenium powder
2626	140	Chloric acid, aqueous solution, with not more than 10% Chloric acid	2659	151	Sodium chloroacetate
2627	140	Nitrites, inorganic, n.o.s.	2660	153	Mononitrotoluidines
2628	151	Potassium fluoroacetate	2660	153	Nitrotoluidines (mono)
2629	151	Sodium fluoroacetate	2661	153	Hexachloroacetone
2630	151	Barium selenate	2662	153	Hydroquinone
2630	151	Barium selenite	2664	160	Dibromomethane
2630	151	Calcium selenate	2666	156	Ethyl cyanoacetate
2630	151	Potassium selenate	2667	131	Butyltoluenes
2630	151	Potassium selenite	2668	131	Chloroacetonitrile
2630	151	Selenates	2669	152	Chlorocresols
2630	151	Selenites	2669	152	Chlorocresols, liquid
2630	151	Sodium selenite	2669	152	Chlorocresols, solid
2630	151	Zinc selenate	2670	157	Cyanuric chloride
2630	151	Zinc selenite	2671	153	Aminopyridines
2642	154	Fluoroacetic acid	2672	154	Ammonia, solution, with more than 10% but not more than 35% Ammonia
2643	155	Methyl bromoacetate	2672	154	Ammonium hydroxide
2644	151	Methyl iodide	2672	154	Ammonium hydroxide, with more than 10% but not more than 35% Ammonia
2645	153	Phenacyl bromide	2673	151	2-Amino-4-chlorophenol
2646	151	Hexachlorocyclopentadiene	2674	154	Sodium fluorosilicate
2647	153	Malononitrile	2674	154	Sodium silicofluoride
2648	154	1,2-Dibromobutan-3-one	2676	119	Stibine
2649	153	1,3-Dichloroacetone	2677	154	Rubidium hydroxide, solution
2650	153	1,1-Dichloro-1-nitroethane	2678	154	Rubidium hydroxide
2651	153	4,4'-Diaminodiphenylmethane	2678	154	Rubidium hydroxide, solid
2653	156	Benzyl iodide	2679	154	Lithium hydroxide, solution
2655	151	Potassium fluorosilicate	2680	154	Lithium hydroxide, monohydrate
2655	151	Potassium silicofluoride	2680	154	Lithium hydroxide, solid
2656	154	Quinoline	2681	154	Caesium hydroxide, solution
2657	153	Selenium disulfide	2681	154	Cesium hydroxide, solution
2657	153	Selenium disulphide			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2682	157	Caesium hydroxide	2693	154	Calcium hydrogen sulphite, solution
2682	157	Cesium hydroxide	2693	154	Magnesium bisulfite solution
2683	132	Ammonium hydrosulfide, solution	2693	154	Magnesium bisulphite solution
2683	132	Ammonium hydrosulphide, solution	2693	154	Potassium bisulfite solution
2683	132	Ammonium sulfide, solution	2693	154	Potassium bisulphite solution
2683	132	Ammonium sulphide, solution	2693	154	Zinc bisulfite solution
2684	132	3-Diethylaminopropylamine	2693	154	Zinc bisulphite solution
2684	132	Diethylaminopropylamine	2698	156	Tetrahydrophthalic anhydrides
2685	132	N,N-Diethylethylenediamine	2699	154	Trifluoroacetic acid
2686	132	2-Diethylaminoethanol	2705	153P	1-Pentol
2686	132	Diethylaminoethanol	2707	128	Dimethyldioxanes
2687	133	Dicyclohexylammonium nitrite	2708	127	Butoxyl
2688	159	1-Bromo-3-chloropropane	2709	128	Butylbenzenes
2688	159	1-Chloro-3-bromopropane	2710	127	Dipropyl ketone
2689	153	Glycerol alpha-monochlorohydrin	2711	129	Dibromobenzene
2690	152	N,n-Butylimidazole	2713	153	Acridine
2691	137	Phosphorus pentabromide	2714	133	Zinc resinate
2692	157	Boron tribromide	2715	133	Aluminum resinate
2693	154	Ammonium bisulfite, solid	2716	153	1,4-Butynediol
2693	154	Ammonium bisulfite, solution	2717	133	Camphor
2693	154	Ammonium bisulphite, solid	2717	133	Camphor, synthetic
2693	154	Ammonium bisulphite, solution	2719	141	Barium bromate
2693	154	Bisulfites, aqueous solution, n.o.s.	2720	141	Chromium nitrate
2693	154	Bisulfites, inorganic, aqueous solutions, n.o.s.	2721	141	Copper chlorate
2693	154	Bisulphites, aqueous solution, n.o.s.	2722	140	Lithium nitrate
2693	154	Bisulphites, inorganic, aqueous solutions, n.o.s.	2723	140	Magnesium chlorate
2693	154	Calcium hydrogen sulfite, solution	2724	140	Manganese nitrate
			2725	140	Nickel nitrate
			2726	140	Nickel nitrite
			2727	141	Thallium nitrate
			2728	140	Zirconium nitrate
			2729	152	Hexachlorobenzene

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2730	152	Nitroanisole	2743	155	n-Butyl chloroformate
2730	152	Nitroanisole, liquid	2744	155	Cyclobutyl chloroformate
2730	152	Nitroanisole, solid	2745	157	Chloromethyl chloroformate
2732	152	Nitrobromobenzene	2746	156	Phenyl chloroformate
2732	152	Nitrobromobenzene, liquid	2747	156	tert-Butylcyclohexyl chloroformate
2732	152	Nitrobromobenzene, solid	2748	156	2-Ethylhexyl chloroformate
2733	132	Alkylamines, n.o.s.	2749	130	Tetramethylsilane
2733	132	Amines, flammable, corrosive, n.o.s.	2750	153	1,3-Dichloropropanol-2
2733	132	Polyalkylamines, n.o.s.	2751	155	Diethylthiophosphoryl chloride
2733	132	Polyamines, flammable, corrosive, n.o.s.	2752	127	1,2-Epoxy-3-ethoxypropane
2734	132	Alkylamines, n.o.s.	2753	153	N-Ethylbenzyltoluidines
2734	132	Amines, liquid, corrosive, flammable, n.o.s.	2754	153	N-Ethyltoluidines
2734	132	Polyalkylamines, n.o.s.	2755	146	3-Chloroperoxybenzoic acid
2734	132	Polyamines, liquid, corrosive, flammable, n.o.s.	2756	146	Organic peroxides, mixtures
2735	153	Alkylamines, n.o.s.	2757	151	Carbamate pesticide, solid, poisonous
2735	153	Amines, liquid, corrosive, n.o.s.	2757	151	Carbamate pesticide, solid, toxic
2735	153	Polyalkylamines, n.o.s.	2757	151	Carbaryl
2735	153	Polyamines, liquid, corrosive, n.o.s.	2757	151	Carbofuran
2738	153	N-Butylaniline	2757	151	Mexacarbate
2739	156	Butyric anhydride	2758	131	Carbamate pesticide, liquid, flammable, poisonous
2740	155	n-Propyl chloroformate	2758	131	Carbamate pesticide, liquid, flammable, toxic
2741	141	Barium hypochlorite, with more than 22% available Chlorine	2759	151	Arsenical pesticide, solid, poisonous
2742	155	sec-Butyl chloroformate	2759	151	Arsenical pesticide, solid, toxic
2742	155	Chloroformates, n.o.s.	2760	131	Arsenical pesticide, liquid, flammable, poisonous
2742	155	Chloroformates, poisonous, corrosive, flammable, n.o.s.	2760	131	Arsenical pesticide, liquid, flammable, toxic
2742	155	Chloroformates, toxic, corrosive, flammable, n.o.s.	2761	151	Aldrin, solid
2742	155	Isobutyl chloroformate	2761	151	Aldrin mixture, dry

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2761	151	DDT	2766	131	Phenoxy pesticide, liquid, flammable, toxic
2761	151	Dichlorodiphenyltrichloroethane (DDT)	2767	151	Phenyl urea pesticide, solid, poisonous
2761	151	Dieldrin	2767	151	Phenyl urea pesticide, solid, toxic
2761	151	Endosulfan	2768	131	Phenyl urea pesticide, liquid, flammable, poisonous
2761	151	Lindane	2768	131	Phenyl urea pesticide, liquid, flammable, toxic
2761	151	Organochlorine pesticide, solid, poisonous	2769	151	Benzoic derivative pesticide, solid, poisonous
2761	151	Organochlorine pesticide, solid, toxic	2769	151	Benzoic derivative pesticide, solid, toxic
2761	151	TDE (1,1-Dichloro-2,2-bis-(p-chlorophenyl)ethane)	2770	131	Benzoic derivative pesticide, liquid, flammable, poisonous
2761	151	Toxaphene	2770	131	Benzoic derivative pesticide, liquid, flammable, toxic
2762	131	Aldrin, liquid	2771	151	Dithiocarbamate pesticide, solid, poisonous
2762	131	Aldrin mixture, liquid	2771	151	Dithiocarbamate pesticide, solid, toxic
2762	131	Organochlorine pesticide, liquid, flammable, poisonous	2771	151	Thiocarbamate pesticide, solid, poisonous
2762	131	Organochlorine pesticide, liquid, flammable, toxic	2771	151	Thiocarbamate pesticide, solid, toxic
2763	151	Triazine pesticide, solid, poisonous	2772	131	Dithiocarbamate pesticide, liquid, flammable, poisonous
2763	151	Triazine pesticide, solid, toxic	2772	131	Dithiocarbamate pesticide, liquid, flammable, toxic
2764	131	Triazine pesticide, liquid, flammable, poisonous	2772	131	Thiocarbamate pesticide, liquid, flammable, poisonous
2764	131	Triazine pesticide, liquid, flammable, toxic	2772	131	Thiocarbamate pesticide, liquid, flammable, toxic
2765	152	2,4-Dichlorophenoxyacetic acid	2773	151	Phthalimide derivative pesticide, solid, poisonous
2765	152	Phenoxy pesticide, solid, poisonous			
2765	152	Phenoxy pesticide, solid, toxic			
2765	152	2,4,5-Trichlorophenoxyacetic acid			
2765	152	2,4,5-Trichlorophenoxypropionic acid			
2766	131	Phenoxy pesticide, liquid, flammable, poisonous			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2773	151	Phthalimide derivative pesticide, solid, toxic	2782	131	Bipyridilium pesticide, liquid, flammable, poisonous
2774	131	Phthalimide derivative pesticide, liquid, flammable, poisonous	2782	131	Bipyridilium pesticide, liquid, flammable, toxic
2774	131	Phthalimide derivative pesticide, liquid, flammable, toxic	2783	152	Azinphos methyl
2775	151	Copper based pesticide, solid, poisonous	2783	152	Chlorpyrifos
2775	151	Copper based pesticide, solid, toxic	2783	152	Coumaphos
2776	131	Copper based pesticide, liquid, flammable, poisonous	2783	152	Diazinon
2776	131	Copper based pesticide, liquid, flammable, toxic	2783	152	Dichlorvos
2777	151	Mercury based pesticide, solid, poisonous	2783	152	Disulfoton
2777	151	Mercury based pesticide, solid, toxic	2783	152	Ethion
2778	131	Mercury based pesticide, liquid, flammable, poisonous	2783	152	Hexaethyl tetraphosphate mixture, liquid
2778	131	Mercury based pesticide, liquid, flammable, toxic	2783	152	Methyl parathion, liquid
2779	153	Substituted nitrophenol pesticide, solid, poisonous	2783	152	Methyl parathion, mixture, dry
2779	153	Substituted nitrophenol pesticide, solid, toxic	2783	152	Methyl parathion, solid
2780	131	Substituted nitrophenol pesticide, liquid, flammable, poisonous	2783	152	Mevinphos
2780	131	Substituted nitrophenol pesticide, liquid, flammable, toxic	2783	152	Organic phosphate, dry
2781	151	Bipyridilium pesticide, solid, poisonous	2783	152	Organic phosphate, solid
2781	151	Bipyridilium pesticide, solid, toxic	2783	152	Organic phosphate compound, dry
			2783	152	Organic phosphate compound, solid
			2783	152	Organic phosphorus compound, dry
			2783	152	Organic phosphorus compound, solid
			2783	152	Organophosphorus pesticide, solid, poisonous
			2783	152	Organophosphorus pesticide, solid, toxic
			2783	152	Parathion
			2783	152	Parathion mixture, dry
			2783	152	Parathion mixture, liquid
			2783	152	Tetraethyl pyrophosphate, liquid

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2783	152	Tetraethyl pyrophosphate, solid	2796	157	Sulfuric acid, with not more than 51% acid
2783	152	Tetraethyl pyrophosphate mixture, dry	2796	157	Sulphuric acid, with not more than 51% acid
2783	152	Trichlorfon	2797	154	Battery fluid, alkali
2784	131	Organophosphorus pesticide, liquid, flammable, poisonous	2797	154	Battery fluid, alkali, with battery
2784	131	Organophosphorus pesticide, liquid, flammable, toxic	2797	154	Battery fluid, alkali, with electronic equipment or actuating device
2785	152	4-Thiapentanal	2798	137	Benzene phosphorus dichloride
2785	152	Thia-4-pentanal	2798	137	Phenylphosphorus dichloride
2786	153	Organotin pesticide, solid, poisonous	2799	137	Benzene phosphorus thiodichloride
2786	153	Organotin pesticide, solid, toxic	2799	137	Phenylphosphorus thiodichloride
2787	131	Organotin pesticide, liquid, flammable, poisonous	2800	154	Batteries, wet, non-spillable
2787	131	Organotin pesticide, liquid, flammable, toxic	2801	154	Coal tar dye, liquid
2788	153	Organotin compound, liquid, n.o.s.	2801	154	Dye, liquid, corrosive, n.o.s.
2789	132	Acetic acid, glacial	2801	154	Dye intermediate, liquid, corrosive, n.o.s.
2789	132	Acetic acid, solution, more than 80% acid	2802	154	Copper chloride
2790	153	Acetic acid, solution, more than 10% but not more than 80% acid	2803	172	Gallium
2793	170	Ferrous metal borings, shavings, turnings or cuttings	2805	138	Lithium hydride, fused solid
2793	170	Steel swarf	2806	138	Lithium nitride
2794	154	Batteries, wet, filled with acid	2807	171	Magnetized material
2794	154	Battery	2809	172	Mercury
2795	154	Batteries, wet, filled with alkali	2809	172	Mercury, metallic
2795	154	Battery	2809	172	Mercury metal
2796	157	Battery fluid, acid	2810	153	Bis-(2-chloroethyl) ethylamine
2796	157	Battery fluid, acid, with battery	2810	153	Bis-(2-chloroethyl) methylamine
2796	157	Battery fluid, acid, with electronic equipment or actuating device	2810	153	Bis-(2-chloroethyl) sulfide
			2810	153	Bis-(2-chloroethyl) sulphide
			2810	153	Buzz
			2810	153	BZ

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2810	153	o-Chlorobenzylidene malononitrile	2810	153	Pinacolyl methylphosphonofluoridate
2810	153	Compound, tree or weed killing, liquid (toxic)	2810	153	Poisonous liquid, n.o.s.
2810	153	CS	2810	153	Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)
2810	153	DC	2810	153	Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)
2810	153	Dichloro-(2-chlorovinyl) arsine	2810	153	Poisonous liquid, organic, n.o.s.
2810	153	Diphenylcyanoarsine	2810	153	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone A)
2810	153	Drugs, liquid, n.o.s.	2810	153	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)
2810	153	O-Ethyl S-(2-diisopropylaminoethyl) methylphosphonothiolate	2810	153	Sarin
2810	153	Ethyl N,N-dimethylphosphoramidocyanidate	2810	153	Soman
2810	153	GA	2810	153	Tabun
2810	153	GB	2810	153	Thickened GD
2810	153	GD	2810	153	Toxic liquid, n.o.s.
2810	153	GF	2810	153	Toxic liquid, n.o.s. (Inhalation Hazard Zone A)
2810	153	H	2810	153	Toxic liquid, n.o.s. (Inhalation Hazard Zone B)
2810	153	HD	2810	153	Toxic liquid, organic, n.o.s.
2810	153	HL	2810	153	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone A)
2810	153	HN-1 (nitrogen mustard)	2810	153	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)
2810	153	HN-2	2810	153	Tris-(2-chloroethyl) amine
2810	153	HN-3	2810	153	VX
2810	153	Isopropyl methylphosphonofluoridate	2811	154	CX
2810	153	L (Lewisite)	2811	154	Drugs, solid, n.o.s.
2810	153	Lewisite	2811	154	Flue dust, poisonous
2810	153	Medicines, poisonous, liquid, n.o.s.	2811	154	Lead fluoride
2810	153	Medicines, toxic, liquid, n.o.s.	2811	154	Medicines, poisonous, solid, n.o.s.
2810	153	Mustard	2811	154	Medicines, toxic, solid, n.o.s.
2810	153	Mustard Lewisite	2811	154	Phosgene oxime
2810	153	Poison B, liquid, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2811	154	Poison B, solid, n.o.s.	2826	155	Ethyl chlorothioformate
2811	154	Poisonous solid, n.o.s.	2829	153	Caproic acid
2811	154	Poisonous solid, organic, n.o.s.	2829	153	Hexanoic acid
2811	154	Selenium oxide	2830	139	Lithium ferrosilicon
2811	154	Toxic solid, n.o.s.	2831	160	1,1,1-Trichloroethane
2811	154	Toxic solid, organic, n.o.s.	2834	154	Phosphorous acid
2812	154	Sodium aluminate, solid	2834	154	Phosphorous acid, ortho
2813	138	Lithium acetylide-Ethylenediamine complex	2835	138	Sodium aluminum hydride
2813	138	Substances, which in contact with water emit flammable gases, solid, n.o.s.	2837	154	Bisulfates, aqueous solution
2813	138	Water-reactive solid, n.o.s.	2837	154	Bisulphates, aqueous solution
2813	138	Water-reactive substances, solid, n.o.s.	2837	154	Sodium bisulfate, solution
2814	158	Etiologic agent, n.o.s.	2837	154	Sodium bisulphate, solution
2814	158	Infectious substance, affecting humans	2837	154	Sodium hydrogen sulfate, solution
2815	153	N-Aminoethylpiperazine	2837	154	Sodium hydrogen sulphate, solution
2817	154	Ammonium bifluoride, solution	2838	129P	Vinyl butyrate, inhibited
2817	154	Ammonium hydrogendifluoride, solution	2839	153	Aldol
2817	154	Ammonium hydrogen fluoride, solution	2840	129	Butyraldoxime
2818	154	Ammonium polysulfide, solution	2841	131	Di-n-amylamine
2818	154	Ammonium polysulphide, solution	2842	129	Nitroethane
2819	153	Amyl acid phosphate	2844	138	Calcium manganese silicon
2820	153	Butyric acid	2845	135	Ethyl phosphonous dichloride, anhydrous
2821	153	Phenol, liquid	2845	135	Methyl phosphonous dichloride
2821	153	Phenol solution	2845	135	Pyrophoric liquid, n.o.s.
2822	153	2-Chloropyridine	2845	135	Pyrophoric liquid, organic, n.o.s.
2823	153	Crotonic acid	2846	135	Pyrophoric solid, n.o.s.
2823	153	Crotonic acid, liquid	2846	135	Pyrophoric solid, organic, n.o.s.
2823	153	Crotonic acid, solid	2849	153	3-Chloropropanol-1
			2850	128	Propylene tetramer
			2851	157	Boron trifluoride, dihydrate
			2852	113	Dipicryl sulfide, wetted with not less than 10% water

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2852	113	Dipicryl sulphide, wetted with not less than 10% water	2862	151	Vanadium pentoxide
2853	151	Magnesium fluorosilicate	2863	154	Sodium ammonium vanadate
2853	151	Magnesium silicofluoride	2864	151	Potassium metavanadate
2854	151	Ammonium fluorosilicate	2865	154	Hydroxylamine sulfate
2854	151	Ammonium silicofluoride	2865	154	Hydroxylamine sulphate
2855	151	Zinc fluorosilicate	2869	157	Titanium trichloride mixture
2855	151	Zinc silicofluoride	2870	135	Aluminum borohydride
2856	151	Fluorosilicates, n.o.s.	2870	135	Aluminum borohydride in devices
2856	151	Silicofluorides, n.o.s.	2871	170	Antimony powder
2857	126	Refrigerating machines, containing Ammonia solutions (UN2073)	2872	159	Dibromochloropropanes
2857	126	Refrigerating machines, containing Ammonia solutions (UN2672)	2873	153	Dibutylaminoethanol
2857	126	Refrigerating machines, containing non-flammable, liquefied gas	2874	153	Furfuryl alcohol
2857	126	Refrigerating machines, containing non-flammable, non-poisonous, liquefied gas	2875	151	Hexachlorophene
2857	126	Refrigerating machines, containing non-flammable, non-toxic, liquefied gas	2876	153	Resorcinol
2857	126	Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	2878	170	Titanium sponge granules
2857	126	Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	2878	170	Titanium sponge powders
2858	170	Zirconium, dry, coiled wire, finished metal sheets or strips	2879	157	Selenium oxychloride
2859	154	Ammonium metavanadate	2880	140	Calcium hypochlorite, hydrated, with not less than 5.5% but not more than 10% water
2860	154	Vanadium trioxide	2880	140	Calcium hypochlorite, hydrated mixture, with not less than 5.5% but not more than 10% water
2861	151	Ammonium polyvanadate	2881	135	Metal catalyst, dry
			2881	135	Nickel catalyst, dry
			2883	145	2,2-Di-(tert-butylperoxy)-propane
			2884	145	2,2-Di-(tert-butylperoxy)-propane
			2885	145	1,1-Di-(tert-butylperoxy)-cyclohexane
			2886	148	tert-Butyl peroxy-2-ethylhexanoate, with 2,2-Di-(tert-butylperoxy)butane

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2887	145	tert-Butyl peroxy-2-ethylhexanoate, with 2,2-Di-(tert-butylperoxy)butane	2903	131	Pesticide, liquid, toxic, flammable, n.o.s.
2888	148	tert-Butyl peroxy-2-ethylhexanoate, not more than 50%, with phlegmatizer	2904	154	Chlorophenates, liquid
2889	148	Diisotridecyl peroxydicarbonate	2904	154	Chlorophenolates, liquid
2890	145	tert-Butyl peroxybenzoate	2904	154	Phenolates, liquid
2891	148	tert-Amyl peroxyneodecanoate	2905	154	Chlorophenates, solid
2892	148	Dimyristyl peroxydicarbonate, not more than 42%, in water	2905	154	Chlorophenolates, solid
2893	145	Lauroyl peroxide, not more than 42%, stable dispersion, in water	2905	154	Phenolates, solid
2894	148	Di-(4-tert-butylcyclohexyl)-peroxydicarbonate	2906	127	Triisocyanatoisocyanurate of Isophoronedisocyanate, solution (70%)
2895	148	Dicetyl peroxydicarbonate, not more than 42%, in water	2907	133	Isosorbide dinitrate mixture
2896	147	Cyclohexanone peroxide, not more than 72% as a paste	2908	161	Radioactive material, empty packages
2897	145	1,1-Di-(tert-butylperoxy)-cyclohexane	2908	161	Radioactive material, excepted package, empty packaging
2898	148	tert-Amyl peroxy-2-ethylhexanoate	2909	161	Radioactive material, articles manufactured from depleted Uranium
2899	148	Organic peroxides, n.o.s. (including trial quantities)	2909	161	Radioactive material, articles manufactured from natural Thorium
2900	158	Infectious substance, affecting animals only	2909	161	Radioactive material, articles manufactured from natural Uranium
2901	124	Bromine chloride	2909	161	Radioactive material, excepted package, articles manufactured from depleted Uranium
2902	151	Allethrin	2909	161	Radioactive material, excepted package, articles manufactured from natural Thorium
2902	151	Insecticide, liquid, poisonous, n.o.s.	2909	161	Radioactive material, excepted package, articles manufactured from natural Uranium
2902	151	Pesticide, liquid, poisonous, n.o.s.			
2902	151	Pesticide, liquid, toxic, n.o.s.			
2903	131	Pesticide, liquid, poisonous, flammable, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2910	161	Radioactive material, excepted package, articles manufactured from depleted Uranium	2916	163	Radioactive material, Type B(U) package
2910	161	Radioactive material, excepted package, articles manufactured from natural Thorium	2917	163	Radioactive material, Type B(M) package
2910	161	Radioactive material, excepted package, articles manufactured from natural Uranium	2918	165	Radioactive material, fissile, n.o.s.
2910	161	Radioactive material, excepted package, empty packaging	2919	163	Radioactive material, transported under special arrangement
2910	161	Radioactive material, excepted package, instruments or articles	2920	132	Corrosive liquid, flammable, n.o.s.
2910	161	Radioactive material, excepted package, limited quantity of material	2920	132	Dichlorobutene
2910	161	Radioactive material, limited quantity, n.o.s.	2921	134	Corrosive solid, flammable, n.o.s.
2911	161	Radioactive material, excepted package, instruments or articles	2922	154	Corrosive liquid, poisonous, n.o.s.
2911	161	Radioactive material, instruments or articles	2922	154	Corrosive liquid, toxic, n.o.s.
2912	162	Radioactive material, low specific activity (LSA), n.o.s.	2922	154	Sodium hydrosulfide, solution
2912	162	Radioactive material, low specific activity (LSA-I)	2922	154	Sodium hydrosulphide, solution
2913	162	Radioactive material, surface contaminated objects (SCO)	2923	154	Corrosive solid, poisonous, n.o.s.
2913	162	Radioactive material, surface contaminated objects (SCO-I)	2923	154	Corrosive solid, toxic, n.o.s.
2913	162	Radioactive material, surface contaminated objects (SCO-II)	2923	154	Sodium hydrosulfide, solid
2915	163	Radioactive material, Type A package	2923	154	Sodium hydrosulphide, solid
			2924	132	Dichlorobutene
			2924	132	Flammable liquid, corrosive, n.o.s.
			2925	134	Flammable solid, corrosive, n.o.s.
			2925	134	Flammable solid, corrosive, organic, n.o.s.
			2926	134	Flammable solid, poisonous, n.o.s.
			2926	134	Flammable solid, poisonous, organic, n.o.s.
			2926	134	Flammable solid, toxic, organic, n.o.s.
			2927	154	Ethyl phosphonothioic dichloride, anhydrous
			2927	154	Ethyl phosphorodichloridate
			2927	154	Poisonous liquid, corrosive, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2927	154	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)	2929	131	Toxic liquid, flammable, organic, n.o.s.
2927	154	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)	2929	131	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)
2927	154	Toxic liquid, corrosive, organic, n.o.s.	2929	131	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)
2927	154	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)	2930	134	Poisonous solid, flammable, n.o.s.
2927	154	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone B)	2930	134	Poisonous solid, flammable, organic, n.o.s.
2928	154	Poisonous solid, corrosive, n.o.s.	2930	134	Toxic solid, flammable, n.o.s.
2928	154	Toxic solid, corrosive, organic, n.o.s.	2930	134	Toxic solid, flammable, organic, n.o.s.
2929	131	Chloropicrin mixture, flammable	2931	151	Vanadyl sulfate
2929	131	Poisonous liquid, flammable, n.o.s.	2931	151	Vanadyl sulphate
2929	131	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	2933	132	Methyl 2-chloropropionate
2929	131	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	2934	132	Isopropyl 2-chloropropionate
2929	131	Poisonous liquid, flammable, organic, n.o.s.	2935	132	Ethyl 2-chloropropionate
2929	131	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	2936	153	Thiolactic acid
2929	131	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	2937	153	alpha-Methylbenzyl alcohol
2929	131	Poisonous liquid, flammable, organic, n.o.s.	2937	153	Methylbenzyl alcohol (alpha)
2929	131	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	2938	152	Methyl benzoate
2929	131	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	2940	135	Cyclooctadiene phosphines
2929	131	Toxic liquid, flammable, n.o.s.	2940	135	9-Phosphabicyclononanes
2929	131	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	2941	153	Fluoroanilines
2929	131	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	2942	153	2-Trifluoromethylaniline
2929	131	Toxic liquid, flammable, n.o.s.	2943	129	Tetrahydrofurfurylamine
2929	131	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	2945	132	N-Methylbutylamine
2929	131	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	2946	153	2-Amino-5-diethylaminopentane
			2947	155	Isopropyl chloroacetate
			2948	153	3-Trifluoromethylaniline
			2949	154	Sodium hydrosulfide, with not less than 25% water of crystallization

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2949	154	Sodium hydrosulphide, with not less than 25% water of crystallization	2974	164	Radioactive material, special form, n.o.s.
2950	138	Magnesium granules, coated	2975	162	Thorium metal, pyrophoric
2951	149	Diphenyloxide-4,4'-disulfohydrazide	2976	162	Thorium nitrate, solid
2951	149	Diphenyloxide-4,4'-disulphohydrazide	2977	166	Radioactive material, Uranium hexafluoride, fissile
2952	150	Azodiisobutyronitrile	2977	166	Uranium hexafluoride, fissile containing more than 1% Uranium-235
2953	150	2,2'-Azodi-(2,4-dimethylvaleronitrile)	2978	166	Radioactive material, Uranium hexafluoride, non fissile or fissile-excepted
2954	149	1,1'-Azodi-(hexahydrobenzonnitrile)	2978	166	Uranium hexafluoride, fissile-excepted
2955	150	2,2'-Azodi-(2,4-dimethyl-4-methoxyvaleronitrile)	2978	166	Uranium hexafluoride, low specific activity
2956	149	5-tert-Butyl-2,4,6-trinitro-m-xylene	2978	166	Uranium hexafluoride, non-fissile
2956	149	Musk xylene	2979	162	Uranium metal, pyrophoric
2965	139	Boron trifluoride dimethyl etherate	2980	162	Uranyl nitrate, hexahydrate, solution
2966	153	Thioglycol	2981	162	Uranyl nitrate, solid
2967	154	Sulfamic acid	2982	163	Radioactive material, n.o.s.
2967	154	Sulphamic acid	2983	129P	Ethylene oxide and Propylene oxide mixture, with not more than 30% Ethylene oxide
2968	135	Maneb, stabilized	2983	129P	Propylene oxide and Ethylene oxide mixture, with not more than 30% Ethylene oxide
2968	135	Maneb preparation, stabilized	2984	140	Hydrogen peroxide, aqueous solution, with not less than 8% but less than 20% Hydrogen peroxide
2969	171	Castor beans, meal, pomace or flake	2985	155	Chlorosilanes, flammable, corrosive, n.o.s.
2970	149	Benzene sulfohydrazide	2985	155	Chlorosilanes, n.o.s.
2970	149	Benzene sulphohydrazide	2986	155	Chlorosilanes, corrosive, flammable, n.o.s.
2971	149	Benzene-1,3-disulfohydrazide			
2971	149	Benzene-1,3-disulphohydrazide			
2972	149	N,N'-Dinitrosopentamethylene tetramine			
2973	149	N,N'-Dinitroso-N,N'-dimethyl terephthalamide			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2986	155	Chlorosilanes, n.o.s.	2998	151	Triazine pesticide, liquid, poisonous
2987	156	Chlorosilanes, corrosive, n.o.s.	2998	151	Triazine pesticide, liquid, toxic
2987	156	Chlorosilanes, n.o.s.	2999	131	Phenoxy pesticide, liquid, poisonous, flammable
2988	139	Chlorosilanes, n.o.s.	2999	131	Phenoxy pesticide, liquid, toxic, flammable
2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	3000	152	Phenoxy pesticide, liquid, poisonous
2989	133	Lead phosphite, dibasic	3000	152	Phenoxy pesticide, liquid, toxic
2990	171	Aircraft evacuation slides	3001	131	Phenyl urea pesticide, liquid, poisonous, flammable
2990	171	Life-saving appliances, self-inflating	3001	131	Phenyl urea pesticide, liquid, toxic, flammable
2991	131	Carbamate pesticide, liquid, poisonous, flammable	3002	151	Phenyl urea pesticide, liquid, poisonous
2991	131	Carbamate pesticide, liquid, toxic, flammable	3002	151	Phenyl urea pesticide, liquid, toxic
2992	151	Carbamate pesticide, liquid, poisonous	3003	131	Benzoic derivative pesticide, liquid, poisonous, flammable
2992	151	Carbamate pesticide, liquid, toxic	3003	131	Benzoic derivative pesticide, liquid, toxic, flammable
2993	131	Arsenical pesticide, liquid, poisonous, flammable	3004	151	Benzoic derivative pesticide, liquid, poisonous
2993	131	Arsenical pesticide, liquid, toxic, flammable	3004	151	Benzoic derivative pesticide, liquid, toxic
2994	151	Arsenical pesticide, liquid, poisonous	3005	131	Dithiocarbamate pesticide, liquid, poisonous, flammable
2994	151	Arsenical pesticide, liquid, toxic	3005	131	Dithiocarbamate pesticide, liquid, toxic, flammable
2995	131	Organochlorine pesticide, liquid, poisonous, flammable	3005	131	Thiocarbamate pesticide, liquid, poisonous, flammable
2995	131	Organochlorine pesticide, liquid, toxic, flammable	3005	131	Thiocarbamate pesticide, liquid, toxic, flammable
2996	151	Organochlorine pesticide, liquid, poisonous	3006	151	Dithiocarbamate pesticide, liquid, poisonous
2996	151	Organochlorine pesticide, liquid, toxic	3006	151	Dithiocarbamate pesticide, liquid, toxic
2997	131	Triazine pesticide, liquid, poisonous, flammable			
2997	131	Triazine pesticide, liquid, toxic, flammable			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3006	151	Thiocarbamate pesticide, liquid, poisonous	3014	153	Substituted nitrophenol pesticide, liquid, toxic
3006	151	Thiocarbamate pesticide, liquid, toxic	3015	131	Bipyridilium pesticide, liquid, poisonous, flammable
3007	131	Phthalimide derivative pesticide, liquid, poisonous, flammable	3015	131	Bipyridilium pesticide, liquid, toxic, flammable
3007	131	Phthalimide derivative pesticide, liquid, toxic, flammable	3016	151	Bipyridilium pesticide, liquid, poisonous
3008	151	Phthalimide derivative pesticide, liquid, poisonous	3016	151	Bipyridilium pesticide, liquid, toxic
3008	151	Phthalimide derivative pesticide, liquid, toxic	3017	131	Organophosphorus pesticide, liquid, poisonous, flammable
3009	131	Copper based pesticide, liquid, poisonous, flammable	3017	131	Organophosphorus pesticide, liquid, toxic, flammable
3009	131	Copper based pesticide, liquid, toxic, flammable	3018	152	Methyl parathion, liquid
3010	151	Copper based pesticide, liquid, poisonous	3018	152	Organophosphorus pesticide, liquid, poisonous
3010	151	Copper based pesticide, liquid, toxic	3018	152	Organophosphorus pesticide, liquid, toxic
3011	131	Mercury based pesticide, liquid, poisonous, flammable	3018	152	Tetraethyl pyrophosphate, liquid
3011	131	Mercury based pesticide, liquid, toxic, flammable	3019	131	Organotin pesticide, liquid, poisonous, flammable
3012	151	Mercury based pesticide, liquid, poisonous	3019	131	Organotin pesticide, liquid, toxic, flammable
3012	151	Mercury based pesticide, liquid, toxic	3020	153	Organotin pesticide, liquid, poisonous
3013	131	Substituted nitrophenol pesticide, liquid, poisonous, flammable	3020	153	Organotin pesticide, liquid, toxic
3013	131	Substituted nitrophenol pesticide, liquid, toxic, flammable	3021	131	Pesticide, liquid, flammable, poisonous
3014	153	Substituted nitrophenol pesticide, liquid, poisonous	3021	131	Pesticide, liquid, flammable, toxic
			3022	127P	1,2-Butylene oxide, stabilized
			3023	131	2-Methyl-2-heptanethiol
			3023	131	tert-Octyl mercaptan
			3024	131	Coumarin derivative pesticide, liquid, flammable, poisonous

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3024	131	Coumarin derivative pesticide, liquid, flammable, toxic	3039	150	4-Dimethylamino-6-(2-dimethylaminoethoxy)toluene-2-diazonium zinc chloride
3025	131	Coumarin derivative pesticide, liquid, poisonous, flammable	3040	149	Sodium 2-diazo-1-naphthol-4-sulfonate
3025	131	Coumarin derivative pesticide, liquid, toxic, flammable	3040	149	Sodium 2-diazo-1-naphthol-4-sulphonate
3026	151	Coumarin derivative pesticide, liquid, poisonous	3041	149	Sodium 2-diazo-1-naphthol-5-sulfonate
3026	151	Coumarin derivative pesticide, liquid, toxic	3041	149	Sodium 2-diazo-1-naphthol-5-sulphonate
3027	151	Coumarin derivative pesticide, solid, poisonous	3042	149	2-Diazo-1-naphthol-4-sulfochloride
3027	151	Coumarin derivative pesticide, solid, toxic	3042	149	2-Diazo-1-naphthol-4-sulphochloride
3028	154	Batteries, dry, containing Potassium hydroxide, solid	3043	149	2-Diazo-1-naphthol-5-sulfochloride
3030	150	2,2'-Azodi-(2-methylbutyronitrile)	3043	149	2-Diazo-1-naphthol-5-sulphochloride
3031	149	Self-reactive substances, samples, n.o.s.	3048	157	Aluminum phosphide pesticide
3032	149	Self-reactive substances, trial quantities, n.o.s.	3049	138	Metal alkyl halides, n.o.s.
3033	149	3-Chloro-4-diethylamino-benzenediazonium zinc chloride	3049	138	Metal alkyl halides, water-reactive, n.o.s.
3034	149	4-Dipropylaminobenzene-diazonium zinc chloride	3049	138	Metal aryl halides, n.o.s.
3035	150	3-(2-Hydroxyethoxy)-4-pyrrolidin-1-yl benzene-diazonium zinc chloride	3049	138	Metal aryl halides, water-reactive, n.o.s.
3036	150	2,5-Diethoxy-4-morpholino-benzenediazonium zinc chloride	3050	138	Metal alkyl hydrides, n.o.s.
3037	149	4-[Benzyl(ethyl)amino]-3-ethoxybenzenediazonium zinc chloride	3050	138	Metal alkyl hydrides, water-reactive, n.o.s.
3038	150	4-[Benzyl(methyl)amino]-3-ethoxybenzenediazonium zinc chloride	3050	138	Metal aryl hydrides, n.o.s.
			3050	138	Metal aryl hydrides, water-reactive, n.o.s.
			3051	135	Aluminum alkyls
			3052	135	Aluminum alkyl halides
			3053	135	Magnesium alkyls
			3054	131	Cyclohexanethiol

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3054	131	Cyclohexyl mercaptan	3071	131	Mercaptans, liquid, toxic, flammable, n.o.s.
3055	154	2-(2-Aminoethoxy)ethanol	3072	171	Aircraft survival kits
3056	129	n-Heptaldehyde	3072	171	Life-saving appliances, not self-inflating
3057	125	Trifluoroacetyl chloride	3073	131P	Vinylpyridines, inhibited
3064	127	Nitroglycerin, solution in alcohol, with more than 1% but not more than 5% Nitroglycerin	3076	138	Aluminum alkyl hydrides
3065	127	Alcoholic beverages	3077	171	Environmentally hazardous substances, solid, n.o.s.
3066	153	Paint (corrosive)	3077	171	Hazardous waste, solid, n.o.s.
3066	153	Paint related material (corrosive)	3077	171	Other regulated substances, solid, n.o.s.
3070	126	Dichlorodifluoromethane and Ethylene oxide mixture, with not more than 12.5% Ethylene oxide	3078	138	Cerium, turnings or gritty powder
3070	126	Dichlorodifluoromethane and Ethylene oxide mixtures, with not more than 12% Ethylene oxide	3079	131P	Methacrylonitrile, inhibited
3070	126	Ethylene oxide and Dichlorodifluoromethane mixture, with not more than 12.5% Ethylene oxide	3080	155	Isocyanate solution, poisonous, flammable, n.o.s.
3070	126	Ethylene oxide and Dichlorodifluoromethane mixtures, with not more than 12% Ethylene oxide	3080	155	Isocyanate solution, toxic, flammable, n.o.s.
3071	131	Mercaptan mixture, liquid, poisonous, flammable, n.o.s.	3080	155	Isocyanate solutions, n.o.s.
3071	131	Mercaptan mixture, liquid, toxic, flammable, n.o.s.	3080	155	Isocyanates, n.o.s.
3071	131	Mercaptan mixtures, liquid, n.o.s.	3080	155	Isocyanates, poisonous, flammable, n.o.s.
3071	131	Mercaptans, liquid, n.o.s.	3080	155	Isocyanates, toxic, flammable, n.o.s.
3071	131	Mercaptans, liquid, poisonous, flammable, n.o.s.	3082	171	Environmentally hazardous substances, liquid, n.o.s.
			3082	171	Hazardous waste, liquid, n.o.s.
			3082	171	Other regulated substances, liquid, n.o.s.
			3083	124	Perchloryl fluoride
			3084	140	Corrosive solid, oxidizing, n.o.s.
			3085	140	Oxidizing solid, corrosive, n.o.s.
			3085	140	Oxidizing substances, solid, corrosive, n.o.s.
			3086	141	Poisonous solid, oxidizing, n.o.s.
			3086	141	Toxic solid, oxidizing, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3087	141	Oxidizing solid, poisonous, n.o.s.	3099	142	Oxidizing liquid, toxic, n.o.s.
3087	141	Oxidizing solid, toxic, n.o.s.	3099	142	Oxidizing substances, liquid, poisonous, n.o.s.
3087	141	Oxidizing substances, solid, poisonous, n.o.s.	3099	142	Oxidizing substances, liquid, toxic, n.o.s.
3087	141	Oxidizing substances, solid, toxic, n.o.s.	3100	135	Oxidizing solid, self-heating, n.o.s.
3088	135	Self-heating solid, organic, n.o.s.	3100	135	Oxidizing substances, self-heating, n.o.s.
3088	135	Self-heating substances, solid, n.o.s.	3100	135	Oxidizing substances, solid, self-heating, n.o.s.
3089	170	Metal powder, flammable, n.o.s.	3101	146	Organic peroxide type B, liquid
3090	138	Lithium batteries	3102	146	Organic peroxide type B, solid
3090	138	Lithium batteries, liquid or solid cathode	3103	146	Organic peroxide type C, liquid
3091	138	Lithium batteries contained in equipment	3104	146	Organic peroxide type C, solid
3091	138	Lithium batteries packed with equipment	3105	145	Organic peroxide type D, liquid
3092	129	1-Methoxy-2-propanol	3106	145	Organic peroxide type D, solid
3093	140	Corrosive liquid, oxidizing, n.o.s.	3107	145	Organic peroxide type E, liquid
3094	138	Corrosive liquid, water-reactive, n.o.s.	3108	145	Organic peroxide type E, solid
3094	138	Corrosive liquid, which in contact with water emits flammable gases, n.o.s.	3109	145	Organic peroxide type F, liquid
3095	136	Corrosive solid, self-heating, n.o.s.	3110	145	Organic peroxide type F, solid
3096	138	Corrosive solid, water-reactive, n.o.s.	3111	148	Organic peroxide type B, liquid, temperature controlled
3096	138	Corrosive solid, which in contact with water emits flammable gases, n.o.s.	3112	148	Organic peroxide type B, solid, temperature controlled
3097	140	Flammable solid, oxidizing, n.o.s.	3113	148	Organic peroxide type C, liquid, temperature controlled
3098	140	Oxidizing liquid, corrosive, n.o.s.	3114	148	Organic peroxide type C, solid, temperature controlled
3098	140	Oxidizing substances, liquid, corrosive, n.o.s.	3115	148	Organic peroxide type D, liquid, temperature controlled
3099	142	Oxidizing liquid, poisonous, n.o.s.	3116	148	Organic peroxide type D, solid, temperature controlled
			3117	148	Organic peroxide type E, liquid, temperature controlled

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3118	148	Organic peroxide type E, solid, temperature controlled	3123	139	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)
3119	148	Organic peroxide type F, liquid, temperature controlled	3123	139	Toxic liquid, water-reactive, n.o.s.
3120	148	Organic peroxide type F, solid, temperature controlled	3123	139	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)
3121	144	Oxidizing solid, water-reactive, n.o.s.	3123	139	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)
3121	144	Oxidizing substances, solid, which in contact with water emit flammable gases, n.o.s.	3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s.
3122	142	Poisonous liquid, oxidizing, n.o.s.	3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)
3122	142	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)
3122	142	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)
3122	142	Toxic liquid, oxidizing, n.o.s.	3124	136	Poisonous solid, self-heating, n.o.s.
3122	142	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	3124	136	Toxic solid, self-heating, n.o.s.
3122	142	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	3125	139	Poisonous solid, water-reactive, n.o.s.
3123	139	Poisonous liquid, water-reactive, n.o.s.	3125	139	Poisonous solid, which in contact with water emits flammable gases, n.o.s.
3123	139	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	3125	139	Toxic solid, water-reactive, n.o.s.
3123	139	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	3125	139	Toxic solid, which in contact with water emits flammable gases, n.o.s.
3123	139	Poisonous liquid, which in contact with water emits flammable gases, n.o.s.	3126	136	Self-heating solid, corrosive, organic, n.o.s.
3123	139	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3126	136	Self-heating substance, solid, corrosive, n.o.s.	3130	139	Water-reactive substances, liquid, toxic, n.o.s.
3127	135	Self-heating solid, oxidizing, n.o.s.	3131	138	Substances, which in contact with water emit flammable gases, solid, corrosive, n.o.s.
3127	135	Self-heating substances, solid, oxidizing, n.o.s.	3131	138	Water-reactive solid, corrosive, n.o.s.
3128	136	Self-heating solid, organic, poisonous, n.o.s.	3131	138	Water-reactive substances, solid, corrosive, n.o.s.
3128	136	Self-heating solid, organic, toxic, n.o.s.	3132	138	Substances, which in contact with water emit flammable gases, solid, flammable, n.o.s.
3128	136	Self-heating solid, poisonous, organic, n.o.s.	3132	138	Water-reactive solid, flammable, n.o.s.
3128	136	Self-heating solid, toxic, organic, n.o.s.	3132	138	Water-reactive substances, solid, flammable, n.o.s.
3128	136	Self-heating substances, solid, poisonous, n.o.s.	3133	138	Substances, which in contact with water emit flammable gases, solid, oxidizing, n.o.s.
3128	136	Self-heating substances, solid, toxic, n.o.s.	3133	138	Water-reactive solid, oxidizing, n.o.s.
3129	138	Substances, which in contact with water emit flammable gases, liquid, corrosive, n.o.s.	3133	138	Water-reactive substances, solid, oxidizing, n.o.s.
3129	138	Water-reactive liquid, corrosive, n.o.s.	3134	139	Substances, which in contact with water emit flammable gases, solid, poisonous, n.o.s.
3129	138	Water-reactive substances, liquid, corrosive, n.o.s.	3134	139	Substances, which in contact with water emit flammable gases, solid, toxic, n.o.s.
3130	139	Substances, which in contact with water emit flammable gases, liquid, poisonous, n.o.s.	3134	139	Water-reactive solid, poisonous, n.o.s.
3130	139	Substances, which in contact with water emit flammable gases, liquid, toxic, n.o.s.	3134	139	Water-reactive solid, toxic, n.o.s.
3130	139	Water-reactive liquid, poisonous, n.o.s.	3134	139	Water-reactive substances, solid, poisonous, n.o.s.
3130	139	Water-reactive liquid, toxic, n.o.s.	3134	139	Water-reactive substances, solid, toxic, n.o.s.
3130	139	Water-reactive substances, liquid, poisonous, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3135	138	Substances, which in contact with water emit flammable gases, solid, self-heating, n.o.s.	3141	157	Antimony compound, inorganic, liquid, n.o.s.
3135	138	Water-reactive solid, self-heating, n.o.s.	3142	151	Disinfectant, liquid, poisonous, n.o.s.
3135	138	Water-reactive substances, solid, self-heating, n.o.s.	3142	151	Disinfectant, liquid, toxic, n.o.s.
3136	120	Trifluoromethane, refrigerated liquid	3142	151	Disinfectants, liquid, n.o.s. (poisonous)
3137	140	Oxidizing solid, flammable, n.o.s.	3143	151	Dye, solid, poisonous, n.o.s.
3137	140	Oxidizing substances, solid, flammable, n.o.s.	3143	151	Dye, solid, toxic, n.o.s.
3138	116	Acetylene, Ethylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene	3143	151	Dye intermediate, solid, poisonous, n.o.s.
3138	116	Ethylene, Acetylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene	3143	151	Dye intermediate, solid, toxic, n.o.s.
3138	116	Propylene, Ethylene and Acetylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene	3144	151	Nicotine compound, liquid, n.o.s.
3139	140	Oxidizing liquid, n.o.s.	3144	151	Nicotine preparation, liquid, n.o.s.
3139	140	Oxidizing substances, liquid, n.o.s.	3145	153	Alkyl phenols, liquid, n.o.s. (Including C2-C12 homologues)
3140	151	Alkaloids, liquid, n.o.s. (poisonous)	3146	153	Organotin compound, solid, n.o.s.
3140	151	Alkaloid salts, liquid, n.o.s. (poisonous)	3147	154	Dye, solid, corrosive, n.o.s.
			3147	154	Dye intermediate, solid, corrosive, n.o.s.
			3148	138	Substances, which in contact with water emit flammable gases, liquid, n.o.s.
			3148	138	Water-reactive liquid, n.o.s.
			3148	138	Water-reactive substances, liquid, n.o.s.
			3149	140	Hydrogen peroxide and Peroxyacetic acid mixture, with acid(s), water and not more than 5% Peroxyacetic acid, stabilized
			3150	115	Devices, small, hydrocarbon gas powered, with release device

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3150	115	Hydrocarbon gas refills for small devices, with release device	3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)
3151	171	Polyhalogenated biphenyls, liquid	3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)
3151	171	Polyhalogenated terphenyls, liquid	3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)
3152	171	Polyhalogenated biphenyls, solid	3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)
3152	171	Polyhalogenated terphenyls, solid	3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)
3153	115	Perfluoromethyl vinyl ether	3161	115	Liquefied gas, flammable, n.o.s.
3153	115	Perfluoro(methyl vinyl ether)	3162	123	Liquefied gas, poisonous, n.o.s.
3154	115	Perfluoroethyl vinyl ether	3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)
3154	115	Perfluoro(ethyl vinyl ether)	3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)
3155	154	Pentachlorophenol	3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)
3156	122	Compressed gas, oxidizing, n.o.s.	3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)
3157	122	Liquefied gas, oxidizing, n.o.s.	3162	123	Liquefied gas, toxic, n.o.s.
3158	120	Gas, refrigerated liquid, n.o.s.	3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)
3159	126	Refrigerant gas R-134a	3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)
3159	126	1,1,1,2-Tetrafluoroethane	3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)
3160	119	Liquefied gas, poisonous, flammable, n.o.s.	3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	3163	126	Liquefied gas, n.o.s.
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	3164	126	Articles, pressurized, hydraulic (containing non-flammable gas)
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	3164	126	Articles, pressurized, pneumatic (containing non-flammable gas)
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)			
3160	119	Liquefied gas, toxic, flammable, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3165	131	Aircraft hydraulic power unit fuel tank	3172	153	Toxins, extracted from living sources, liquid, n.o.s.
3166	128	Engines, internal combustion, flammable gas powered	3172	153	Toxins, extracted from living sources, n.o.s.
3166	128	Engines, internal combustion, flammable liquid powered	3172	153	Toxins, extracted from living sources, solid, n.o.s.
3166	128	Engines, internal combustion, including when fitted in machinery or vehicles	3174	135	Titanium disulfide
3166	128	Vehicle, flammable gas powered	3174	135	Titanium disulphide
3166	128	Vehicle, flammable liquid powered	3175	133	Solids containing flammable liquid, n.o.s.
3167	115	Gas sample, non-pressurized, flammable, n.o.s., not refrigerated liquid	3176	133	Flammable solid, organic, molten, n.o.s.
3168	119	Gas sample, non-pressurized, poisonous, flammable, n.o.s., not refrigerated liquid	3178	133	Flammable solid, inorganic, n.o.s.
3168	119	Gas sample, non-pressurized, toxic, flammable, n.o.s., not refrigerated liquid	3178	133	Smokeless powder for small arms
3169	123	Gas sample, non-pressurized, poisonous, n.o.s., not refrigerated liquid	3179	134	Flammable solid, poisonous, inorganic, n.o.s.
3169	123	Gas sample, non-pressurized, toxic, n.o.s., not refrigerated liquid	3179	134	Flammable solid, toxic, inorganic, n.o.s.
3170	138	Aluminum dross	3180	134	Flammable solid, corrosive, inorganic, n.o.s.
3170	138	Aluminum processing by-products	3180	134	Flammable solid, inorganic, corrosive, n.o.s.
3170	138	Aluminum remelting by-products	3181	133	Metal salts of organic compounds, flammable, n.o.s.
3170	138	Aluminum smelting by-products	3182	170	Metal hydrides, flammable, n.o.s.
3171	154	Battery-powered equipment (wet battery)	3183	135	Self-heating liquid, organic, n.o.s.
3171	154	Battery-powered vehicle (wet battery)	3184	136	Self-heating liquid, poisonous, organic, n.o.s.
3171	154	Wheelchair, electric, with batteries	3184	136	Self-heating liquid, toxic, organic, n.o.s.
			3185	136	Self-heating liquid, corrosive, organic, n.o.s.
			3186	135	Self-heating liquid, inorganic, n.o.s.
			3187	136	Self-heating liquid, poisonous, inorganic, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3187	136	Self-heating liquid, toxic, inorganic, n.o.s.	3208	138	Metallic substance, water-reactive, n.o.s.
3188	136	Self-heating liquid, corrosive, inorganic, n.o.s.	3209	138	Metallic substance, water-reactive, self-heating, n.o.s.
3189	135	Metal powder, self-heating, n.o.s.	3210	140	Chlorates, inorganic, aqueous solution, n.o.s.
3189	135	Self-heating metal powders, n.o.s.	3211	140	Perchlorates, inorganic, aqueous solution, n.o.s.
3190	135	Self-heating solid, inorganic, n.o.s.	3212	140	Hypochlorites, inorganic, n.o.s.
3191	136	Self-heating solid, inorganic, poisonous, n.o.s.	3213	140	Bromates, inorganic, aqueous solution, n.o.s.
3191	136	Self-heating solid, inorganic, toxic, n.o.s.	3214	140	Permanganates, inorganic, aqueous solution, n.o.s.
3191	136	Self-heating solid, poisonous, inorganic, n.o.s.	3215	140	Persulfates, inorganic, n.o.s.
3191	136	Self-heating solid, toxic, inorganic, n.o.s.	3215	140	Persulphates, inorganic, n.o.s.
3192	136	Self-heating solid, corrosive, inorganic, n.o.s.	3216	140	Persulfates, inorganic, aqueous solution, n.o.s.
3194	135	Pyrophoric liquid, inorganic, n.o.s.	3216	140	Persulphates, inorganic, aqueous solution, n.o.s.
3200	135	Pyrophoric solid, inorganic, n.o.s.	3217	140	Percarbonates, inorganic, n.o.s.
3203	135	Pyrophoric organometallic compound, n.o.s.	3218	140	Nitrates, inorganic, aqueous solution, n.o.s.
3203	135	Pyrophoric organometallic compound, water-reactive, n.o.s.	3219	140	Nitrites, inorganic, aqueous solution, n.o.s.
3205	135	Alkaline earth metal alcoholates, n.o.s.	3220	126	Pentafluoroethane
3206	136	Alkali metal alcoholates, self-heating, corrosive, n.o.s.	3220	126	Refrigerant gas R-125
3207	138	Organometallic compound, water-reactive, flammable, n.o.s.	3221	149	Self-reactive liquid type B
3207	138	Organometallic compound dispersion, water-reactive, flammable, n.o.s.	3222	149	Self-reactive solid type B
3207	138	Organometallic compound solution, water-reactive, flammable, n.o.s.	3223	149	Self-reactive liquid type C
			3224	149	Self-reactive solid type C
			3225	149	Self-reactive liquid type D
			3226	149	Self-reactive solid type D
			3227	149	Self-reactive liquid type E
			3228	149	Self-reactive solid type E
			3229	149	Self-reactive liquid type F

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3230	149	Self-reactive solid type F	3248	131	Medicine, liquid, flammable, toxic, n.o.s.
3231	150	Self-reactive liquid type B, temperature controlled	3249	151	Medicine, solid, poisonous, n.o.s.
3232	150	Self-reactive solid type B, temperature controlled	3249	151	Medicine, solid, toxic, n.o.s.
3233	150	Self-reactive liquid type C, temperature controlled	3250	153	Chloroacetic acid, molten
3234	150	Self-reactive solid type C, temperature controlled	3251	133	Isosorbide-5-mononitrate
3235	150	Self-reactive liquid type D, temperature controlled	3252	115	Difluoromethane
3236	150	Self-reactive solid type D, temperature controlled	3252	115	Refrigerant gas R-32
3237	150	Self-reactive liquid type E, temperature controlled	3253	154	Disodium trioxosilicate
3238	150	Self-reactive solid type E, temperature controlled	3253	154	Disodium trioxosilicate, pentahydrate
3239	150	Self-reactive liquid type F, temperature controlled	3254	135	Tributylphosphane
3240	150	Self-reactive solid type F, temperature controlled	3254	135	Tributylphosphine
3241	133	2-Bromo-2-nitropropane-1,3-diol	3255	135	tert-Butyl hypochlorite
3242	149	Azodicarbonamide	3256	128	Elevated temperature liquid, flammable, n.o.s., with flash point above 37.8°C (100°F), at or above its flash point
3243	151	Solids containing poisonous liquid, n.o.s.	3256	128	Elevated temperature liquid, flammable, n.o.s., with flash point above 60.5°C (141°F), at or above its flash point
3243	151	Solids containing toxic liquid, n.o.s.	3257	128	Elevated temperature liquid, n.o.s., at or above 100°C (212°F) and below its flash point
3244	154	Solids containing corrosive liquid, n.o.s.	3258	171	Elevated temperature solid, n.o.s., at or above 240°C (464°F)
3245	171	Genetically modified micro-organisms	3259	154	Amines, solid, corrosive, n.o.s.
3246	156	Methanesulfonyl chloride	3259	154	Polyamines, solid, corrosive, n.o.s.
3246	156	Methanesulphonyl chloride	3260	154	Corrosive solid, acidic, inorganic, n.o.s.
3247	140	Sodium peroxoborate, anhydrous	3261	154	Corrosive solid, acidic, organic, n.o.s.
3248	131	Medicine, liquid, flammable, poisonous, n.o.s.	3262	154	Corrosive solid, basic, inorganic, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3263	154	Corrosive solid, basic, organic, n.o.s.	3278	151	Organophosphorus compound, poisonous, n.o.s.
3264	154	Corrosive liquid, acidic, inorganic, n.o.s.	3278	151	Organophosphorus compound, toxic, n.o.s.
3265	153	Corrosive liquid, acidic, organic, n.o.s.	3279	131	Organophosphorus compound, poisonous, flammable, n.o.s.
3266	154	Corrosive liquid, basic, inorganic, n.o.s.	3279	131	Organophosphorus compound, toxic, flammable, n.o.s.
3267	153	Corrosive liquid, basic, organic, n.o.s.	3280	151	Organoarsenic compound, n.o.s.
3268	171	Air bag inflators	3281	151	Metal carbonyls, n.o.s.
3268	171	Air bag inflators, pyrotechnic	3282	151	Organometallic compound, poisonous, n.o.s.
3268	171	Air bag modules	3282	151	Organometallic compound, toxic, n.o.s.
3268	171	Air bag modules, pyrotechnic	3283	151	Selenium compound, n.o.s.
3268	171	Seat-belt modules	3284	151	Tellurium compound, n.o.s.
3268	171	Seat-belt pre-tensioners	3285	151	Vanadium compound, n.o.s.
3268	171	Seat-belt pre-tensioners, pyrotechnic	3286	131	Flammable liquid, poisonous, corrosive, n.o.s.
3269	127	Polyester resin kit	3286	131	Flammable liquid, toxic, corrosive, n.o.s.
3270	133	Nitrocellulose membrane filters	3287	151	Poisonous liquid, inorganic, n.o.s.
3271	127	Ethers, n.o.s.	3287	151	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)
3272	127	Esters, n.o.s.	3287	151	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)
3273	131	Nitriles, flammable, poisonous, n.o.s.	3287	151	Toxic liquid, inorganic, n.o.s.
3273	131	Nitriles, flammable, toxic, n.o.s.	3287	151	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)
3274	127	Alcoholates solution, n.o.s., in alcohol	3287	151	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)
3275	131	Nitriles, poisonous, flammable, n.o.s.	3288	151	Poisonous solid, inorganic, n.o.s.
3275	131	Nitriles, toxic, flammable, n.o.s.	3288	151	Toxic solid, inorganic, n.o.s.
3276	151	Nitriles, poisonous, n.o.s.			
3276	151	Nitriles, toxic, n.o.s.			
3277	154	Chloroformates, poisonous, corrosive, n.o.s.			
3277	154	Chloroformates, toxic, corrosive, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3289	154	Poisonous liquid, corrosive, inorganic, n.o.s.	3297	126	Chlorotetrafluoroethane and Ethylene oxide mixture, with not more than 8.8% Ethylene oxide
3289	154	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	3297	126	Ethylene oxide and Chlorotetrafluoroethane mixture, with not more than 8.8% Ethylene oxide
3289	154	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	3298	126	Ethylene oxide and Pentafluoroethane mixture, with not more than 7.9% Ethylene oxide
3289	154	Toxic liquid, corrosive, inorganic, n.o.s.	3298	126	Pentafluoroethane and Ethylene oxide mixture, with not more than 7.9% Ethylene oxide
3289	154	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	3299	126	Ethylene oxide and Tetrafluoroethane mixture, with not more than 5.6% Ethylene oxide
3289	154	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	3299	126	Tetrafluoroethane and Ethylene oxide mixture, with not more than 5.6% Ethylene oxide
3290	154	Poisonous solid, corrosive, inorganic, n.o.s.	3300	119P	Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide
3290	154	Toxic solid, corrosive, inorganic, n.o.s.	3300	119P	Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide
3291	158	(Bio)Medical waste, n.o.s.	3301	136	Corrosive liquid, self-heating, n.o.s.
3291	158	Clinical waste, unspecified, n.o.s.	3302	152	2-Dimethylaminoethyl acrylate
3291	158	Medical waste, n.o.s.	3303	124	Compressed gas, poisonous, oxidizing, n.o.s.
3291	158	Regulated medical waste, n.o.s.	3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)
3292	138	Batteries, containing Sodium	3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)
3292	138	Cells, containing Sodium			
3293	152	Hydrazine, aqueous solution, with not more than 37% Hydrazine			
3294	131	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide			
3295	128	Hydrocarbons, liquid, n.o.s.			
3296	126	Heptafluoropropane			
3296	126	Refrigerant gas R-227			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	3304	123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)
3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	3304	123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)
3303	124	Compressed gas, toxic, oxidizing, n.o.s.	3304	123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)
3303	124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s.
3303	124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
3303	124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
3303	124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
3304	123	Compressed gas, poisonous, corrosive, n.o.s.	3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)
3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)
3304	123	Compressed gas, toxic, corrosive, n.o.s.	3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	3307	124	Liquefied gas, toxic, oxidizing, n.o.s.
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)
3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s.	3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	3308	123	Liquefied gas, poisonous, corrosive, n.o.s.
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)
3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)
3307	124	Liquefied gas, poisonous, oxidizing, n.o.s.	3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)
3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	3308	123	Liquefied gas, toxic, corrosive, n.o.s.
3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)
3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)
3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s.	3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s.
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)
3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s.	3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	3311	122	Gas, refrigerated liquid, oxidizing, n.o.s.
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	3312	115	Gas, refrigerated liquid, flammable, n.o.s.
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	3313	135	Organic pigments, self-heating
3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	3314	171	Plastic molding compound
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	3314	171	Plastics moulding compound
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	3315	151	Chemical sample, poisonous liquid
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	3315	151	Chemical sample, poisonous solid
			3315	151	Chemical sample, toxic liquid
			3315	151	Chemical sample, toxic solid
			3316	171	Chemical kit
			3316	171	First aid kit
			3317	113	2-Amino-4,6-dinitrophenol, wetted with not less than 20% water

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3318	125	Ammonia solution, with more than 50% Ammonia	3331	165	Radioactive material, transported under special arrangement, fissile
3319	113	Nitroglycerin mixture, desensitized, solid, n.o.s., with more than 2% but not more than 10% Nitroglycerin	3332	164	Radioactive material, Type A package, special form
3319	113	Nitroglycerin mixture with more than 2% but not more than 10% Nitroglycerin, desensitized	3333	165	Radioactive material, Type A package, special form, fissile
3320	157	Sodium borohydride and Sodium hydroxide solution, with not more than 12% Sodium borohydride and not more than 40% Sodium hydroxide	3334	171	Aviation regulated liquid, n.o.s.
3321	162	Radioactive material, low specific activity (LSA-II)	3335	171	Aviation regulated solid, n.o.s.
3322	162	Radioactive material, low specific activity (LSA-III)	3336	130	Mercaptan mixture, liquid, flammable, n.o.s.
3323	163	Radioactive material, Type C package	3336	130	Mercaptans, liquid, flammable, n.o.s.
3324	165	Radioactive material, low specific activity (LSA-II), fissile	3337	126	Refrigerant gas R-404A
3325	165	Radioactive material, low specific activity (LSA-III), fissile	3338	126	Refrigerant gas R-407A
3326	165	Radioactive material, surface contaminated objects (SCO-I), fissile	3339	126	Refrigerant gas R-407B
3326	165	Radioactive material, surface contaminated objects (SCO-II), fissile	3340	126	Refrigerant gas R-407C
3327	165	Radioactive material, Type A package, fissile	3341	135	Thiourea dioxide
3328	165	Radioactive material, Type B(U) package, fissile	3342	135	Xanthates
3329	165	Radioactive material, Type B(M) package, fissile	3343	113	Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s., with not more than 30% Nitroglycerin
3330	165	Radioactive material, Type C package, fissile	3344	113	Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s., with more than 10% but not more than 20% PETN
			3345	153	Phenoxyacetic acid derivative pesticide, solid, poisonous
			3345	153	Phenoxyacetic acid derivative pesticide, solid, toxic
			3346	131	Phenoxyacetic acid derivative pesticide, liquid, flammable, poisonous
			3346	131	Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3347	131	Phenoxyacetic acid derivative pesticide, liquid, poisonous, flammable	3355	119	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)
3347	131	Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable	3355	119	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)
3348	153	Phenoxyacetic acid derivative pesticide, liquid, poisonous	3355	119	Insecticide gas, toxic, flammable, n.o.s.
3348	153	Phenoxyacetic acid derivative pesticide, liquid, toxic	3355	119	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)
3349	151	Pyrethroid pesticide, solid, poisonous	3355	119	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)
3349	151	Pyrethroid pesticide, solid, toxic	3355	119	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)
3350	131	Pyrethroid pesticide, liquid, flammable, poisonous	3355	119	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)
3350	131	Pyrethroid pesticide, liquid, flammable, toxic	3356	140	Oxygen generator, chemical
3351	131	Pyrethroid pesticide, liquid, poisonous, flammable	3357	113	Nitroglycerin mixture, desensitized, liquid, n.o.s., with not more than 30% Nitroglycerin
3351	131	Pyrethroid pesticide, liquid, toxic, flammable	3358	115	Refrigerating machines containing flammable, non-toxic, liquefied gas
3352	151	Pyrethroid pesticide, liquid, poisonous	8000	171	Consumer commodity
3352	151	Pyrethroid pesticide, liquid, toxic	8001	171	Dangerous goods in apparatus
3353	126	Air bag inflators, compressed gas	8001	171	Dangerous goods in machinery
3353	126	Air bag modules, compressed gas	8013	171	Gas generator assemblies
3353	126	Seat-belt pre-tensioners, compressed gas	8023	115	Refrigerating machines
3354	115	Insecticide gas, flammable, n.o.s.	8027	171	Other regulated substance
3355	119	Insecticide gas, poisonous, flammable, n.o.s.	8037	140	Oxygen generators, small
3355	119	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	8038	171	Heat producing article
3355	119	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	9011	133	Camphene
			9018	160	Dichlorodifluoroethylene

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
9026	153	Dinitrocyclohexylphenol	9103	171	Cobaltous bromide
9035	123	Gas identification set	9104	171	Cobaltous formate
9037	151	Hexachloroethane	9105	171	Cobaltous sulfamate
9069	132	Tetramethylmethylenediamine	9105	171	Cobaltous sulphamate
9073	113	Trinitroaniline, wetted	9106	171	Cupric acetate
9077	153	Adipic acid	9109	171	Cupric sulfate
9078	171	Aluminum sulfate, solid	9109	171	Cupric sulphate
9078	171	Aluminum sulphate, solid	9110	171	Cupric sulfate, ammoniated
9079	171	Ammonium acetate	9110	171	Cupric sulphate, ammoniated
9080	171	Ammonium benzoate	9111	171	Cupric tartrate
9081	171	Ammonium bicarbonate	9117	171	EDTA
9083	154	Ammonium carbamate	9117	171	Ethylenediaminetetraacetic acid
9084	154	Ammonium carbonate	9118	171	Ferric ammonium citrate
9085	171	Ammonium chloride	9119	171	Ferric ammonium oxalate
9086	143	Ammonium chromate	9120	171	Ferric fluoride
9087	171	Ammonium citrate, dibasic	9121	171	Ferric sulfate
9088	154	Ammonium fluoborate	9121	171	Ferric sulphate
9089	171	Ammonium sulfamate	9122	171	Ferrous ammonium sulfate
9089	171	Ammonium sulphamate	9122	171	Ferrous ammonium sulphate
9090	171	Ammonium sulfite	9125	171	Ferrous sulfate
9090	171	Ammonium sulphite	9125	171	Ferrous sulphate
9091	171	Ammonium tartrate	9126	171	Fumaric acid
9094	153	Benzoic acid	9127	171	Isopropanolamine dodecylbenzenesulfonate
9095	171	n-Butyl phthalate	9127	171	Isopropanolamine dodecylbenzenesulphonate
9096	171	Calcium chromate	9134	171	Lithium chromate
9097	171	Calcium dodecylbenzenesulfonate	9137	171	Naphthenic acid
9097	171	Calcium dodecylbenzenesulphonate	9138	171	Nickel ammonium sulfate
9100	171	Chromic sulfate	9138	171	Nickel ammonium sulphate
9100	171	Chromic sulphate	9139	151	Nickel chloride
9101	171	Chromic acetate	9140	154	Nickel hydroxide
9102	171	Chromous chloride	9141	154	Nickel sulfate

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
9141	154	Nickel sulphate	9188	171	Hazardous substance, liquid, n.o.s.
9142	171	Potassium chromate	9188	171	Hazardous substance, solid, n.o.s.
9145	171	Sodium chromate	9188	171	ORM-E, liquid, n.o.s.
9146	171	Sodium dodecylbenzenesulfonate (branched chain)	9188	171	ORM-E, solid, n.o.s.
9146	171	Sodium dodecylbenzenesulphonate (branched chain)	9189	171	Hazardous waste, liquid, n.o.s.
9147	171	Sodium phosphate, dibasic	9189	171	Hazardous waste, solid, n.o.s.
9148	171	Sodium phosphate, tribasic	9190	143	Ammonium permanganate
9149	171	Strontium chromate	9191	143	Chlorine dioxide, hydrate, frozen
9151	171	Triethanolamine dodecylbenzenesulfonate	9192	167	Fluorine, refrigerated liquid (cryogenic liquid)
9151	171	Triethanolamine dodecylbenzenesulphonate	9193	140	Oxidizer, corrosive, liquid, n.o.s.
9153	171	Zinc acetate	9194	140	Oxidizer, corrosive, solid, n.o.s.
9154	171	Zinc ammonium chloride	9195	135	Metal alkyl, solution, n.o.s.
9155	171	Zinc borate	9199	142	Oxidizer, poisonous, liquid, n.o.s.
9156	171	Zinc bromide	9200	141	Oxidizer, poisonous, solid, n.o.s.
9157	171	Zinc carbonate	9201	171	Antimony trioxide
9158	151	Zinc fluoride	9202	168	Carbon monoxide, refrigerated liquid (cryogenic liquid)
9159	171	Zinc formate	9206	137	Methyl phosphonic dichloride
9160	171	Zinc phenolsulfonate	9259	128	Elevated temperature material, liquid, n.o.s., (at or above 100°C (212°F) and below its flash point)
9160	171	Zinc phenolsulphonate	9260	169	Aluminum, molten
9161	171	Zinc sulfate	9263	156	Chloropivaloyl chloride
9161	171	Zinc sulphate	9264	151	3,5-Dichloro-2,4,6-trifluoropyridine
9162	171	Zirconium potassium fluoride	9269	132	Trimethoxysilane
9163	171	Zirconium sulfate	9274	160	1,1-Dichloro-1-fluoroethane
9163	171	Zirconium sulphate	9275	158	Regulated medical waste
9180	162	Uranyl acetate	9276	128	Flammable liquids, elevated temperature material, n.o.s.
9183	146	Organic peroxide, liquid, n.o.s.			
9183	146	Organic peroxide, solution, n.o.s.			
9187	146	Organic peroxide, solid, n.o.s.			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
9277	171	Oil, n.o.s., flash point not less than 93°C (200°F)	9331	129	Waste Type 31
9278	171	Genetically modified organisms	9332	129	Waste Type 32
9301	153	Waste Type 1	9333	129	Waste Type 33
9302	153	Waste Type 2	9334	129	Waste Type 34
9303	131	Waste Type 3	9335	153	Waste Type 35
9304	153	Waste Type 4	9336	153	Waste Type 36
9305	131	Waste Type 5	9337	153	Waste Type 37
9306	154	Waste Type 6	9338	153	Waste Type 38
9307	154	Waste Type 7	9339	153	Waste Type 39
9308	153	Waste Type 8	9340	153	Waste Type 40
9309	153	Waste Type 9	9341	132	Waste Type 41
9310	153	Waste Type 10	9342	129	Waste Type 42
9311	153	Waste Type 11	9343	154	Waste Type 43
9312	153	Waste Type 12	9344	132	Waste Type 44
9313	153	Waste Type 13	9345	132	Waste Type 45
9314	153	Waste Type 14	9346	153	Waste Type 46
9315	153	Waste Type 15	9347	132	Waste Type 47
9316	154	Waste Type 16	9348	153	Waste Type 48
9317	154	Waste Type 17	9349	153	Waste Type 49
9318	154	Waste Type 18	9350	153	Waste Type 50
9319	154	Waste Type 19	9351	153	Waste Type 51
9320	154	Waste Type 20	9352	153	Waste Type 52
9321	154	Waste Type 21	9353	153	Waste Type 53
9322	154	Waste Type 22	9354	153	Waste Type 54
9323	154	Waste Type 23	9355	153	Waste Type 55
9324	152	Waste Type 24	9356	153	Waste Type 56
9325	127	Waste Type 25	9357	153	Waste Type 57
9326	152	Waste Type 26	9358	153	Waste Type 58
9327	131	Waste Type 27	9359	151	Waste Type 59
9328	131	Waste Type 28	9360	132	Waste Type 60
9329	153	Waste Type 29	9361	151	Waste Type 61
9330	153	Waste Type 30	9362	151	Waste Type 62
			9363	151	Waste Type 63

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
9364	151	Waste Type 64	9397	153	Waste Type 97
9365	151	Waste Type 65	9399	137	Waste Type 99
9366	151	Waste Type 66	9400	137	Waste Type 100
9367	152	Waste Type 67	9500	151	Leachable toxic waste
9368	154	Waste Type 68			
9369	151	Waste Type 69			
9370	151	Waste Type 70			
9371	133	Waste Type 71			
9372	151	Waste Type 72			
9373	151	Waste Type 73			
9374	127	Waste Type 74			
9375	153	Waste Type 75			
9376	153	Waste Type 76			
9377	131	Waste Type 77			
9378	153	Waste Type 78			
9379	153	Waste Type 79			
9380	151	Waste Type 80			
9381	154	Waste Type 81			
9382	154	Waste Type 82			
9383	154	Waste Type 83			
9384	151	Waste Type 84			
9385	154	Waste Type 85			
9386	154	Waste Type 86			
9387	154	Waste Type 87			
9388	151	Waste Type 88			
9389	154	Waste Type 89			
9390	154	Waste Type 90			
9391	153	Waste Type 91			
9392	154	Waste Type 92			
9393	153	Waste Type 93			
9394	151	Waste Type 94			
9395	153	Waste Type 95			
9396	151	Waste Type 96			

Note: If an entry is highlighted in either the yellow-bordered or blue-bordered pages AND THERE IS NO FIRE, go directly to the Table of Initial Isolation and Protective Action Distances (green-bordered pages) and look up the ID number and name of material to obtain initial isolation and protective action distances. IF THERE IS A FIRE, or IF A FIRE IS INVOLVED, go directly to the appropriate guide (orange-bordered pages) and use the evacuation information shown under PUBLIC SAFETY.

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
AC	117	1051	Acetylene tetrabromide	159	2504
Accumulators, pressurized, pneumatic or hydraulic	126	1956	Acetyl iodide	156	1898
Acetal	127	1088	Acetyl methyl carbinol	127	2621
Acetaldehyde	129	1089	Acetyl peroxide	148	2084
Acetaldehyde ammonia	171	1841	Acid, liquid, n.o.s.	154	1760
Acetaldehyde oxime	129	2332	Acid, sludge	153	1906
Acetic acid, glacial	132	2789	Acid butyl phosphate	153	1718
Acetic acid, solution, more than 10% but not more than 80% acid	153	2790	Acridine	153	2713
Acetic acid, solution, more than 80% acid	132	2789	Acrolein, inhibited	131P	1092
Acetic anhydride	137	1715	Acrolein dimer, stabilized	129P	2607
Acetone	127	1090	Acrylamide	153P	2074
Acetone cyanohydrin, stabilized	155	1541	Acrylic acid, inhibited	132P	2218
Acetone oils	127	1091	Acrylonitrile, inhibited	131P	1093
Acetonitrile	131	1648	Adamsite	154	1698
Acetyl acetone peroxide	145	2080	Adhesives (flammable)	128	1133
Acetyl benzoyl peroxide	147	2081	Adipic acid	153	9077
Acetyl bromide	156	1716	Adiponitrile	153	2205
Acetyl chloride	132	1717	Aerosol dispensers	126	1950
Acetyl cyclohexanesulfonyl peroxide	148	2082	Aerosols	126	1950
Acetyl cyclohexanesulfonyl peroxide	148	2083	Air, compressed	122	1002
Acetyl cyclohexanesulphonyl peroxide	148	2082	Air, refrigerated liquid (cryogenic liquid)	122	1003
Acetyl cyclohexanesulphonyl peroxide	148	2083	Air, refrigerated liquid (cryogenic liquid), non-pressurized	122	1003
Acetylene	116	1001	Air bag inflators	133	1325
Acetylene, dissolved	116	1001	Air bag inflators	171	3268
Acetylene, Ethylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene	116	3138	Air bag inflators, compressed gas	126	3353
			Air bag inflators, pyrotechnic	171	3268
			Air bag modules	133	1325
			Air bag modules	171	3268
			Air bag modules, compressed gas	126	3353
			Air bag modules, pyrotechnic	171	3268
			Aircraft evacuation slides	171	2990
			Aircraft hydraulic power unit fuel tank	131	3165

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Aircraft survival kits	171	3072	Alkaline earth metal dispersion	138	1391
Alcoholates solution, n.o.s., in alcohol	127	3274	Alkaline liquid, n.o.s.	154	1719
Alcoholic beverages	127	3065	Alkaloids, liquid, n.o.s. (poisonous)	151	3140
Alcohols, flammable, poisonous, n.o.s.	131	1986	Alkaloids, solid, n.o.s. (poisonous)	151	1544
Alcohols, flammable, toxic, n.o.s.	131	1986	Alkaloid salts, liquid, n.o.s. (poisonous)	151	3140
Alcohols, n.o.s.	127	1987	Alkaloid salts, solid, n.o.s. (poisonous)	151	1544
Alcohols, poisonous, n.o.s.	131	1986	Alkylamines, n.o.s.	132	2733
Alcohols, toxic, n.o.s.	131	1986	Alkylamines, n.o.s.	132	2734
Aldehydes, flammable, poisonous, n.o.s.	131	1988	Alkylamines, n.o.s.	153	2735
Aldehydes, flammable, toxic, n.o.s.	131	1988	Alkyl phenols, liquid, n.o.s. (including C2-C12 homologues)	153	3145
Aldehydes, n.o.s.	129	1989	Alkyl phenols, solid, n.o.s. (including C2-C12 homologues)	153	2430
Aldehydes, poisonous, n.o.s.	131	1988	Alkyl sulfonic acids, liquid, with more than 5% free Sulfuric acid	153	2584
Aldehydes, toxic, n.o.s.	131	1988	Alkyl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	153	2586
Aldol	153	2839	Alkyl sulfonic acids, solid, with more than 5% free Sulfuric acid	153	2583
Aldrin, liquid	131	2762	Alkyl sulfonic acids, solid, with not more than 5% free Sulfuric acid	153	2585
Aldrin, solid	151	2761	Alkylsulfuric acids	156	2571
Aldrin mixture, dry	151	2761	Alkyl sulphonic acids, liquid, with more than 5% free Sulphuric acid	153	2584
Aldrin mixture, liquid	131	2762	Alkyl sulphonic acids, liquid, with not more than 5% free Sulphuric acid	153	2586
Alkali metal alcoholates, self-heating, corrosive, n.o.s.	136	3206			
Alkali metal alloy, liquid, n.o.s.	138	1421			
Alkali metal amalgam	138	1389			
Alkali metal amalgam, liquid	138	1389			
Alkali metal amalgam, solid	138	1389			
Alkali metal amides	139	1390			
Alkali metal dispersion	138	1391			
Alkaline earth metal alcoholates, n.o.s.	135	3205			
Alkaline earth metal alloy, n.o.s.	138	1393			
Alkaline earth metal amalgam	138	1392			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Alkyl sulphonic acids, solid, with more than 5% free Sulphuric acid	153	2583	Aluminum dross	138	3170
Alkyl sulphonic acids, solid, with not more than 5% free Sulphuric acid	153	2585	Aluminum ferrosilicon powder	139	1395
Alkylsulphuric acids	156	2571	Aluminum hydride	138	2463
Allethrin	151	2902	Aluminum nitrate	140	1438
Allyl acetate	131	2333	Aluminum phosphate, solution	154	1760
Allyl alcohol	131	1098	Aluminum phosphide	139	1397
Allylamine	131	2334	Aluminum phosphide pesticide	157	3048
Allyl bromide	131	1099	Aluminum powder, coated	170	1309
Allyl chloride	131	1100	Aluminum powder, pyrophoric	135	1383
Allyl chlorocarbonate	155	1722	Aluminum powder, uncoated	138	1396
Allyl chloroformate	155	1722	Aluminum processing by-products	138	3170
Allyl ethyl ether	131	2335	Aluminum remelting by-products	138	3170
Allyl formate	131	2336	Aluminum resinate	133	2715
Allyl glycidyl ether	129	2219	Aluminum silicon powder, uncoated	138	1398
Allyl iodide	132	1723	Aluminum smelting by-products	138	3170
Allyl isothiocyanate, inhibited	155	1545	Aluminum sulfate, solid	171	9078
Allyl isothiocyanate, stabilized	155	1545	Aluminum sulfate, solution	154	1760
Allyltrichlorosilane, stabilized	155	1724	Aluminum sulphate, solid	171	9078
Aluminum, molten	169	9260	Aluminum sulphate, solution	154	1760
Aluminum alkyl halides	135	3052	Amines, flammable, corrosive, n.o.s.	132	2733
Aluminum alkyl hydrides	138	3076	Amines, liquid, corrosive, flammable, n.o.s.	132	2734
Aluminum alkyls	135	3051	Amines, liquid, corrosive, n.o.s.	153	2735
Aluminum borohydride	135	2870	Amines, solid, corrosive, n.o.s.	154	3259
Aluminum borohydride in devices	135	2870	2-Amino-4-chlorophenol	151	2673
Aluminum bromide, anhydrous	137	1725	2-Amino-5-diethylaminopentane	153	2946
Aluminum bromide, solution	154	2580	2-Amino-4,6-dinitrophenol, wetted with not less than 20% water	113	3317
Aluminum carbide	138	1394	2-(2-Aminoethoxy)ethanol	154	1760
Aluminum chloride, anhydrous	137	1726	2-(2-Aminoethoxy)ethanol	154	3055
Aluminum chloride, solution	154	2581			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
N-Aminoethylpiperazine	153	2815	Ammonium fluoborate	154	9088
Aminophenols	152	2512	Ammonium fluoride	154	2505
Aminopropyl-diethanolamine	154	1760	Ammonium fluorosilicate	151	2854
N-Aminopropylmorpholine	154	1760	Ammonium hydrogendifluoride, solid	154	1727
Aminopyridines	153	2671	Ammonium hydrogendifluoride, solution	154	2817
Ammonia, anhydrous	125	1005	Ammonium hydrogen fluoride, solid	154	1727
Ammonia, anhydrous, liquefied	125	1005	Ammonium hydrogen fluoride, solution	154	2817
Ammonia, solution, with more than 10% but not more than 35% Ammonia	154	2672	Ammonium hydrogen sulfate	154	2506
Ammonia, solution, with more than 35% but not more than 50% Ammonia	125	2073	Ammonium hydrogen sulphate	154	2506
Ammonia solution, with more than 50% Ammonia	125	1005	Ammonium hydrosulfide, solution	132	2683
Ammonia solution, with more than 50% Ammonia	125	3318	Ammonium hydrosulphide, solution	132	2683
Ammonium acetate	171	9079	Ammonium hydroxide	154	2672
Ammonium arsenate	151	1546	Ammonium hydroxide, with more than 10% but not more than 35% Ammonia	154	2672
Ammonium benzoate	171	9080	Ammonium metavanadate	154	2859
Ammonium bicarbonate	171	9081	Ammonium nitrate, liquid (hot concentrated solution)	140	2426
Ammonium bifluoride, solid	154	1727	Ammonium nitrate, with not more than 0.2% combustible substances	140	1942
Ammonium bifluoride, solution	154	2817	Ammonium nitrate, with organic coating	140	1942
Ammonium bisulfite, solid	154	2693	Ammonium nitrate fertilizer, n.o.s.	140	2072
Ammonium bisulfite, solution	154	2693	Ammonium nitrate fertilizer, with not more than 0.4% combustible material	140	2071
Ammonium bisulphite, solid	154	2693	Ammonium nitrate fertilizers	140	2067
Ammonium bisulphite, solution	154	2693	Ammonium nitrate fertilizers	140	2071
Ammonium carbamate	154	9083	Ammonium nitrate fertilizers	140	2072
Ammonium carbonate	154	9084			
Ammonium chloride	171	9085			
Ammonium chromate	143	9086			
Ammonium citrate, dibasic	171	9087			
Ammonium dichromate	141	1439			
Ammonium dinitro-o-cresolate	141	1843			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Ammonium nitrate fertilizers, with Ammonium sulfate	140	2069	Ammunition, tear-producing, non-explosive	159	2017
Ammonium nitrate fertilizers, with Ammonium sulphate	140	2069	Ammunition, toxic, non-explosive	151	2016
Ammonium nitrate fertilizers, with Calcium carbonate	140	2068	Amyl acetates	129	1104
Ammonium nitrate fertilizers, with Phosphate or Potash	143	2070	Amyl acid phosphate	153	2819
Ammonium nitrate-fuel oil mixtures	112	--	Amyl alcohols	129	1105
Ammonium nitrate mixed fertilizers	140	2069	Amylamines	132	1106
Ammonium oxalate	154	2449	Amyl butyrates	130	2620
Ammonium perchlorate	143	1442	Amyl chloride	129	1107
Ammonium permanganate	143	9190	n-Amylene	127	1108
Ammonium persulfate	140	1444	Amyl formates	129	1109
Ammonium persulphate	140	1444	Amyl mercaptan	130	1111
Ammonium picrate, wetted with not less than 10% water	113	1310	n-Amyl methyl ketone	127	1110
Ammonium polysulfide, solution	154	2818	Amyl methyl ketone	127	1110
Ammonium polysulphide, solution	154	2818	Amyl nitrate	140	1112
Ammonium polyvanadate	151	2861	Amyl nitrite	129	1113
Ammonium silicofluoride	151	2854	tert-Amyl peroxy-2-ethylhexanoate	148	2898
Ammonium sulfamate	171	9089	tert-Amyl peroxyneodecanoate	148	2891
Ammonium sulfate nitrate	140	1477	Amyltrichlorosilane	155	1728
Ammonium sulfide, solution	132	2683	Anhydrous ammonia	125	1005
Ammonium sulfite	171	9090	Anhydrous ammonia, liquefied	125	1005
Ammonium sulphamate	171	9089	Aniline	153	1547
Ammonium sulphate nitrate	140	1477	Aniline hydrochloride	153	1548
Ammonium sulphide, solution	132	2683	Anisidines	153	2431
Ammonium sulphite	171	9090	Anisidines, liquid	153	2431
Ammonium sulphamate	171	9089	Anisidines, solid	153	2431
Ammonium sulphate nitrate	140	1477	Anisole	127	2222
Ammonium sulphide, solution	132	2683	Anisoyl chloride	156	1729
Ammonium sulphite	171	9090	Antimony compound, inorganic, liquid, n.o.s.	157	3141
Ammonium tartrate	171	9091	Antimony compound, inorganic, n.o.s.	157	1549
Ammunition, poisonous, non-explosive	151	2016			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Antimony compound, inorganic, solid, n.o.s.	157	1549	Arsenical pesticide, liquid, poisonous, flammable	131	2993
Antimony lactate	151	1550	Arsenical pesticide, liquid, toxic	151	2994
Antimony pentachloride, liquid	157	1730	Arsenical pesticide, liquid, toxic, flammable	131	2993
Antimony pentachloride, solution	157	1731	Arsenical pesticide, solid, poisonous	151	2759
Antimony pentafluoride	157	1732	Arsenical pesticide, solid, toxic	151	2759
Antimony potassium tartrate	151	1551	Arsenic bromide	151	1555
Antimony powder	170	2871	Arsenic chloride	157	1560
Antimony sulfide, solid	133	1325	Arsenic compound, liquid, n.o.s.	152	1556
Antimony sulphide, solid	133	1325	Arsenic compound, liquid, n.o.s., inorganic	152	1556
Antimony tribromide, solid	157	1549	Arsenic compound, solid, n.o.s.	152	1557
Antimony tribromide, solution	157	1549	Arsenic compound, solid, n.o.s., inorganic	152	1557
Antimony trichloride	157	1733	Arsenic iodide, solid	152	1557
Antimony trichloride, liquid	157	1733	Arsenic pentoxide	151	1559
Antimony trichloride, solid	157	1733	Arsenic sulfide	152	1557
Antimony trichloride, solution	157	1733	Arsenic sulphide	152	1557
Antimony trifluoride, solid	157	1549	Arsenic trichloride	157	1560
Antimony trifluoride, solution	157	1549	Arsenic trioxide	151	1561
Antimony trioxide	171	9201	Arsenic trisulfide	152	1557
Aqua regia	157	1798	Arsenic trisulphide	152	1557
Argon	121	1006	Arsine	119	2188
Argon, compressed	121	1006	Articles containing Polychlorinated biphenyls (PCB)	171	2315
Argon, refrigerated liquid (cryogenic liquid)	120	1951	Articles, pressurized, hydraulic (containing non-flammable gas)	126	3164
Arsenic	152	1558	Articles, pressurized, pneumatic (containing non-flammable gas)	126	3164
Arsenic acid, liquid	154	1553	Aryl sulfonic acids, liquid, with more than 5% free Sulfuric acid	153	2584
Arsenic acid, solid	154	1554			
Arsenical dust	152	1562			
Arsenical pesticide, liquid, flammable, poisonous	131	2760			
Arsenical pesticide, liquid, flammable, toxic	131	2760			
Arsenical pesticide, liquid, poisonous	151	2994			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Aryl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	153	2586	1,1'-Azodi-(hexahydrobenzotrile)	149	2954
Aryl sulfonic acids, solid, with more than 5% free Sulfuric acid	153	2583	Azodiisobutyronitrile	150	2952
Aryl sulfonic acids, solid, with not more than 5% free Sulfuric acid	153	2585	2,2'-Azodi-(2-methylbutyronitrile)	150	3030
Aryl sulphonic acids, liquid, with more than 5% free Sulphuric acid	153	2584	Barium	138	1400
Aryl sulphonic acids, liquid, with not more than 5% free Sulphuric acid	153	2586	Barium alloys, pyrophoric	135	1854
Aryl sulphonic acids, solid, with more than 5% free Sulphuric acid	153	2583	Barium azide, wetted with not less than 50% water	113	1571
Aryl sulphonic acids, solid, with not more than 5% free Sulphuric acid	153	2585	Barium bromate	141	2719
Asbestos	171	2212	Barium chlorate	141	1445
Asbestos, blue	171	2212	Barium chlorate, wet	141	1445
Asbestos, brown	171	2212	Barium compound, n.o.s.	154	1564
Asbestos, white	171	2590	Barium cyanide	157	1565
Asphalt	130	1999	Barium hypochlorite, with more than 22% available Chlorine	141	2741
Asphalt, cut back	130	1999	Barium nitrate	141	1446
Aviation regulated liquid, n.o.s.	171	3334	Barium oxide	157	1884
Aviation regulated solid, n.o.s.	171	3335	Barium perchlorate	141	1447
Azinphos methyl	152	2783	Barium permanganate	141	1448
1-Aziridinyl phosphine oxide (Tris)	152	2501	Barium peroxide	141	1449
Azodicarbonamide	149	3242	Barium selenate	151	2630
2,2'-Azodi-(2,4-dimethyl-4-methoxyvaleronitrile)	150	2955	Barium selenite	151	2630
2,2'-Azodi-(2,4-dimethylvaleronitrile)	150	2953	Barium nitrate	141	1446
			Barium oxide	157	1884
			Barium perchlorate	141	1447
			Barium permanganate	141	1448
			Barium peroxide	141	1449
			Barium selenate	151	2630
			Barium selenite	151	2630
			Batteries, containing Sodium	138	3292
			Batteries, dry, containing Potassium hydroxide, solid	154	3028
			Batteries, wet, filled with acid	154	2794
			Batteries, wet, filled with alkali	154	2795
			Batteries, wet, non-spillable	154	2800
			Battery	154	1813
			Battery	154	2794
			Battery	154	2795
			Battery fluid, acid	157	2796
			Battery fluid, acid, with battery	157	2796

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Battery fluid, acid, with electronic equipment or actuating device	157	2796	Benzoic derivative pesticide, liquid, toxic, flammable	131	3003
Battery fluid, alkali	154	2797	Benzoic derivative pesticide, solid, poisonous	151	2769
Battery fluid, alkali, with battery	154	2797	Benzoic derivative pesticide, solid, toxic	151	2769
Battery fluid, alkali, with electronic equipment or actuating device	154	2797	Benzonitrile	152	2224
Battery-powered equipment (wet battery)	154	3171	Benzoquinone	153	2587
Battery-powered vehicle (wet battery)	154	3171	Benzotrichloride	156	2226
Benzaldehyde	129	1989	Benzotrifluoride	131	2338
Benzaldehyde	129	1990	Benzoyl chloride	137	1736
Benzene	130	1114	Benzoyl peroxide	146	2085
Benzene-1,3-disulfohydrazide	149	2971	Benzoyl peroxide	146	2087
Benzene-1,3-disulphohydrazide	149	2971	Benzoyl peroxide	146	2088
Benzene phosphorus dichloride	137	2798	Benzoyl peroxide	145	2089
Benzene phosphorus thiodichloride	137	2799	Benzoyl peroxide	146	2090
Benzene sulfohydrazide	149	2970	Benzyl bromide	156	1737
Benzenesulfonyl chloride	156	2225	Benzyl chloride	156	1738
Benzene sulphohydrazide	149	2970	Benzyl chloroformate	137	1739
Benzenesulphonyl chloride	156	2225	Benzylidimethylamine	132	2619
Benzidine	153	1885	4-[Benzyl(ethyl)amino]-3-ethoxybenzenediazonium zinc chloride	149	3037
Benzoic acid	153	9094	Benzylidene chloride	156	1886
Benzoic derivative pesticide, liquid, flammable, poisonous	131	2770	Benzyl iodide	156	2653
Benzoic derivative pesticide, liquid, flammable, toxic	131	2770	4-[Benzyl(methyl)amino]-3-ethoxybenzenediazonium zinc chloride	150	3038
Benzoic derivative pesticide, liquid, poisonous	151	3004	Beryllium chloride	154	1566
Benzoic derivative pesticide, liquid, poisonous, flammable	131	3003	Beryllium compound, n.o.s.	154	1566
Benzoic derivative pesticide, liquid, toxic	151	3004	Beryllium fluoride	154	1566
			Beryllium nitrate	141	2464
			Beryllium powder	134	1567
			Bhusa, wet, damp or contaminated with oil	133	1327

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Bicyclo[2.2.1]hepta-2,5-diene	127P	2251	Blasting agent, n.o.s.	112	--
Bicyclo[2.2.1]hepta-2,5-diene, inhibited	127P	2251	Bleaching powder	140	2208
Bifluorides, n.o.s.	154	1740	Blue asbestos	171	2212
Biological agents	158	--	Bombs, smoke, non-explosive, with corrosive liquid, without initiating device	153	2028
(Bio)Medical waste, n.o.s.	158	3291	Borate and Chlorate mixtures	140	1458
Bipyridilium pesticide, liquid, flammable, poisonous	131	2782	Borneol	133	1312
Bipyridilium pesticide, liquid, flammable, toxic	131	2782	Boron tribromide	157	2692
Bipyridilium pesticide, liquid, poisonous	151	3016	Boron trichloride	125	1741
Bipyridilium pesticide, liquid, poisonous, flammable	131	3015	Boron trifluoride	125	1008
Bipyridilium pesticide, liquid, toxic	151	3016	Boron trifluoride, compressed	125	1008
Bipyridilium pesticide, liquid, toxic, flammable	131	3015	Boron trifluoride, dihydrate	157	2851
Bipyridilium pesticide, solid, poisonous	151	2781	Boron trifluoride acetic acid complex	157	1742
Bipyridilium pesticide, solid, toxic	151	2781	Boron trifluoride diethyl etherate	132	2604
Bis-(2-chloroethyl) ethylamine	153	2810	Boron trifluoride dimethyl etherate	139	2965
Bis-(2-chloroethyl) methylamine	153	2810	Boron trifluoride propionic acid complex	157	1743
Bis-(2-chloroethyl) sulfide	153	2810	Brake fluid, hydraulic	130	1118
Bis-(2-chloroethyl) sulphide	153	2810	Bromates, inorganic, aqueous solution, n.o.s.	140	3213
Bisulfates, aqueous solution	154	2837	Bromates, inorganic, n.o.s.	141	1450
Bisulfites, aqueous solution, n.o.s.	154	2693	Bromine	154	1744
Bisulfites, inorganic, aqueous solutions, n.o.s.	154	2693	Bromine, solution	154	1744
Bisulphates, aqueous solution	154	2837	Bromine chloride	124	2901
Bisulphites, aqueous solution, n.o.s.	154	2693	Bromine pentafluoride	144	1745
Bisulphites, inorganic, aqueous solutions, n.o.s.	154	2693	Bromine trifluoride	144	1746
			Bromoacetic acid	156	1938
			Bromoacetic acid, solid	156	1938
			Bromoacetic acid, solution	156	1938
			Bromoacetone	131	1569
			Bromoacetyl bromide	156	2513

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Bromobenzene	129	2514	Butyl alcohol	129	1120
Bromobenzyl cyanides	159	1694	n-Butylamine	132	1125
1-Bromobutane	129	1126	N-Butylaniline	153	2738
2-Bromobutane	130	2339	Butylbenzenes	128	2709
Bromochlorodifluoromethane	126	1974	n-Butyl bromide	129	1126
Bromochloromethane	160	1887	Butyl chloride	130	1127
1-Bromo-3-chloropropane	159	2688	n-Butyl chloroformate	155	2743
2-Bromoethyl ethyl ether	130	2340	sec-Butyl chloroformate	155	2742
Bromoform	159	2515	tert-Butyl cumene peroxide	145	2091
1-Bromo-3-methylbutane	130	2341	tert-Butyl cumyl peroxide	145	2091
Bromomethylpropanes	130	2342	tert-Butylcyclohexyl chloroformate	156	2747
2-Bromo-2-nitropropane-1,3-diol	133	3241	n-Butyl-4,4-di-(tert-butylperoxy)valerate	146	2140
2-Bromopentane	130	2343	n-Butyl-4,4-di-(tert-butylperoxy)valerate	145	2141
2-Bromopropane	130	2344	Butylene	115	1012
Bromopropanes	130	2344	Butylene	115	1075
3-Bromopropyne	129	2345	1,2-Butylene oxide, stabilized	127P	3022
Bromotrifluoroethylene	116	2419	Butyl ethers	127	1149
Bromotrifluoromethane	126	1009	n-Butyl formate	129	1128
Brown asbestos	171	2212	tert-Butyl hydroperoxide	147	2093
Brucine	152	1570	tert-Butyl hydroperoxide	147	2094
Burnt cotton, not picked	133	1325	tert-Butyl hydroperoxide, not more than 80% in Di-tert-butyl peroxide and/or solvent	147	2092
Butadienes, inhibited	116P	1010	tert-Butyl hypochlorite	135	3255
Butane	115	1011	N,n-Butylimidazole	152	2690
Butane	115	1075	n-Butyl isocyanate	155	2485
Butanedione	127	2346	tert-Butyl isocyanate	155	2484
Butane mixture	115	1011	tert-Butyl isopropyl benzene hydroperoxide	145	2091
Butane mixture	115	1075	Butyl mercaptan	130	2347
Butanols	129	1120	n-Butyl methacrylate	129P	2227
Butoxyl	127	2708			
Butyl acetates	129	1123			
Butyl acid phosphate	153	1718			
Butyl acrylate	129P	2348			
Butyl acrylates, inhibited	129P	2348			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
n-Butyl methacrylate, inhibited	129P	2227	tert-Butyl peroxy-pivalate	148	2110
Butyl methyl ether	127	2350	tert-Butyl peroxy-3,5,5-trimethylhexanoate	145	2104
tert-Butyl monoperoxymaleate	146	2099	Butylphenols, liquid	153	2228
Butyl nitrites	129	2351	Butylphenols, solid	153	2229
tert-Butyl peroxyacetate	146	2095	n-Butyl phthalate	171	9095
tert-Butyl peroxyacetate	146	2096	Butyl propionates	130	1914
tert-Butyl peroxybenzoate	146	2097	Butyltoluenes	131	2667
tert-Butyl peroxybenzoate	145	2098	Butyltrichlorosilane	155	1747
tert-Butyl peroxybenzoate	145	2890	5-tert-Butyl-2,4,6-trinitro-m-xylene	149	2956
tert-Butyl peroxycrotonate	145	2183	Butyl vinyl ether, inhibited	127P	2352
Butyl peroxydicarbonate	148	2169	1,4-Butynediol	153	2716
Butyl peroxydicarbonate	148	2170	Butyraldehyde	129	1129
tert-Butyl peroxydiethylacetate	148	2144	Butyraldoxime	129	2840
tert-Butyl peroxydiethylacetate, with tert-Butyl peroxybenzoate	145	2551	Butyric acid	153	2820
tert-Butyl peroxy-2-ethylhexanoate	148	2143	Butyric anhydride	156	2739
tert-Butyl peroxy-2-ethylhexanoate, not more than 50%, with phlegmatizer	148	2888	Butyronitrile	131	2411
tert-Butyl peroxy-2-ethylhexanoate, with 2,2-Di-(tert-butylperoxy)butane	148	2886	Butyryl chloride	132	2353
tert-Butyl peroxy-2-ethylhexanoate, with 2,2-Di-(tert-butylperoxy)butane	145	2887	Buzz	153	2810
tert-Butyl peroxyisobutyrate	148	2142	BZ	153	2810
tert-Butyl peroxyisobutyrate	148	2562	CA	159	1694
tert-Butyl peroxyisononanoate	145	2104	Cacodylic acid	151	1572
tert-Butyl peroxyisopropyl carbonate	146	2103	Cadmium compound	154	2570
tert-Butyl peroxyneodecanoate	148	2177	Caesium	138	1407
tert-Butyl peroxyneodecanoate	148	2594	Caesium hydroxide	157	2682
tert-Butyl peroxy-3-phenylphthalide	145	2596	Caesium hydroxide, solution	154	2681
			Caesium nitrate	140	1451
			Calcium	138	1401
			Calcium, metal and alloys, pyrophoric	135	1855
			Calcium, pyrophoric	135	1855
			Calcium alloys, pyrophoric	135	1855
			Calcium arsenate	151	1573

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Calcium arsenate and Calcium arsenite mixture, solid	151	1574	Calcium hypochlorite mixture, dry, with more than 10% but not more than 39% available Chlorine	140	2208
Calcium arsenite, solid	151	1574	Calcium hypochlorite mixture, dry, with more than 39% available Chlorine (8.8% available Oxygen)	140	1748
Calcium arsenite and Calcium arsenate mixture, solid	151	1574	Calcium manganese silicon	138	2844
Calcium carbide	138	1402	Calcium metal, crystalline	138	1401
Calcium chlorate	140	1452	Calcium nitrate	140	1454
Calcium chlorate, aqueous solution	140	2429	Calcium oxide	157	1910
Calcium chlorate, solution	140	2429	Calcium perchlorate	140	1455
Calcium chlorite	140	1453	Calcium permanganate	140	1456
Calcium chromate	171	9096	Calcium peroxide	140	1457
Calcium cyanamide, with more than 0.1% Calcium carbide	138	1403	Calcium phosphide	139	1360
Calcium cyanide	157	1575	Calcium resinate	133	1313
Calcium dithionite	135	1923	Calcium resinate, fused	133	1314
Calcium dodecylbenzenesulfonate	171	9097	Calcium selenate	151	2630
Calcium dodecylbenzenesulphonate	171	9097	Calcium silicide	138	1405
Calcium hydride	138	1404	Calcium silicon	138	1406
Calcium hydrogen sulfite, solution	154	2693	Camphene	133	9011
Calcium hydrogen sulphite, solution	154	2693	Camphor	133	2717
Calcium hydrosulfite	135	1923	Camphor, synthetic	133	2717
Calcium hydrosulphite	135	1923	Camphor oil	128	1130
Calcium hypochlorite, dry	140	1748	Caproic acid	153	2829
Calcium hypochlorite, hydrated, with not less than 5.5% but not more than 10% water	140	2880	Caprylyl peroxide	148	2129
Calcium hypochlorite, hydrated mixture, with not less than 5.5% but not more than 10% water	140	2880	Caprylyl peroxide, solution	148	2129
			Carbamate pesticide, liquid, flammable, poisonous	131	2758
			Carbamate pesticide, liquid, flammable, toxic	131	2758
			Carbamate pesticide, liquid, poisonous	151	2992
			Carbamate pesticide, liquid, poisonous, flammable	131	2991

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Carbamate pesticide, liquid, toxic	151	2992	Carbon dioxide and Oxygen mixture	122	1014
Carbamate pesticide, liquid, toxic, flammable	131	2991	Carbon dioxide and Oxygen mixture, compressed	122	1014
Carbamate pesticide, solid, poisonous	151	2757	Carbon disulfide	131	1131
Carbamate pesticide, solid, toxic	151	2757	Carbon disulphide	131	1131
Carbaryl	151	2757	Carbon monoxide	119	1016
Carbofuran	151	2757	Carbon monoxide, compressed	119	1016
Carbon, activated	133	1362	Carbon monoxide and Hydrogen mixture	119	2600
Carbon, animal or vegetable origin	133	1361	Carbon monoxide and Hydrogen mixture, compressed	119	2600
Carbon bisulfide	131	1131	Carbon monoxide, refrigerated liquid (cryogenic liquid)	168	9202
Carbon bisulphide	131	1131	Carbon tetrabromide	151	2516
Carbon dioxide	120	1013	Carbon tetrachloride	151	1846
Carbon dioxide, compressed	120	1013	Carbonyl fluoride	125	2417
Carbon dioxide, refrigerated liquid	120	2187	Carbonyl fluoride, compressed	125	2417
Carbon dioxide, solid	120	1845	Carbonyl sulfide	119	2204
Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide	115	1041	Carbonyl sulphide	119	2204
Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide	119P	3300	Cargo transport unit under fumigation	171	--
Carbon dioxide and Ethylene oxide mixtures, with more than 6% Ethylene oxide	115	1041	Castor beans, meal, pomace or flake	171	2969
Carbon dioxide and Ethylene oxide mixtures, with not more than 6% Ethylene oxide	126	1952	Caustic alkali liquid, n.o.s.	154	1719
Carbon dioxide and Ethylene oxide mixtures, with not more than 9% Ethylene oxide	126	1952	Caustic potash, dry, solid	154	1813
Carbon dioxide and Nitrous oxide mixture	126	1015	Caustic potash, liquid	154	1814
			Caustic potash, solution	154	1814
			Caustic soda, bead	154	1823
			Caustic soda, flake	154	1823
			Caustic soda, granular	154	1823
			Caustic soda, solid	154	1823
			Caustic soda, solution	154	1824
			Cells, containing Sodium	138	3292

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Celluloid, in blocks, rods, rolls, sheets, tubes, etc., except scrap	133	2000	Chemical kits (containing flammable solids)	133	--
Celluloid, scrap	135	2002	Chemical kits (containing oxidizing substances)	140	--
Cement (flammable)	128	1133	Chemical kits (containing poisonous liquids)	153	--
Cement, container, linoleum, tile or wallboard, liquid	128	1133	Chemical kits (containing poisonous solids)	154	--
Cement, leather	128	1133	Chemical kits (containing toxic liquids)	153	--
Cement, liquid, n.o.s.	128	1133	Chemical kits (containing toxic solids)	154	--
Cement, pyroxylin	128	1133	Chemical sample, poisonous liquid	151	3315
Cement, roofing, liquid	128	1133	Chemical sample, poisonous solid	151	3315
Cement, rubber	128	1133	Chemical sample, toxic liquid	151	3315
Cerium, slabs, ingots or rods	170	1333	Chemical sample, toxic solid	151	3315
Cerium, turnings or gritty powder	138	3078	Chloral, anhydrous, inhibited	153	2075
Cesium	138	1407	Chlorate, n.o.s., wet	140	1461
Cesium hydroxide	157	2682	Chlorate and Borate mixtures	140	1458
Cesium hydroxide, solution	154	2681	Chlorate and Magnesium chloride mixture	140	1459
Cesium nitrate	140	1451	Chlorates, inorganic, aqueous solution, n.o.s.	140	3210
CG	125	1076	Chlorates, inorganic, n.o.s.	140	1461
Charcoal	133	1361	Chloric acid	140	2626
Charcoal, briquettes	133	1361	Chloric acid, aqueous solution, with not more than 10% Chloric acid	140	2626
Charcoal, shell	133	1361	Chlorine	124	1017
Charcoal, wood, ground, crushed, granulated or pulverized	133	1361	Chlorine dioxide, hydrate, frozen	143	9191
Charcoal screenings, made from "Pinon" wood	133	1361	Chlorine pentafluoride	124	2548
Charcoal screenings, other than "Pinon" wood screenings	133	1361	Chlorine trifluoride	124	1749
Chemical kit	154	1760	Chlorite solution	154	1908
Chemical kit	171	3316			
Chemical kits (containing corrosive substances)	154	--			
Chemical kits (containing flammable liquids)	128	--			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Chlorite solution, with more than 5% available Chlorine	154	1908	1-Chloro-1,1-difluoroethane	115	2517
Chlorites, inorganic, n.o.s.	143	1462	Chlorodifluoroethanes	115	2517
Chloroacetaldehyde	153	2232	Chlorodifluoromethane	126	1018
Chloroacetic acid, liquid	153	1750	Chlorodifluoromethane and Chloropentafluoroethane mixture	126	1973
Chloroacetic acid, molten	153	3250	Chlorodinitrobenzenes	153	1577
Chloroacetic acid, solid	153	1751	1-Chloro-2,3-epoxypropane	131P	2023
Chloroacetic acid, solution	153	1750	2-Chloroethanal	153	2232
Chloroacetone, stabilized	131	1695	Chloroform	151	1888
Chloroacetoneitrile	131	2668	Chloroformates, n.o.s.	155	2742
Chloroacetophenone	153	1697	Chloroformates, poisonous, corrosive, flammable, n.o.s.	155	2742
Chloroacetophenone, liquid	153	1697	Chloroformates, poisonous, corrosive, n.o.s.	154	3277
Chloroacetophenone, solid	153	1697	Chloroformates, toxic, corrosive, flammable, n.o.s.	155	2742
Chloroacetyl chloride	156	1752	Chloroformates, toxic, corrosive, n.o.s.	154	3277
Chloroanilines, liquid	152	2019	1-Chloroheptane	129	--
Chloroanilines, solid	152	2018	1-Chlorohexane	129	--
Chloroanisidines	152	2233	Chloromethyl chloroformate	157	2745
Chlorobenzene	130	1134	Chloromethyl ethyl ether	131	2354
Chlorobenzotrifluorides	130	2234	3-Chloro-4-methylphenyl isocyanate	156	2236
p-Chlorobenzoyl peroxide	146	2113	Chloronitroanilines	153	2237
p-Chlorobenzoyl peroxide	145	2114	Chloronitrobenzenes	152	1578
p-Chlorobenzoyl peroxide	145	2115	Chloronitrobenzenes, liquid	152	1578
Chlorobenzyl chlorides	153	2235	Chloronitrobenzenes, solid	152	1578
o-Chlorobenzylidene malononitrile	153	2810	Chloronitrotoluenes	152	2433
1-Chloro-3-bromopropane	159	2688	Chloronitrotoluenes, liquid	152	2433
Chlorobutanes	130	1127	Chloronitrotoluenes, solid	152	2433
Chlorocresols	152	2669	Chloropentafluoroethane	126	1020
Chlorocresols, liquid	152	2669	Chloropentafluoroethane and Chlorodifluoromethane mixture	126	1973
Chlorocresols, solid	152	2669			
3-Chloro-4-diethylamino-benzenediazonium zinc chloride	149	3033			
Chlorodifluorobromomethane	126	1974			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
3-Chloroperoxybenzoic acid	146	2755	Chlorosilanes, n.o.s.	155	2985
Chlorophenates, liquid	154	2904	Chlorosilanes, n.o.s.	155	2986
Chlorophenates, solid	154	2905	Chlorosilanes, n.o.s.	156	2987
Chlorophenolates, liquid	154	2904	Chlorosilanes, n.o.s.	139	2988
Chlorophenolates, solid	154	2905	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	139	2988
Chlorophenols, liquid	153	2021	Chlorosulfonic acid	137	1754
Chlorophenols, solid	153	2020	Chlorosulfonic acid and Sulfur trioxide mixture	137	1754
Chlorophenyltrichlorosilane	156	1753	Chlorosulphonic acid	137	1754
Chloropicrin	154	1580	Chlorosulphonic acid and Sulphur trioxide mixture	137	1754
Chloropicrin, absorbed	154	1583	1-Chloro-1,2,2,2-tetrafluoroethane	126	1021
Chloropicrin and Methyl bromide mixture	123	1581	Chlorotetrafluoroethane	126	1021
Chloropicrin and Methyl chloride mixture	119	1582	Chlorotetrafluoroethane and Ethylene oxide mixture, with not more than 8.8% Ethylene oxide	126	3297
Chloropicrin and non-flammable, non-liquefied compressed gas mixture	123	1955	Chlorotoluenes	130	2238
Chloropicrin mixture, flammable	131	2929	4-Chloro-o-toluidine hydrochloride	153	1579
Chloropicrin mixture, n.o.s.	154	1583	Chlorotoluidines	153	2239
Chloropivaloyl chloride	156	9263	Chlorotoluidines, liquid	153	2239
Chloroplatinic acid, solid	154	2507	Chlorotoluidines, solid	153	2239
Chloroprene, inhibited	131P	1991	1-Chloro-2,2,2-trifluoroethane	126	1983
1-Chloropropane	129	1278	Chlorotrifluoroethane	126	1983
2-Chloropropane	129	2356	Chlorotrifluoromethane	126	1022
3-Chloropropanol-1	153	2849	Chlorotrifluoromethane and Trifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane	126	2599
2-Chloropropene	130P	2456	Chlorpyrifos	152	2783
2-Chloropropionic acid	153	2511	Chromic acetate	171	9101
alpha-Chloropropionic acid	153	2511	Chromic acid, solid	141	1463
2-Chloropyridine	153	2822	Chromic acid, solution	154	1755
Chlorosilanes, corrosive, flammable, n.o.s.	155	2986			
Chlorosilanes, corrosive, n.o.s.	156	2987			
Chlorosilanes, flammable, corrosive, n.o.s.	155	2985			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Chromic acid mixture, dry	141	1463	Combustible liquid, n.o.s.	128	1993
Chromic fluoride, solid	154	1756	Compound, cleaning liquid (containing Hydrochloric (muriatic) acid)	157	1789
Chromic fluoride, solution	154	1757	Compound, cleaning liquid (containing Hydrofluoric acid)	157	1790
Chromic sulfate	171	9100	Compound, rust preventing (corrosive)	154	1760
Chromic sulphate	171	9100	Compound, rust removing (corrosive)	154	1760
Chromium nitrate	141	2720	Compound, tree or weed killing, liquid (corrosive)	154	1760
Chromium oxychloride	137	1758	Compound, tree or weed killing, liquid (flammable)	128	1993
Chromium trioxide, anhydrous	141	1463	Compound, tree or weed killing, liquid (toxic)	153	2810
Chromosulfuric acid	154	2240	Compound, tree or weed killing, solid (oxidizer)	140	1479
Chromosulphuric acid	154	2240	Compound, vulcanizing, liquid (corrosive)	154	1760
Chromous chloride	171	9102	Compound, vulcanizing, liquid (flammable)	127	1142
Cigarette lighter, with flammable gas	115	1057	Compounds, cleaning, liquid (corrosive)	154	1760
Cigarette lighter, with flammable liquid	127	1226	Compounds, cleaning, liquid (flammable)	128	1993
Cigarettes, self-lighting	133	1867	Compounds, polishing, liquid, etc. (flammable)	127	1142
CK	125	1589	Compressed gas, flammable, n.o.s.	115	1954
Clinical waste, unspecified, n.o.s.	158	3291	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	119	1953
CN	153	1697	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	119	1953
Coal gas	119	1023	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	119	1953
Coal gas, compressed	119	1023			
Coal tar distillate	128	1137			
Coal tar distillates, flammable	128	1136			
Coal tar dye, liquid	154	2801			
Coating solution	127	1139			
Cobalt naphthenates, powder	133	2001			
Cobaltous bromide	171	9103			
Cobaltous formate	171	9104			
Cobaltous sulfamate	171	9105			
Cobaltous sulphamate	171	9105			
Cobalt resinate, precipitated	133	1318			
Cocculus	151	1584			
Collodion	127	2059			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	119	1953	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3305
Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	119	1953	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3305
Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	119	1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	119	1953
Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	119	1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	119	1953
Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	119	1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compressed gas, n.o.s.	126	1956	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	119	1953
Compressed gas, oxidizing, n.o.s.	122	3156	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	119	1953
Compressed gas, poisonous, corrosive, n.o.s.	123	3304	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	119	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	123	3304	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3304	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	119	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3304	Compressed gas, poisonous, n.o.s.	123	1955
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3304	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123	1955
Compressed gas, poisonous, flammable, corrosive, n.o.s.	119	3305	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	123	1955
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119	3305	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123	1955
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3305	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	123	1955
			Compressed gas, poisonous, oxidizing, corrosive, n.o.s.	124	3306
			Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3306

Name of Material	Guide ID No.	ID No.	Name of Material	Guide ID No.	ID No.
Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3306	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119	3305
Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3306	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3305
Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	124	3306	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3305
Compressed gas, poisonous, oxidizing, n.o.s.	124	3303	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3305
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124	3303	Compressed gas, toxic, flammable, n.o.s.	119	1953
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	119	1953
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	119	1953
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compressed gas, toxic, corrosive, n.o.s.	123	3304	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	119	1953
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	123	3304	Compressed gas, toxic, n.o.s.	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	1955
Compressed gas, toxic, flammable, corrosive, n.o.s.	119	3305	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	1955
			Compressed gas, toxic, oxidizing, corrosive, n.o.s.	124	3306

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3306	Copper based pesticide, liquid, toxic, flammable	131	3009
Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3306	Copper based pesticide, solid, poisonous	151	2775
Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3306	Copper based pesticide, solid, toxic	151	2775
Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	124	3306	Copper chlorate	141	2721
Compressed gas, toxic, oxidizing, n.o.s.	124	3303	Copper chloride	154	2802
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124	3303	Copper cyanide	151	1587
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3303	Copra	135	1363
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3303	Corrosive liquid, acidic, inorganic, n.o.s.	154	3264
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3303	Corrosive liquid, acidic, organic, n.o.s.	153	3265
Consumer commodity	171	8000	Corrosive liquid, basic, inorganic, n.o.s.	154	3266
Copper acetoarsenite	151	1585	Corrosive liquid, basic, organic, n.o.s.	153	3267
Copper arsenite	151	1586	Corrosive liquid, flammable, n.o.s.	132	2920
Copper based pesticide, liquid, flammable, poisonous	131	2776	Corrosive liquid, n.o.s.	154	1760
Copper based pesticide, liquid, flammable, toxic	131	2776	Corrosive liquid, oxidizing, n.o.s.	140	3093
Copper based pesticide, liquid, poisonous	151	3010	Corrosive liquid, poisonous, n.o.s.	154	2922
Copper based pesticide, liquid, poisonous, flammable	131	3009	Corrosive liquid, self-heating, n.o.s.	136	3301
Copper based pesticide, liquid, toxic	151	3010	Corrosive liquid, toxic, n.o.s.	154	2922
			Corrosive liquid, water-reactive, n.o.s.	138	3094
			Corrosive liquid, which in contact with water emits flammable gases, n.o.s.	138	3094
			Corrosive solid, acidic, inorganic, n.o.s.	154	3260
			Corrosive solid, acidic, organic, n.o.s.	154	3261

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Corrosive solid, basic, inorganic, n.o.s.	154	3262	Coumarin derivative pesticide, liquid, toxic, flammable	131	3025
Corrosive solid, basic, organic, n.o.s.	154	3263	Coumarin derivative pesticide, solid, poisonous	151	3027
Corrosive solid, flammable, n.o.s.	134	2921	Coumarin derivative pesticide, solid, toxic	151	3027
Corrosive solid, n.o.s.	154	1759	Cresols	153	2076
Corrosive solid, oxidizing, n.o.s.	140	3084	Cresylic acid	153	2022
Corrosive solid, poisonous, n.o.s.	154	2923	Crotonaldehyde, inhibited	131P	1143
Corrosive solid, self-heating, n.o.s.	136	3095	Crotonaldehyde, stabilized	131P	1143
Corrosive solid, toxic, n.o.s.	154	2923	Crotonic acid	153	2823
Corrosive solid, water-reactive, n.o.s.	138	3096	Crotonic acid, liquid	153	2823
Corrosive solid, which in contact with water emits flammable gases, n.o.s.	138	3096	Crotonic acid, solid	153	2823
Cosmetics, liquid, n.o.s.	154	1760	Crotonylene	128	1144
Cosmetics, n.o.s.	133	1325	CS	153	2810
Cosmetics, n.o.s.	140	1479	Cumene	130	1918
Cosmetics, n.o.s.	128	1993	Cumene hydroperoxide	147	2116
Cosmetics, solid, n.o.s.	154	1759	Cupric acetate	171	9106
Cotton	133	1365	Cupric sulfate	171	9109
Cotton, wet	133	1365	Cupric sulfate, ammoniated	171	9110
Cotton waste, oily	133	1364	Cupric sulphate	171	9109
Coumaphos	152	2783	Cupric sulphate, ammoniated	171	9110
Coumarin derivative pesticide, liquid, flammable, poisonous	131	3024	Cupric tartrate	171	9111
Coumarin derivative pesticide, liquid, flammable, toxic	131	3024	Cupriethylenediamine, solution	154	1761
Coumarin derivative pesticide, liquid, poisonous	151	3026	CX	154	2811
Coumarin derivative pesticide, liquid, poisonous, flammable	131	3025	Cyanide solution, n.o.s.	157	1935
Coumarin derivative pesticide, liquid, toxic	151	3026	Cyanides, inorganic, n.o.s.	157	1588
			Cyanides, inorganic, solid, n.o.s.	157	1588
			Cyanogen	119	1026
			Cyanogen, liquefied	119	1026
			Cyanogen bromide	157	1889
			Cyanogen chloride, inhibited	125	1589
			Cyanogen gas	119	1026

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Cyanuric chloride	157	2670	DA	151	1699
Cyclobutane	115	2601	Dangerous goods in apparatus	171	8001
Cyclobutyl chloroformate	155	2744	Dangerous goods in machinery	171	8001
1,5,9-Cyclododecatriene	153	2518	DC	153	2810
Cycloheptane	128	2241	DDT	151	2761
Cycloheptatriene	131	2603	Decaborane	134	1868
Cycloheptene	128	2242	Decahydronaphthalene	130	1147
Cyclohexane	128	1145	n-Decane	128	2247
Cyclohexanethiol	131	3054	Decanoyl peroxide	148	2120
Cyclohexanone	127	1915	Denatured alcohol	127	1987
Cyclohexanone peroxide, not more than 72% as a paste	147	2896	Denatured alcohol (toxic)	131	1986
Cyclohexanone peroxide, not more than 72% in solution	147	2118	Deuterium	115	1957
Cyclohexanone peroxide, not more than 90%, with not less than 10% water	147	2119	Deuterium, compressed	115	1957
Cyclohexene	130	2256	Devices, small, hydrocarbon gas powered, with release device	115	3150
Cyclohexenyltrichlorosilane	156	1762	Diacetone alcohol	129	1148
Cyclohexyl acetate	130	2243	Diacetone alcohol peroxides	148	2163
Cyclohexylamine	132	2357	Diacetyl	127	2346
Cyclohexyl isocyanate	155	2488	Diallylamine	132	2359
Cyclohexyl mercaptan	131	3054	Diallyl ether	131P	2360
Cyclohexyltrichlorosilane	156	1763	4,4'-Diaminodiphenylmethane	153	2651
Cyclooctadiene phosphines	135	2940	Di-n-amylamine	131	2841
Cyclooctadienes	130P	2520	Diazinon	152	2783
Cyclooctatetraene	128P	2358	2-Diazo-1-naphthol-4-sulfochloride	149	3042
Cyclopentane	128	1146	2-Diazo-1-naphthol-4-sulphochloride	149	3042
Cyclopentanol	129	2244	2-Diazo-1-naphthol-5-sulfochloride	149	3043
Cyclopentanone	127	2245	2-Diazo-1-naphthol-5-sulphochloride	149	3043
Cyclopentene	128	2246	Dibenzylchlorosilane	156	2434
Cyclopropane	115	1027	Dibenzyl peroxydicarbonate	148	2149
Cyclopropane, liquefied	115	1027	Diborane	119	1911
Cymenes	130	2046			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Diborane, compressed	119	1911	Di-(tert-butylperoxy)phthalate	145	2108
Diborane mixtures	119	1911	2,2-Di-(tert-butylperoxy)-propane	145	2883
Dibromobenzene	129	2711	2,2-Di-(tert-butylperoxy)-propane	145	2884
1,2-Dibromobutan-3-one	154	2648	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane	146	2145
Dibromochloropropanes	159	2872	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane	145	2146
Dibromodifluoromethane	171	1941	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane	145	2147
Dibromomethane	160	2664	Dicetyl peroxydicarbonate	148	2164
Di-n-butylamine	132	2248	Dicetyl peroxydicarbonate, not more than 42%, in water	148	2895
Dibutylaminoethanol	153	2873	Dichloroacetic acid	153	1764
Di-(4-tert-butylcyclohexyl)-peroxydicarbonate	148	2154	1,3-Dichloroacetone	153	2649
Di-(4-tert-butylcyclohexyl)-peroxydicarbonate	148	2894	Dichloroacetyl chloride	156	1765
Dibutyl ethers	127	1149	Dichloroanilines	153	1590
Di-tert-butyl peroxide	145	2102	Dichloroanilines, liquid	153	1590
2,2-Di-(tert-butylperoxy)butane	146	2111	Dichloroanilines, solid	153	1590
1,1-Di-(tert-butylperoxy)-cyclohexane	146	2179	m-Dichlorobenzene	152	--
1,1-Di-(tert-butylperoxy)-cyclohexane	146	2180	o-Dichlorobenzene	152	1591
1,1-Di-(tert-butylperoxy)-cyclohexane	145	2885	p-Dichlorobenzene	152	1592
1,1-Di-(tert-butylperoxy)-cyclohexane	145	2897	2,4-Dichlorobenzoyl peroxide	146	2137
Di-(sec-butyl)peroxydicarbonate	148	2150	2,4-Dichlorobenzoyl peroxide	145	2138
Di-(sec-butyl)peroxydicarbonate	148	2151	2,4-Dichlorobenzoyl peroxide	145	2139
1,3-Di-(2-tert-butylperoxy-isopropyl)benzene and 1,4-Di-(2-tert-butylperoxy-isopropyl)benzene mixtures	145	2112	Dichlorobutene	132	2920
1,4-Di-(2-tert-butylperoxy-isopropyl)benzene and 1,3-Di-(2-tert-butylperoxy-isopropyl)benzene mixtures	145	2112	Dichlorobutene	132	2924
Di-(tert-butylperoxy)phthalate	146	2106	Dichloro-(2-chlorovinyl) arsine	153	2810
Di-(tert-butylperoxy)phthalate	145	2107	2,2'-Dichlorodiethyl ether	152	1916
			Dichlorodifluoroethylene	160	9018
			Dichlorodifluoromethane	126	1028
			Dichlorodifluoromethane and Difluoroethane azeotropic mixture with approximately 74% Dichlorodifluoromethane	126	2602

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Dichlorodifluoromethane and Ethylene oxide mixture, with not more than 12.5% Ethylene oxide	126	3070	Dichlorotetrafluoroethane	126	1958
Dichlorodifluoromethane and Ethylene oxide mixtures, with not more than 12% Ethylene oxide	126	3070	3,5-Dichloro-2,4,6-trifluoropyridine	151	9264
Dichlorodimethyl ether, symmetrical	153	2249	Dichlorvos	152	2783
Dichlorodiphenyltrichloroethane (DDT)	151	2761	Dicumyl peroxide	145	2121
1,1-Dichloroethane	130	2362	Dicycloheptadiene	127P	2251
1,2-Dichloroethylene	130P	1150	Dicyclohexylamine	153	2565
Dichloroethylene	130P	1150	Dicyclohexylammonium nitrite	133	2687
Dichloroethyl ether	152	1916	Dicyclohexyl peroxydicarbonate	148	2152
1,1-Dichloro-1-fluoroethane	160	9274	Dicyclohexyl peroxydicarbonate	148	2153
Dichlorofluoromethane	126	1029	Dicyclopentadiene	129	2048
Dichloroisocyanuric acid, dry	140	2465	2,2-Di-(4,4-di-tert-butyl-peroxycyclohexyl)propane	145	2168
Dichloroisocyanuric acid salts	140	2465	1,2-Di-(dimethylamino)ethane	129	2372
Dichloroisopropyl ether	153	2490	Didymium nitrate	140	1465
Dichloromethane	160	1593	Dieldrin	151	2761
1,1-Dichloro-1-nitroethane	153	2650	Diesel fuel	128	1202
Dichloropentanes	130	1152	Diesel fuel	128	1993
2,4-Dichlorophenoxyacetic acid	152	2765	Diethoxymethane	127	2373
Dichlorophenyl isocyanates	156	2250	2,5-Diethoxy-4-morpholino-benzenediazonium zinc chloride	150	3036
Dichlorophenyltrichlorosilane	156	1766	3,3-Diethoxypropene	127	2374
1,2-Dichloropropane	130	1279	Diethylamine	132	1154
Dichloropropane	130	1279	2-Diethylaminoethanol	132	2686
1,3-Dichloropropanol-2	153	2750	Diethylaminoethanol	132	2686
Dichloropropenes	132	2047	3-Diethylaminopropylamine	132	2684
2,2-Dichloropropionic acid	154	1760	Diethylaminopropylamine	132	2684
Dichlorosilane	119	2189	N,N-Diethylaniline	153	2432
1,2-Dichloro-1,1,2,2-tetrafluoroethane	126	1958	Diethylbenzene	130	2049
			Diethyl carbonate	127	2366
			Diethyldichlorosilane	155	1767
			Diethylenetriamine	154	2079
			Diethyl ether	127	1155

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
N,N-Diethylethylenediamine	132	2685	Diisobutyl ketone	127	1157
Di-(2-ethylhexyl)-peroxydicarbonate	148	2122	Diisobutyryl peroxide	148	2182
Di-(2-ethylhexyl)-peroxydicarbonate	148	2123	Diisooctyl acid phosphate	153	1902
Di-(2-ethylhexyl)phosphoric acid	153	1902	Diisopropylamine	132	1158
Diethyl ketone	127	1156	Diisopropylbenzene hydroperoxide	145	2171
p-Diethylnitrosoaniline	136	--	Diisopropyl ether	127	1159
Diethyl peroxydicarbonate	148	2175	Diisotridecyl peroxydicarbonate	148	2889
Diethyl sulfate	152	1594	Diketene, inhibited	131P	2521
Diethyl sulfide	129	2375	1,1-Dimethoxyethane	127	2377
Diethyl sulphate	152	1594	1,2-Dimethoxyethane	127	2252
Diethyl sulphide	129	2375	Dimethylamine, anhydrous	118	1032
Diethylthiophosphoryl chloride	155	2751	Dimethylamine, aqueous solution	129	1160
Diethylzinc	135	1366	Dimethylamine, solution	129	1160
Difluorochloroethanes	115	2517	2-Dimethylaminoacetonitrile	131	2378
1,1-Difluoroethane	115	1030	4-Dimethylamino-6-(2-dimethylaminoethoxy)toluene-2-diazonium zinc chloride	150	3039
Difluoroethane	115	1030	2-Dimethylaminoethanol	132	2051
Difluoroethane and Dichlorodifluoromethane azeotropic mixture with approximately 74% dichlorodifluoromethane	126	2602	2-Dimethylaminoethyl acrylate	152	3302
1,1-Difluoroethylene	116P	1959	2-Dimethylaminoethyl methacrylate	153P	2522
Difluoromethane	115	3252	Dimethylaminoethyl methacrylate	153P	2522
Difluorophosphoric acid, anhydrous	154	1768	N,N-Dimethylaniline	153	2253
2,2-Dihydroperoxypropane	146	2178	Di-(2-methylbenzoyl)peroxide	148	2593
2,3-Dihydropyran	127	2376	2,3-Dimethylbutane	128	2457
Di-(1-hydroxycyclohexyl)-peroxide	145	2148	1,3-Dimethylbutylamine	132	2379
Diisobutylamine	132	2361	Dimethylcarbamoyl chloride	156	2262
Diisobutylene, isomeric compounds	127	2050	Dimethyl carbonate	129	1161
			Dimethyl chlorothiophosphate	156	2267
			Dimethylcyclohexanes	128	2263
			Dimethylcyclohexylamine	132	2264

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	146	2172	2,2-Dimethylpropane	115	2044
2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	145	2173	Dimethyl-N-propylamine	132	2266
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	145	2155	Dimethyl sulfate	156	1595
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	145	2156	Dimethyl sulfide	130	1164
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3	146	2158	Dimethyl sulphate	156	1595
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3, with not more than 52% Peroxide in inert solid	145	2159	Dimethyl sulphide	130	1164
Dimethyldichlorosilane	155	1162	Dimethyl thiophosphoryl chloride	156	2267
Dimethyldiethoxysilane	127	2380	Dimethylzinc	135	1370
2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy)hexane	148	2157	Dimyristyl peroxydicarbonate	148	2595
2,5-Dimethyl-2,5-dihydroperoxy hexane, not more than 82% with water	146	2174	Dimyristyl peroxydicarbonate, not more than 42%, in water	148	2892
Dimethyldioxanes	128	2707	Dinitroanilines	153	1596
Dimethyl disulfide	130	2381	Dinitrobenzenes	152	1597
Dimethyl disulphide	130	2381	Dinitrochlorobenzene	153	1577
Dimethylethanolamine	132	2051	Dinitro-o-cresol	153	1598
Dimethyl ether	115	1033	Dinitrocyclohexylphenol	153	9026
N,N-Dimethylformamide	129	2265	Dinitrogen tetroxide	124	1067
Dimethylhexane dihydroperoxide, with 18% or more water	146	2174	Dinitrogen tetroxide, liquefied	124	1067
1,1-Dimethylhydrazine	131	1163	Dinitrogen tetroxide and Nitric oxide mixture	124	1975
1,2-Dimethylhydrazine	131	2382	Dinitrophenol, solution	153	1599
Dimethylhydrazine, symmetrical	131	2382	Dinitrophenol, wetted with not less than 15% water	113	1320
Dimethylhydrazine, unsymmetrical	131	1163	Dinitrophenolates, wetted with not less than 15% water	113	1321
Dimethyl phosphorochloridothioate	156	2267	Dinitroresorcinol, wetted with not less than 15% water	113	1322
			N,N'-Dinitroso-N,N'-dimethyl terephthalamide	149	2973
			N,N'-Dinitrosopentamethylene tetramine	149	2972
			Dinitrotoluenes	152	2038
			Dinitrotoluenes, liquid	152	2038
			Dinitrotoluenes, molten	152	1600
			Dinitrotoluenes, solid	152	2038

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Dioxane	127	1165	Disinfectant, solid, toxic, n.o.s.	151	1601
Dioxolane	127	1166	Disinfectants, corrosive, liquid, n.o.s.	153	1903
Dipentene	128	2052	Disinfectants, liquid, n.o.s. (poisonous)	151	3142
Diphenylamine chloroarsine	154	1698	Disinfectants, solid, n.o.s. (poisonous)	151	1601
Diphenylchloroarsine	151	1699	Disodium trioxosilicate	154	3253
Diphenylchloroarsine, liquid	151	1699	Disodium trioxosilicate, pentahydrate	154	3253
Diphenylchloroarsine, solid	151	1699	Dispersant gas, n.o.s.	126	1078
Diphenylcyanoarsine	153	2810	Dispersant gas, n.o.s. (flammable)	115	1954
Diphenyldichlorosilane	156	1769	Distearyl peroxydicarbonate	145	2592
Diphenylmethane-4,4'-diisocyanate	156	2489	Disulfoton	152	2783
Diphenylmethyl bromide	153	1770	Dithiocarbamate pesticide, liquid, flammable, poisonous	131	2772
Diphenyloxide-4,4'-disulfohydrazide	149	2951	Dithiocarbamate pesticide, liquid, flammable, toxic	131	2772
Diphenyloxide-4,4'-disulphohydrazide	149	2951	Dithiocarbamate pesticide, liquid, poisonous	151	3006
Diphosgene	125	1076	Dithiocarbamate pesticide, liquid, poisonous, flammable	131	3005
Dipicryl sulfide, wetted with not less than 10% water	113	2852	Dithiocarbamate pesticide, liquid, toxic	151	3006
Dipicryl sulphide, wetted with not less than 10% water	113	2852	Dithiocarbamate pesticide, solid, poisonous	151	2771
Dipropylamine	132	2383	Dithiocarbamate pesticide, solid, toxic	151	2771
4-Dipropylaminobenzene-diazonium zinc chloride	149	3034	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide	148	2597
Di-n-propyl ether	127	2384	Divinyl ether, inhibited	131P	1167
Dipropyl ether	127	2384	DM	154	1698
Dipropyl ketone	127	2710	Dodecylbenzenesulfonic acid	153	2584
Di-n-propyl peroxydicarbonate	148	2176	Dodecylbenzenesulphonic acid	153	2584
Disinfectant, liquid, corrosive, n.o.s.	153	1903			
Disinfectant, liquid, n.o.s.	128	1993			
Disinfectant, liquid, poisonous, n.o.s.	151	3142			
Disinfectant, liquid, toxic, n.o.s.	151	3142			
Disinfectant, solid, poisonous, n.o.s.	151	1601			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Dodecyltrichlorosilane	156	1771	Elevated temperature liquid, flammable, n.o.s., with flash point above 60.5°C (141°F), at or above its flash point	128	3256
DP	125	1076	Elevated temperature liquid, n.o.s., at or above 100°C (212°F) and below its flash point	128	3257
Driers, paint or varnish, liquid, n.o.s.	127	1168	Elevated temperature material, liquid, n.o.s., (at or above 100°C (212°F) and below its flash point)	128	9259
Drugs, liquid, n.o.s.	154	1760	Elevated temperature solid, n.o.s., at or above 240°C (464°F)	171	3258
Drugs, liquid, n.o.s.	153	2810	Endosulfan	151	2761
Drugs, n.o.s.	133	1325	Engine starting fluid	115	1960
Drugs, n.o.s.	140	1479	Engines, internal combustion, flammable gas powered	128	3166
Drugs, n.o.s.	128	1993	Engines, internal combustion, flammable liquid powered	128	3166
Drugs, solid, n.o.s.	154	1759	Engines, internal combustion, including when fitted in machinery or vehicles	128	3166
Drugs, solid, n.o.s.	154	2811	Environmentally hazardous substances, liquid, n.o.s.	171	3082
Dry ice	120	1845	Environmentally hazardous substances, solid, n.o.s.	171	3077
Dye, liquid, corrosive, n.o.s.	154	2801	Epibromohydrin	131	2558
Dye, liquid, poisonous, n.o.s.	151	1602	Epichlorohydrin	131P	2023
Dye, liquid, toxic, n.o.s.	151	1602	1,2-Epoxy-3-ethoxypropane	127	2752
Dye, solid, corrosive, n.o.s.	154	3147	Esters, n.o.s.	127	3272
Dye, solid, poisonous, n.o.s.	151	3143	Etching acid, liquid, n.o.s.	157	1790
Dye, solid, toxic, n.o.s.	151	3143	Ethane	115	1035
Dye intermediate, liquid, corrosive, n.o.s.	154	2801	Ethane, compressed	115	1035
Dye intermediate, liquid, poisonous, n.o.s.	151	1602	Ethane, refrigerated liquid	115	1961
Dye intermediate, liquid, toxic, n.o.s.	151	1602	Ethane-Propane mixture, refrigerated liquid	115	1961
Dye intermediate, solid, corrosive, n.o.s.	154	3147			
Dye intermediate, solid, poisonous, n.o.s.	151	3143			
Dye intermediate, solid, toxic, n.o.s.	151	3143			
ED	151	1892			
EDTA	171	9117			
Elevated temperature liquid, flammable, n.o.s., with flash point above 37.8°C (100°F), at or above its flash point	128	3256			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Ethanol	127	1170	Ethyl 2-chloropropionate	132	2935
Ethanol, solution	127	1170	Ethyl chlorothioformate	155	2826
Ethanolamine	153	2491	Ethyl crotonate	129	1862
Ethanolamine, solution	153	2491	Ethyl cyanoacetate	156	2666
Ethers, n.o.s.	127	3271	Ethyl-3,3-di-(tert-butyl-peroxy)butyrate	146	2184
Ethion	152	2783	Ethyl-3,3-di-(tert-butylperoxy)butyrate	145	2598
Ethyl acetate	129	1173	Ethyl-3,3-di-(tert-butyl-peroxy)butyrate, not more than 77% in solution	145	2185
Ethylacetylene, inhibited	116P	2452	Ethyl dichloroarsine	151	1892
Ethyl acrylate, inhibited	129P	1917	Ethyl dichlorosilane	139	1183
Ethyl alcohol	127	1170	O-Ethyl S-(2-diisopropylamino-ethyl) methylphosphonothiolate	153	2810
Ethyl alcohol, solution	127	1170	Ethyl N,N-dimethylphosphor-amidocyanidate	153	2810
Ethylamine	118	1036	Ethylene	116P	1962
Ethylamine, aqueous solution, with not less than 50% but not more than 70% Ethylamine	132	2270	Ethylene, Acetylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene	116	3138
Ethyl amyl ketone	127	2271	Ethylene, compressed	116P	1962
2-Ethylaniline	153	2273	Ethylene, refrigerated liquid (cryogenic liquid)	115	1038
N-Ethylaniline	153	2272	Ethylene chlorohydrin	131	1135
Ethylbenzene	129	1175	Ethylenediamine	132	1604
N-Ethyl-N-benzylaniline	153	2274	Ethylenediaminetetraacetic acid	171	9117
N-Ethylbenzyltoluidines	153	2753	Ethylene dibromide	154	1605
Ethyl borate	129	1176	Ethylene dibromide and Methyl bromide mixture, liquid	151	1647
Ethyl bromide	131	1891	Ethylene dichloride	129	1184
Ethyl bromoacetate	155	1603	Ethylene glycol diethyl ether	127	1153
2-Ethylbutanol	129	2275	Ethylene glycol monobutyl ether	152	2369
2-Ethylbutyl acetate	129	1177			
Ethylbutyl acetate	129	1177			
Ethyl butyl ether	127	1179			
2-Ethylbutyraldehyde	129	1178			
Ethyl butyrate	129	1180			
Ethyl chloride	115	1037			
Ethyl chloroacetate	155	1181			
Ethyl chloroformate	155	1182			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Ethylene glycol monoethyl ether	127	1171	Ethylene oxide and Propylene oxide mixture, with not more than 30% Ethylene oxide	129P	2983
Ethylene glycol monoethyl ether acetate	129	1172	Ethylene oxide and Tetrafluoroethane mixture, with not more than 5.6% Ethylene oxide	126	3299
Ethylene glycol monomethyl ether	127	1188	Ethylene oxide with Nitrogen	119P	1040
Ethylene glycol monomethyl ether acetate	129	1189	Ethyl ether	127	1155
Ethyleneimine, inhibited	131P	1185	Ethyl fluoride	115	2453
Ethylene oxide	119P	1040	Ethyl formate	129	1190
Ethylene oxide and Carbon dioxide mixture, with more than 9% but not more than 87% Ethylene oxide	115	1041	Ethylhexaldehydes	129	1191
Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide	119P	3300	2-Ethylhexylamine	132	2276
Ethylene oxide and Carbon dioxide mixtures, with more than 6 % Ethylene oxide	115	1041	2-Ethylhexyl chloroformate	156	2748
Ethylene oxide and Carbon dioxide mixtures, with not more than 6% Ethylene oxide	126	1952	Ethyl isobutyrate	129	2385
Ethylene oxide and Carbon dioxide mixtures, with not more than 9% Ethylene oxide	126	1952	Ethyl isocyanate	155	2481
Ethylene oxide and Chlorotetrafluoroethane mixture, with not more than 8.8% Ethylene oxide	126	3297	Ethyl lactate	129	1192
Ethylene oxide and Dichlorodifluoromethane mixture, with not more than 12.5% Ethylene oxide	126	3070	Ethyl mercaptan	130	2363
Ethylene oxide and Dichlorodifluoromethane mixtures, with not more than 12% Ethylene oxide	126	3070	Ethyl methacrylate	129P	2277
Ethylene oxide and Pentafluoroethane mixture, with not more than 7.9% Ethylene oxide	126	3298	Ethyl methacrylate, inhibited	129P	2277
			Ethyl methyl ether	115	1039
			Ethyl methyl ketone	127	1193
			Ethyl nitrate	128	1993
			Ethyl nitrite, solution	131	1194
			Ethyl orthoformate	129	2524
			Ethyl oxalate	156	2525
			Ethylphenyldichlorosilane	156	2435
			Ethyl phosphonothioic dichloride, anhydrous	154	2927
			Ethyl phosphonous dichloride, anhydrous	135	2845
			Ethyl phosphorodichloridate	154	2927
			1-Ethylpiperidine	132	2386
			Ethyl propionate	129	1195
			2-Ethyl-3-propylacrolein	153	--

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Ethyl propyl ether	127	2615	Ferrous ammonium sulphate	171	9122
Ethyl silicate	132	1292	Ferrous arsenate	151	1608
Ethylsulfuric acid	156	2571	Ferrous chloride, solid	154	1759
Ethylsulphuric acid	156	2571	Ferrous chloride, solution	154	1760
N-Ethyltoluidines	153	2754	Ferrous metal borings, shavings, turnings or cuttings	170	2793
Ethyltrichlorosilane	155	1196	Ferrous sulfate	171	9125
Etiologic agent, n.o.s.	158	2814	Ferrous sulphate	171	9125
Explosive A	112	--	Fertilizer, ammoniating solution, with free Ammonia	125	1043
Explosive B	112	--	Fiber, animal, synthetic or vegetable, n.o.s., with oil	133	1373
Explosive C	114	--	Fiber, animal or vegetable, n.o.s., burnt, wet or damp	133	1372
Explosives, division 1.1, 1.2, 1.3, 1.5 or 1.6	112	--	Fibers	133	1372
Explosives, division 1.4	114	--	Fibers impregnated with weakly nitrated Nitrocellulose, n.o.s.	133	1353
Extracts, aromatic, liquid	127	1169	Fibres, animal, synthetic or vegetable, n.o.s., with oil	133	1373
Extracts, flavoring, liquid	127	1197	Fibres, animal or vegetable, burnt, wet or damp	133	--
Extracts, flavouring, liquid	127	1197	Fibres, vegetable, dry	133	--
Fabrics, animal, synthetic or vegetable, n.o.s., with oil	133	1373	Fibres impregnated with weakly nitrated Nitrocellulose, n.o.s.	133	1353
Fabrics impregnated with weakly nitrated Nitrocellulose, n.o.s.	133	1353	Film	133	1324
Ferric ammonium citrate	171	9118	Films, nitrocellulose base	133	1324
Ferric ammonium oxalate	171	9119	Fire extinguisher charges, corrosive liquid	154	1774
Ferric arsenate	151	1606	Fire extinguishers with compressed gas	126	1044
Ferric arsenite	151	1607	Fire extinguishers with liquefied gas	126	1044
Ferric chloride	157	1773	Firelighters, solid, with flammable liquid	133	2623
Ferric chloride, anhydrous	157	1773	First aid kit	171	3316
Ferric chloride, solution	154	2582	Fish meal, stabilized	171	2216
Ferric fluoride	171	9120			
Ferric nitrate	140	1466			
Ferric sulfate	171	9121			
Ferric sulphate	171	9121			
Ferrocerium	170	1323			
Ferrosilicon	139	1408			
Ferrous ammonium sulfate	171	9122			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Fish meal, unstabilized	133	1374	Flammable solid, inorganic, n.o.s.	133	3178
Fish meal containing 6% to 12% water	171	2216	Flammable solid, n.o.s.	133	1325
Fish meal containing less than 6% or more than 12% water	133	1374	Flammable solid, organic, molten, n.o.s.	133	3176
Fish scrap, stabilized	171	2216	Flammable solid, organic, n.o.s.	133	1325
Fish scrap, unstabilized	133	1374	Flammable solid, oxidizing, n.o.s.	140	3097
Fish scrap containing 6% to 12% water	171	2216	Flammable solid, poisonous, inorganic, n.o.s.	134	3179
Fish scrap containing less than 6% or more than 12% water	133	1374	Flammable solid, poisonous, n.o.s.	134	2926
Flame retardant compound, liquid (corrosive)	154	1760	Flammable solid, poisonous, organic, n.o.s.	134	2926
Flammable gas in lighter for cigars, cigarettes, etc.	115	1057	Flammable solid, toxic, inorganic, n.o.s.	134	3179
Flammable liquid, corrosive, n.o.s.	132	2924	Flammable solid, toxic, organic, n.o.s.	134	2926
Flammable liquid, n.o.s.	128	1993	Flue dust, poisonous	154	2811
Flammable liquid, poisonous, corrosive, n.o.s.	131	3286	Fluoboric acid	154	1775
Flammable liquid, poisonous, n.o.s.	131	1992	Fluorine	124	1045
Flammable liquid, toxic, corrosive, n.o.s.	131	3286	Fluorine, compressed	124	1045
Flammable liquid, toxic, n.o.s.	131	1992	Fluorine, refrigerated liquid (cryogenic liquid)	167	9192
Flammable liquid preparations, n.o.s.	127	1142	Fluoroacetic acid	154	2642
Flammable liquids, elevated temperature material, n.o.s.	128	9276	Fluoroanilines	153	2941
Flammable solid, corrosive, inorganic, n.o.s.	134	3180	Fluorobenzene	130	2387
Flammable solid, corrosive, n.o.s.	134	2925	Fluoroboric acid	154	1775
Flammable solid, corrosive, organic, n.o.s.	134	2925	Fluorophosphoric acid, anhydrous	154	1776
Flammable solid, inorganic, corrosive, n.o.s.	134	3180	Fluorosilicates, n.o.s.	151	2856
			Fluorosilicic acid	154	1778
			Fluorosulfonic acid	137	1777
			Fluorosulphonic acid	137	1777
			Fluorotoluenes	130	2388

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Fluosilicic acid	154	1778	Gas oil	128	1202
Formaldehyde, solution, flammable	132	1198	Gasoline	128	1203
Formaldehyde, solutions (Formalin)	132	1198	Gas sample, non-pressurized, flammable, n.o.s., not refrigerated liquid	115	3167
Formaldehyde, solutions (Formalin) (corrosive)	132	2209	Gas sample, non-pressurized, poisonous, flammable, n.o.s., not refrigerated liquid	119	3168
Formic acid	153	1779	Gas sample, non-pressurized, poisonous, n.o.s., not refrigerated liquid	123	3169
Fuel, aviation, turbine engine	128	1863	Gas sample, non-pressurized, toxic, flammable, n.o.s., not refrigerated liquid	119	3168
Fuel oil	128	1202	Gas sample, non-pressurized, toxic, n.o.s., not refrigerated liquid	123	3169
Fuel oil	128	1993	GB	153	2810
Fuel oil, no. 1,2,4,5,6	128	1202	GD	153	2810
Fumaric acid	171	9126	Genetically modified micro-organisms	171	3245
Fumaryl chloride	156	1780	Genetically modified organisms	171	9278
Furaldehydes	132P	1199	Germane	119	2192
Furan	127	2389	GF	153	2810
Furfural	132P	1199	Glycerol alpha-monochlorohydrin	153	2689
Furfuraldehydes	132P	1199	Glycidaldehyde	131P	2622
Furfuryl alcohol	153	2874	Grenade, tear gas	159	2017
Furfurylamine	132	2526	Guanidine nitrate	143	1467
Fusee (rail or highway)	133	1325	H	153	2810
Fusel oil	127	1201	Hafnium powder, dry	135	2545
GA	153	2810	Hafnium powder, wetted with not less than 25% water	170	1326
Gallium	172	2803	Halogenated irritating liquid, n.o.s.	159	1610
Gas, refrigerated liquid, flammable, n.o.s.	115	3312	Hay, wet, damp or contaminated with oil	133	1327
Gas, refrigerated liquid, n.o.s.	120	3158			
Gas, refrigerated liquid, oxidizing, n.o.s.	122	3311			
Gas cartridges	115	2037			
Gas drips, hydrocarbon	128	1864			
Gas generator assemblies	171	8013			
Gas identification set	123	9035			
Gasohol	128	1203			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Hazardous substance, liquid, n.o.s.	171	9188	Hexaethyl tetraphosphate and compressed gas mixture	123	1612
Hazardous substance, solid, n.o.s.	171	9188	Hexaethyl tetraphosphate mixture, liquid	152	2783
Hazardous waste, liquid, n.o.s.	171	3082	Hexafluoroacetone	125	2420
Hazardous waste, liquid, n.o.s.	171	9189	Hexafluoroacetone hydrate	151	2552
Hazardous waste, solid, n.o.s.	171	3077	Hexafluoroethane	126	2193
Hazardous waste, solid, n.o.s.	171	9189	Hexafluoroethane, compressed	126	2193
HD	153	2810	Hexafluorophosphoric acid	154	1782
Heater for refrigerator car, liquid fuel type	128	1993	Hexafluoropropylene	126	1858
Heating oil, light	128	1202	Hexafluoropropylene oxide	126	1956
Heat producing article	171	8038	Hexaldehyde	129	1207
Helium	121	1046	Hexamethylenediamine, solid	153	2280
Helium, compressed	121	1046	Hexamethylenediamine, solution	153	1783
Helium, refrigerated liquid (cryogenic liquid)	120	1963	Hexamethylene diisocyanate	156	2281
Helium-Oxygen mixture	122	1980	Hexamethyleneimine	132	2493
Heptafluoropropane	126	3296	Hexamethylenetetramine	133	1328
n-Heptaldehyde	129	3056	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane	146	2165
Heptanes	128	1206	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane	145	2166
n-Heptene	128	2278	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane	145	2167
Hexachloroacetone	153	2661	Hexamine	133	1328
Hexachlorobenzene	152	2729	Hexanes	128	1208
Hexachlorobutadiene	151	2279	Hexanoic acid	154	1760
Hexachlorocyclopentadiene	151	2646	Hexanoic acid	153	2829
Hexachloroethane	151	9037	Hexanols	129	2282
Hexachlorophene	151	2875	1-Hexene	128	2370
Hexadecyltrichlorosilane	156	1781	Hexyltrichlorosilane	156	1784
Hexadiene	130	2458	HL	153	2810
Hexaethyl tetraphosphate	151	1611	HN-1 (nitrogen mustard)	153	2810
Hexaethyl tetraphosphate, liquid	151	1611	HN-2	153	2810
Hexaethyl tetraphosphate, solid	151	1611			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
HN-3	153	2810	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide	154	1613
Hydrazine, anhydrous	132	2029	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide	117	1051
Hydrazine, aqueous solution, with not less than 37% but not more than 64% Hydrazine	153	2030	Hydrocyanic acid, liquefied	117	1051
Hydrazine, aqueous solution, with not more than 37% Hydrazine	152	3293	Hydrofluoric acid	157	1790
Hydrazine, aqueous solutions, with more than 64% Hydrazine	132	2029	Hydrofluoric acid, solution	157	1790
Hydrazine, aqueous solutions, with not more than 64% Hydrazine	153	2030	Hydrofluoric acid and Sulfuric acid mixture	157	1786
Hydrazine hydrate	153	2030	Hydrofluoric acid and Sulphuric acid mixture	157	1786
Hydrides, metal, n.o.s.	138	1409	Hydrofluorosilicic acid	154	1778
Hydriodic acid	154	1787	Hydrofluosilicic acid	154	1778
Hydriodic acid, solution	154	1787	Hydrogen	115	1049
Hydrobromic acid	154	1788	Hydrogen, compressed	115	1049
Hydrobromic acid, solution	154	1788	Hydrogen, refrigerated liquid (cryogenic liquid)	115	1966
Hydrocarbon gas, compressed, n.o.s.	115	1964	Hydrogen and Carbon monoxide mixture	119	2600
Hydrocarbon gas, liquefied, n.o.s.	115	1965	Hydrogen and Carbon monoxide mixture, compressed	119	2600
Hydrocarbon gas mixture, compressed, n.o.s.	115	1964	Hydrogen and Methane mixture, compressed	115	2034
Hydrocarbon gas mixture, liquefied, n.o.s.	115	1965	Hydrogen bromide, anhydrous	125	1048
Hydrocarbon gas refills for small devices, with release device	115	3150	Hydrogen chloride, anhydrous	125	1050
Hydrocarbons, liquid, n.o.s.	128	3295	Hydrogen chloride, refrigerated liquid	125	2186
Hydrochloric acid	157	1789	Hydrogen cyanide, anhydrous, stabilized	117	1051
Hydrochloric acid, mixture	157	1789	Hydrogen cyanide, anhydrous, stabilized (absorbed)	131	1614
Hydrochloric acid, solution	157	1789	Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide	154	1613
Hydrocyanic acid, aqueous solution, with less than 5% Hydrogen cyanide	154	1613			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide	131	3294	Hypochlorite solution	154	1791
Hydrogen cyanide, stabilized	117	1051	Hypochlorite solution, with more than 5% available Chlorine	154	1791
Hydrogen cyanide, stabilized (absorbed)	131	1614	Hypochlorites, inorganic, n.o.s.	140	3212
Hydrogendifluorides, n.o.s.	154	1740	3,3'-Iminodipropylamine	153	2269
Hydrogen fluoride, anhydrous	125	1052	Infectious substance, affecting animals only	158	2900
Hydrogen iodide, anhydrous	125	2197	Infectious substance, affecting humans	158	2814
Hydrogen peroxide, aqueous solution, stabilized, with more than 60% Hydrogen peroxide	143	2015	Ink, printer's, flammable	129	1210
Hydrogen peroxide, aqueous solution, with not less than 8% but less than 20% Hydrogen peroxide	140	2984	Insecticide, dry, n.o.s.	151	2588
Hydrogen peroxide, aqueous solution, with not less than 20% but not more than 60% Hydrogen peroxide (stabilized as necessary)	140	2014	Insecticide, liquefied gas	126	1968
Hydrogen peroxide, stabilized	143	2015	Insecticide, liquefied gas, containing Poison A or Poison B material	123	1967
Hydrogen peroxide and Peroxyacetic acid mixture, with acid(s), water and not more than 5% Peroxyacetic acid, stabilized	140	3149	Insecticide, liquid, poisonous, n.o.s.	151	2902
Hydrogen selenide, anhydrous	117	2202	Insecticide gas, flammable, n.o.s.	115	1954
Hydrogen sulfide	117	1053	Insecticide gas, flammable, n.o.s.	115	3354
Hydrogen sulfide, liquefied	117	1053	Insecticide gas, n.o.s.	126	1968
Hydrogen sulphide	117	1053	Insecticide gas, poisonous, flammable, n.o.s.	119	3355
Hydrogen sulphide, liquefied	117	1053	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	119	3355
Hydroquinone	153	2662	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	119	3355
3-(2-Hydroxyethoxy)-4-pyrrolidin-1-yl benzene-diazonium zinc chloride	150	3035	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	119	3355
Hydroxylamine sulfate	154	2865	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	119	3355
Hydroxylamine sulphate	154	2865	Insecticide gas, poisonous, n.o.s.	123	1967
			Insecticide gas, toxic, flammable, n.o.s.	119	3355

Name of Material	Guide ID No.	ID No.	Name of Material	Guide ID No.	ID No.
Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	119	3355	Isobutylene	115	1055
Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	119	3355	Isobutylene	115	1075
Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	119	3355	Isobutyl formate	132	2393
Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	119	3355	Isobutyl isobutyrate	129	2528
Insecticide gas, toxic, n.o.s.	123	1967	Isobutyl isocyanate	155	2486
Iodine monochloride	157	1792	Isobutyl methacrylate	130P	2283
Iodine pentafluoride	144	2495	Isobutyl methacrylate, inhibited	130P	2283
2-Iodobutane	129	2390	Isobutyl propionate	129	2394
Iodomethylpropanes	129	2391	Isobutyraldehyde	129	2045
Iodopropanes	129	2392	Isobutyric acid	132	2529
IPDI	156	2290	Isobutyric anhydride	132	2530
Iron oxide, spent	135	1376	Isobutyronitrile	131	2284
Iron pentacarbonyl	131	1994	Isobutyryl chloride	132	2395
Iron sponge, spent	135	1376	Isocyanate solution, flammable, poisonous, n.o.s.	155	2478
Irritating agent, n.o.s.	159	1693	Isocyanate solution, flammable, toxic, n.o.s.	155	2478
Isobutane	115	1075	Isocyanate solution, poisonous, flammable, n.o.s.	155	3080
Isobutane	115	1969	Isocyanate solution, poisonous, n.o.s.	155	2206
Isobutane mixture	115	1075	Isocyanate solution, toxic, flammable, n.o.s.	155	3080
Isobutane mixture	115	1969	Isocyanate solution, toxic, n.o.s.	155	2206
Isobutanol	129	1212	Isocyanate solutions, n.o.s.	155	2206
Isobutyl acetate	129	1213	Isocyanate solutions, n.o.s.	155	2478
Isobutyl acrylate	130P	2527	Isocyanate solutions, n.o.s. (toxic)	155	2207
Isobutyl acrylate, inhibited	130P	2527	Isocyanates, flammable, poisonous, n.o.s.	155	2478
Isobutyl alcohol	129	1212	Isocyanates, flammable, toxic, n.o.s.	155	2478
Isobutyl aldehyde	129	2045	Isocyanates, n.o.s.	155	2206
Isobutylamine	132	1214	Isocyanates, n.o.s.	155	2478
Isobutyl chloroformate	155	2742			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Isocyanates, n.o.s.	155	3080	Isopropyl chloroformate	155	2407
Isocyanates, n.o.s. (toxic)	155	2207	Isopropyl 2-chloropropionate	132	2934
Isocyanates, poisonous, flammable, n.o.s.	155	3080	Isopropyl isobutyrate	131	2406
Isocyanates, poisonous, n.o.s.	155	2206	Isopropyl isocyanate	155	2483
Isocyanates, toxic, flammable, n.o.s.	155	3080	Isopropyl mercaptan	130	2402
Isocyanates, toxic, n.o.s.	155	2206	Isopropyl methylphosphono-fluoridate	153	2810
Isocyanatobenzotrifluorides	156	2285	Isopropyl nitrate	130	1222
Isoheptene	128	2287	Isopropyl percarbonate, unstabilized	148	2133
Isohexene	128	2288	Isopropyl peroxydicarbonate	148	2133
Isononanoyl peroxide	148	2128	Isopropyl peroxydicarbonate	148	2134
Isooctane	128	1262	Isopropyl propionate	129	2409
Isooctene	128	1216	Isosorbide dinitrate mixture	133	2907
Isopentane	128	1265	Isosorbide-5-mononitrate	133	3251
Isopentanoic acid	154	1760	Kerosene	128	1223
Isopentenes	128	2371	Ketones, liquid, n.o.s.	127	1224
Isophoronediamine	153	2289	Krypton	121	1056
Isophorone diisocyanate	156	2290	Krypton, compressed	121	1056
Isoprene, inhibited	130P	1218	Krypton, refrigerated liquid (cryogenic liquid)	120	1970
Isopropanol	129	1219	L (Lewisite)	153	2810
Isopropanolamine dodecylbenzenesulfonate	171	9127	Lacquer chips, dry	133	2557
Isopropanolamine dodecylbenzenesulphonate	171	9127	Lauroyl peroxide	145	2124
Isopropenyl acetate	129P	2403	Lauroyl peroxide, not more than 42%, stable dispersion, in water	145	2893
Isopropenylbenzene	128	2303	Leachable toxic waste	151	9500
Isopropyl acetate	129	1220	Lead acetate	151	1616
Isopropyl acid phosphate	153	1793	Lead arsenates	151	1617
Isopropyl alcohol	129	1219	Lead arsenites	151	1618
Isopropylamine	132	1221	Lead chloride	151	2291
Isopropylbenzene	130	1918	Lead compound, soluble, n.o.s.	151	2291
Isopropyl butyrate	129	2405	Lead cyanide	151	1620
Isopropyl chloroacetate	155	2947	Lead dioxide	141	1872

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Lead fluoborate	151	2291	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	119	1953
Lead fluoride	154	2811	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	119	1953
Lead nitrate	141	1469	Liquefied gas, flammable, toxic, n.o.s.	119	1953
Lead perchlorate	141	1470	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	119	1953
Lead perchlorate, solid	141	1470	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	119	1953
Lead perchlorate, solution	141	1470	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	119	1953
Lead peroxide	141	1872	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	119	1953
Lead phosphite, dibasic	133	2989	Liquefied gas, n.o.s.	126	1956
Lead sulfate, with more than 3% free acid	154	1794	Liquefied gas, n.o.s.	126	3163
Lead sulphate, with more than 3% free acid	154	1794	Liquefied gas, oxidizing, n.o.s.	122	3157
Lewisite	153	2810	Liquefied gas, poisonous, corrosive, n.o.s.	123	3308
Life-saving appliances, not self-inflating	171	3072	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	123	3308
Life-saving appliances, self-inflating	171	2990	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3308
Lighter refills (cigarettes) (flammable gas)	115	1057	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3308
Lighters (cigarettes) (flammable gas)	115	1057	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3308
Lighters for cigars, cigarettes etc. with lighter fluid	127	1226	Liquefied gas, poisonous, flammable, corrosive, n.o.s.	119	3309
Lighters for cigars, cigarettes (flammable liquid)	127	1226			
Lindane	151	2761			
Liquefied gas (nonflammable)	121	1058			
Liquefied gas, flammable, n.o.s.	115	1954			
Liquefied gas, flammable, n.o.s.	115	3161			
Liquefied gas, flammable, poisonous, n.o.s.	119	1953			
Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	119	1953			
Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	119	1953			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119	3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123	3162
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	123	1955
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	123	3162
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3309	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	124	3310
Liquefied gas, poisonous, flammable, n.o.s.	119	3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	119	3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	119	3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	119	3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	124	3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	119	3160	Liquefied gas, poisonous, oxidizing, n.o.s.	124	3307
Liquefied gas, poisonous, n.o.s.	123	1955	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124	3307
Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123	1955	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3307
Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123	3162	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3307
Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	123	1955	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3307
Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	123	3162	Liquefied gas, toxic, corrosive, n.o.s.	123	3308
Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123	1955	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	123	3308

Name of Material	Guide ID No.	ID No.	Name of Material	Guide ID No.	ID No.
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	1955
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	3162
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	1955
Liquefied gas, toxic, flammable, corrosive, n.o.s.	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	3162
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	1955
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	3162
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3309	Liquefied gas, toxic, oxidizing, corrosive, n.o.s.	124	3310
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3309	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3310
Liquefied gas, toxic, flammable, n.o.s.	119	3160	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3310
Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	119	3160	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3310
Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	119	3160	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	124	3307
Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	119	3160	Liquefied gas, toxic, oxidizing, n.o.s.	124	3307
Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	119	3160	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124	3307
Liquefied gas, toxic, n.o.s.	123	1955	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3307
Liquefied gas, toxic, n.o.s.	123	3162			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3307	Lithium hypochlorite mixture	140	1471
Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3307	Lithium hypochlorite mixtures, dry	140	1471
Liquefied gases, non-flammable, charged with Nitrogen, Carbon dioxide or Air	121	1058	Lithium nitrate	140	2722
Liquefied natural gas (cryogenic liquid)	115	1972	Lithium nitride	138	2806
Liquefied petroleum gas	115	1075	Lithium peroxide	143	1472
Lithium	138	1415	Lithium silicon	138	1417
Lithium acetylide-Ethylenediamine complex	138	2813	LNG (cryogenic liquid)	115	1972
Lithium alkyls	135	2445	London purple	151	1621
Lithium aluminum hydride	138	1410	LPG	115	1075
Lithium aluminum hydride, ethereal	138	1411	Magnesium	138	1869
Lithium amide	139	1412	Magnesium, in pellets, turnings or ribbons	138	1869
Lithium batteries	138	3090	Magnesium alkyls	135	3053
Lithium batteries, liquid or solid cathode	138	3090	Magnesium alloys, with more than 50% Magnesium, in pellets, turnings or ribbons	138	1869
Lithium batteries contained in equipment	138	3091	Magnesium alloys powder	138	1418
Lithium batteries packed with equipment	138	3091	Magnesium aluminum phosphide	139	1419
Lithium borohydride	138	1413	Magnesium arsenate	151	1622
Lithium chromate	171	9134	Magnesium bisulfite solution	154	2693
Lithium ferrosilicon	139	2830	Magnesium bisulphite solution	154	2693
Lithium hydride	138	1414	Magnesium bromate	140	1473
Lithium hydride, fused solid	138	2805	Magnesium chlorate	140	2723
Lithium hydroxide, monohydrate	154	2680	Magnesium chloride and Chlorate mixture	140	1459
Lithium hydroxide, solid	154	2680	Magnesium diamide	135	2004
Lithium hydroxide, solution	154	2679	Magnesium diphenyl	135	2005
Lithium hypochlorite, dry	140	1471	Magnesium fluorosilicate	151	2853
			Magnesium granules, coated	138	2950
			Magnesium hydride	138	2010
			Magnesium nitrate	140	1474
			Magnesium perchlorate	140	1475
			Magnesium peroxide	140	1476

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Magnesium phosphide	139	2011	Medicines, corrosive, solid, n.o.s.	154	1759
Magnesium powder	138	1418	Medicines, flammable, liquid, n.o.s.	128	1993
Magnesium scrap	138	1869	Medicines, flammable, solid, n.o.s.	133	1325
Magnesium silicide	138	2624	Medicines, oxidizing substances, solid, n.o.s.	140	1479
Magnesium silicofluoride	151	2853	Medicines, poisonous, liquid, n.o.s.	153	2810
Magnetized material	171	2807	Medicines, poisonous, solid, n.o.s.	154	2811
Maleic acid	156	2215	Medicines, toxic, liquid, n.o.s.	153	2810
Maleic anhydride	156	2215	Medicines, toxic, solid, n.o.s.	154	2811
Malononitrile	153	2647	p-Menthane hydroperoxide	147	2125
Maneb	135	2210	Mercaptan mixture, aliphatic	131	1228
Maneb, stabilized	135	2968	Mercaptan mixture, liquid, flammable, n.o.s.	130	3336
Maneb preparation, stabilized	135	2968	Mercaptan mixture, liquid, flammable, poisonous, n.o.s.	131	1228
Maneb preparation, with not less than 60% Maneb	135	2210	Mercaptan mixture, liquid, flammable, toxic, n.o.s.	131	1228
Manganese nitrate	140	2724	Mercaptan mixture, liquid, poisonous, flammable, n.o.s.	131	3071
Manganese resinate	133	1330	Mercaptan mixture, liquid, toxic, flammable, n.o.s.	131	3071
Matches, fusee	133	2254	Mercaptan mixtures, liquid, n.o.s.	131	1228
Matches, safety	133	1944	Mercaptan mixtures, liquid, n.o.s.	131	3071
Matches, "strike anywhere"	133	1331	Mercaptans, liquid, flammable, n.o.s.	130	3336
Matches, wax "vesta"	133	1945	Mercaptans, liquid, flammable, poisonous, n.o.s.	131	1228
MD	152	1556	Mercaptans, liquid, flammable, toxic, n.o.s.	131	1228
Medical waste, n.o.s.	158	3291	Mercaptans, liquid, flammable, n.o.s.	131	3071
Medicine, liquid, flammable, poisonous, n.o.s.	131	3248	Mercaptans, liquid, flammable, n.o.s.	131	1228
Medicine, liquid, flammable, toxic, n.o.s.	131	3248	Mercaptans, liquid, flammable, toxic, n.o.s.	131	1228
Medicine, liquid, poisonous, n.o.s.	151	1851	Mercaptans, liquid, flammable, toxic, n.o.s.	131	1228
Medicine, liquid, toxic, n.o.s.	151	1851	Mercaptans, liquid, n.o.s.	131	3071
Medicine, solid, poisonous, n.o.s.	151	3249	Mercaptans, liquid, flammable, n.o.s.	130	3336
Medicine, solid, toxic, n.o.s.	151	3249	Mercaptans, liquid, flammable, n.o.s.	131	1228
Medicines, corrosive, liquid, n.o.s.	154	1760	Mercaptans, liquid, flammable, n.o.s.	131	1228
			Mercaptans, liquid, n.o.s.	131	3071

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Mercaptans, liquid, poisonous, flammable, n.o.s.	131	3071	Mercury based pesticide, solid, toxic	151	2777
Mercaptans, liquid, toxic, flammable, n.o.s.	131	3071	Mercury benzoate	154	1631
Mercuric arsenate	151	1623	Mercury bisulfate	151	1633
Mercuric bromide	154	1634	Mercury bisulphate	151	1633
Mercuric chloride	154	1624	Mercury bromides	154	1634
Mercuric cyanide	154	1636	Mercury compound, liquid, n.o.s.	151	2024
Mercuric nitrate	141	1625	Mercury compound, solid, n.o.s.	151	2025
Mercuric oxycyanide	151	1642	Mercury cyanide	154	1636
Mercuric potassium cyanide	157	1626	Mercury gluconate	151	1637
Mercuric sulfate	151	1645	Mercury iodide	151	1638
Mercuric sulphate	151	1645	Mercury metal	172	2809
Mercurous bromide	154	1634	Mercury nucleate	151	1639
Mercurous nitrate	141	1627	Mercury oleate	151	1640
Mercurous sulfate	151	1628	Mercury oxide	151	1641
Mercurous sulphate	151	1628	Mercury oxycyanide, desensitized	151	1642
Mercury	172	2809	Mercury potassium iodide	151	1643
Mercury, metallic	172	2809	Mercury salicylate	151	1644
Mercury acetate	151	1629	Mercury sulfate	151	1645
Mercury ammonium chloride	151	1630	Mercury sulphate	151	1645
Mercury based pesticide, liquid, flammable, poisonous	131	2778	Mercury thiocyanate	151	1646
Mercury based pesticide, liquid, flammable, toxic	131	2778	Mesityl oxide	129	1229
Mercury based pesticide, liquid, poisonous	151	3012	Metal alkyl, solution, n.o.s.	135	9195
Mercury based pesticide, liquid, poisonous, flammable	131	3011	Metal alkyl halides, n.o.s.	138	3049
Mercury based pesticide, liquid, toxic	151	3012	Metal alkyl halides, water-reactive, n.o.s.	138	3049
Mercury based pesticide, liquid, toxic, flammable	131	3011	Metal alkyl hydrides, n.o.s.	138	3050
Mercury based pesticide, solid, poisonous	151	2777	Metal alkyl hydrides, water-reactive, n.o.s.	138	3050
			Metal alkyls, n.o.s.	135	2003
			Metal alkyls, water-reactive, n.o.s.	135	2003
			Metal aryl halides, n.o.s.	138	3049

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Metal aryl halides, water-reactive, n.o.s.	138	3049	Methanesulphonyl chloride	156	3246
Metal aryl hydrides, n.o.s.	138	3050	Methanol	131	1230
Metal aryl hydrides, water-reactive, n.o.s.	138	3050	Methoxymethyl isocyanate	155	2605
Metal aryls, n.o.s.	135	2003	4-Methoxy-4-methyl-pentan-2-one	127	2293
Metal aryls, water-reactive, n.o.s.	135	2003	1-Methoxy-2-propanol	129	3092
Metal carbonyls, n.o.s.	151	3281	Methyl acetate	129	1231
Metal catalyst, dry	135	2881	Methyl acetone	127	1232
Metal catalyst, wetted	170	1378	Methylacetylene and Propadiene mixture, stabilized	116P	1060
Metaldehyde	133	1332	Methyl acrylate, inhibited	129P	1919
Metal hydrides, flammable, n.o.s.	170	3182	Methylal	127	1234
Metal hydrides, water-reactive, n.o.s.	138	1409	Methyl alcohol	131	1230
Metallic substance, water-reactive, n.o.s.	138	3208	Methylallyl chloride	129P	2554
Metallic substance, water-reactive, self-heating, n.o.s.	138	3209	Methylamine, anhydrous	118	1061
Metal powder, flammable, n.o.s.	170	3089	Methylamine, aqueous solution	132	1235
Metal powder, self-heating, n.o.s.	135	3189	Methylamyl acetate	129	1233
Metal salts of organic compounds, flammable, n.o.s.	133	3181	Methylamyl alcohol	129	2053
Methacrylaldehyde	131P	2396	Methyl amyl ketone	127	1110
Methacrylaldehyde, inhibited	131P	2396	N-Methylaniline	153	2294
Methacrylic acid, inhibited	153P	2531	Methyl benzoate	152	2938
Methacrylonitrile, inhibited	131P	3079	alpha-Methylbenzyl alcohol	153	2937
Methallyl alcohol	129	2614	Methylbenzyl alcohol (alpha)	153	2937
Methane	115	1971	Methyl bromide	123	1062
Methane, compressed	115	1971	Methyl bromide and Chloropicrin mixtures	123	1581
Methane, refrigerated liquid (cryogenic liquid)	115	1972	Methyl bromide and Ethylene dibromide mixture, liquid	151	1647
Methane and Hydrogen mixture, compressed	115	2034	Methyl bromide and more than 2% Chloropicrin mixture, liquid	123	1581
Methanesulfonyl chloride	156	3246	Methyl bromide and nonflammable, nonliquefied compressed gas mixture	123	1955

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Methyl bromoacetate	155	2643	Methyl fluoride	115	2454
Methylbromoacetone	159	--	Methyl formate	129	1243
3-Methylbutan-2-one	127	2397	2-Methylfuran	127	2301
2-Methyl-1-butene	127	2459	2-Methyl-2-heptanethiol	131	3023
2-Methyl-2-butene	127	2460	5-Methylhexan-2-one	127	2302
3-Methyl-1-butene	127	2561	Methylhydrazine	131	1244
N-Methylbutylamine	132	2945	Methyl iodide	151	2644
Methyl teri-butyl ether	127	2398	Methyl isobutyl carbinol	129	2053
Methyl butyrate	129	1237	Methyl isobutyl ketone	127	1245
Methyl chloride	115	1063	Methyl isobutyl ketone peroxide	147	2126
Methyl chloride and Chloropicrin mixtures	119	1582	Methyl isocyanate	155	2480
Methyl chloride and Methylene chloride mixture	115	1912	Methyl isopropenyl ketone, inhibited	127P	1246
Methyl chloroacetate	155	2295	Methyl isothiocyanate	131	2477
Methyl chloroformate	155	1238	Methyl isovalerate	130	2400
Methyl chloromethyl ether	131	1239	Methyl magnesium bromide in Ethyl ether	135	1928
Methyl 2-chloropropionate	132	2933	Methyl mercaptan	117	1064
Methylchlorosilane	119	2534	Methyl methacrylate monomer, inhibited	129P	1247
Methyl cyanide	131	1648	Methyl methacrylate monomer, uninhibited	129P	1247
Methylcyclohexane	128	2296	4-Methylmorpholine	132	2535
Methylcyclohexanols	129	2617	N-Methylmorpholine	132	2535
Methylcyclohexanone	127	2297	Methylmorpholine	132	2535
Methylcyclopentane	128	2298	Methyl nitrite	116	2455
Methyl dichloroacetate	155	2299	N-Methyl-N'-Nitro-N-Nitrosoguanidine	133	1325
Methyldichloroarsine	152	1556	Methyl orthosilicate	155	2606
Methyldichlorosilane	139	1242	Methyl parathion, liquid	152	2783
Methylene chloride	160	1593	Methyl parathion, liquid	152	3018
Methylene chloride and Methyl chloride mixture	115	1912	Methyl parathion, mixture, dry	152	2783
Methyl ethyl ether	115	1039	Methyl parathion, solid	152	2783
Methyl ethyl ketone	127	1193	Methylpentadiene	127	2461
Methyl ethyl ketone peroxide	147	2550			
2-Methyl-5-ethylpyridine	153	2300			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Methyl pentane	128	2462	Mustard Lewisite	153	2810
2-Methylpentan-2-ol	129	2560	Naphtha	128	2553
Methylphenyldichlorosilane	156	2437	Naphtha, petroleum	128	1255
Methyl phosphonic dichloride	137	9206	Naphtha, solvent	128	1256
Methyl phosphonous dichloride	135	2845	Naphthalene, crude	133	1334
1-Methylpiperidine	132	2399	Naphthalene, molten	133	2304
Methyl propionate	129	1248	Naphthalene, refined	133	1334
Methyl propyl ether	127	2612	Naphthenic acid	171	9137
Methyl propyl ketone	127	1249	alpha-Naphthylamine	153	2077
Methyltetrahydrofuran	127	2536	Naphthylamine (alpha)	153	2077
Methyl trichloroacetate	156	2533	beta-Naphthylamine	153	1650
Methyltrichlorosilane	155	1250	Naphthylamine (beta)	153	1650
alpha-Methylvaleraldehyde	130	2367	Naphthylthiourea	153	1651
Methyl valeraldehyde (alpha)	130	2367	Naphthylurea	153	1652
Methyl vinyl ketone	131P	1251	Natural gas, compressed	115	1971
Methyl vinyl ketone, stabilized	131P	1251	Natural gas, refrigerated liquid (cryogenic liquid)	115	1972
Mevinphos	152	2783	Natural gasoline	128	1257
Mexacarbate	151	2757	Neohexane	128	1208
M.I.B.C.	129	2053	Neon	121	1065
Mining reagent, liquid	153	2022	Neon, compressed	121	1065
Molybdenum pentachloride	156	2508	Neon, refrigerated liquid (cryogenic liquid)	120	1913
Monoethanolamine	153	2491	Nickel ammonium sulfate	171	9138
Mononitrotoluidines	153	2660	Nickel ammonium sulphate	171	9138
Monopropylamine	132	1277	Nickel carbonyl	131	1259
Morpholine	132	2054	Nickel catalyst, dry	135	2881
Morpholine, aqueous mixture	154	1760	Nickel chloride	151	9139
Morpholine, aqueous mixture	132	2054	Nickel cyanide	151	1653
Motor fuel anti-knock compound	131	1649	Nickel hydroxide	154	9140
Motor fuel anti-knock mixture	131	1649	Nickel nitrate	140	2725
Motor spirit	128	1203	Nickel nitrite	140	2726
Muriatic acid	157	1789	Nickel sulfate	154	9141
Musk xylene	149	2956			
Mustard	153	2810			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Nickel sulphate	154	9141	Nitric oxide and Nitrogen tetroxide mixture	124	1975
Nicotine	151	1654	Nitriles, flammable, poisonous, n.o.s.	131	3273
Nicotine compound, liquid, n.o.s.	151	3144	Nitriles, flammable, toxic, n.o.s.	131	3273
Nicotine compound, solid, n.o.s.	151	1655	Nitriles, poisonous, flammable, n.o.s.	131	3275
Nicotine hydrochloride	151	1656	Nitriles, poisonous, n.o.s.	151	3276
Nicotine hydrochloride, solution	151	1656	Nitriles, toxic, flammable, n.o.s.	131	3275
Nicotine preparation, liquid, n.o.s.	151	3144	Nitriles, toxic, n.o.s.	151	3276
Nicotine preparation, solid, n.o.s.	151	1655	Nitrites, inorganic, aqueous solution, n.o.s.	140	3219
Nicotine salicylate	151	1657	Nitrites, inorganic, n.o.s.	140	2627
Nicotine sulfate, solid	151	1658	Nitroanilines	153	1661
Nicotine sulfate, solution	151	1658	Nitroanisole	152	2730
Nicotine sulphate, solid	151	1658	Nitroanisole, liquid	152	2730
Nicotine sulphate, solution	151	1658	Nitroanisole, solid	152	2730
Nicotine tartrate	151	1659	Nitrobenzene	152	1662
Nitrate, n.o.s.	140	1477	Nitrobenzenesulfonic acid	153	2305
Nitrates, inorganic, aqueous solution, n.o.s.	140	3218	Nitrobenzenesulphonic acid	153	2305
Nitrates, inorganic, n.o.s.	140	1477	Nitrobenzotrifluorides	152	2306
Nitrating acid, spent	157	1826	Nitrobromobenzene	152	2732
Nitrating acid mixture	157	1796	Nitrobromobenzene, liquid	152	2732
Nitrating acid mixture, spent	157	1826	Nitrobromobenzene, solid	152	2732
Nitric acid, 40% or less	154	1760	Nitrocellulose, block, wet, with not less than 25% alcohol	127	2059
Nitric acid, fuming	157	2032	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% alcohol or solvent	127	2059
Nitric acid, other than red fuming	157	2031	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% water	113	2555
Nitric acid, red fuming	157	2032	Nitrocellulose, solution, flammable	127	2059
Nitric oxide	124	1660	Nitrocellulose, solution, in a flammable liquid	127	2059
Nitric oxide, compressed	124	1660			
Nitric oxide and Dinitrogen tetroxide mixture	124	1975			
Nitric oxide and Nitrogen dioxide mixture	124	1975			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Nitrocellulose, wet, with not less than 30% alcohol or solvent	113	2556	Nitrogen tetroxide, liquid	124	1067
Nitrocellulose membrane filters	133	3270	Nitrogen tetroxide and Nitric oxide mixture	124	1975
Nitrocellulose mixture, without plasticizer, without pigment	133	2557	Nitrogen trifluoride	122	2451
Nitrocellulose mixture, without plasticizer, with pigment	133	2557	Nitrogen trifluoride, compressed	122	2451
Nitrocellulose mixture, with plasticizer, without pigment	133	2557	Nitrogen trioxide	124	2421
Nitrocellulose mixture, with plasticizer, with pigment	133	2557	Nitroglycerin, solution in alcohol, with more than 1% but not more than 5% Nitroglycerin	127	3064
Nitrocellulose with alcohol	113	2556	Nitroglycerin, solution in alcohol, with not more than 1% Nitroglycerin	127	1204
Nitrocellulose with not less than 25% alcohol	113	2556	Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s., with not more than 30% Nitroglycerin	113	3343
Nitrocellulose with plasticizing substance	133	2557	Nitroglycerin mixture, desensitized, liquid, n.o.s., with not more than 30% Nitroglycerin	113	3357
Nitrocellulose with water, not less than 25% water	113	2555	Nitroglycerin mixture, desensitized, solid, n.o.s., with more than 2% but not more than 10% Nitroglycerin	113	3319
Nitrochlorobenzenes, liquid	152	1578	Nitroglycerin mixture with more than 2% but not more than 10% Nitroglycerin, desensitized	113	3319
Nitrochlorobenzenes, solid	152	1578	Nitroguanidine (Picrite), wetted with not less than 20% water	113	1336
3-Nitro-4-chlorobenzotrifluoride	152	2307	Nitroguanidine, wetted with not less than 20% water	113	1336
Nitrocresols	153	2446	Nitrohydrochloric acid	157	1798
Nitroethane	129	2842	Nitromethane	129	1261
Nitrogen	121	1066	Nitronaphthalene	133	2538
Nitrogen, compressed	121	1066	Nitrophenols	153	1663
Nitrogen, refrigerated liquid (cryogenic liquid)	120	1977	Nitropropanes	129	2608
Nitrogen and Rare gases mixture	121	1981			
Nitrogen and Rare gases mixture, compressed	121	1981			
Nitrogen dioxide	124	1067			
Nitrogen dioxide, liquefied	124	1067			
Nitrogen dioxide and Nitric oxide mixture	124	1975			
Nitrogen peroxide, liquid	124	1067			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
p-Nitrosodiethylaniline	135	--	tert-Octyl mercaptan	131	3023
p-Nitrosodimethylaniline	135	1369	Octyltrichlorosilane	156	1801
Nitrostarch, wet, with not less than 30% alcohol or solvent	113	1337	Oil, n.o.s., flash point not less than 93°C (200°F)	171	9277
Nitrostarch, wetted with not less than 20% water	113	1337	Oil, petroleum, n.o.s.	128	1270
Nitrostarch, wetted with not less than 30% solvent	113	1337	Oil gas	119	1071
Nitrosyl chloride	125	1069	Oil gas, compressed	119	1071
Nitrosylsulfuric acid	157	2308	Oleum	137	1831
Nitrosylsulphuric acid	157	2308	Oleum, with less than 30% free Sulfur trioxide	137	1831
Nitrotoluenes	152	1664	Oleum, with less than 30% free Sulphur trioxide	137	1831
Nitrotoluenes, liquid	152	1664	Oleum, with not less than 30% free Sulfur trioxide	137	1831
Nitrotoluenes, solid	152	1664	Oleum, with not less than 30% free Sulphur trioxide	137	1831
Nitrotoluidines (mono)	153	2660	Organic peroxide, liquid, n.o.s.	146	9183
Nitrous oxide	122	1070	Organic peroxide, solution, n.o.s.	146	9183
Nitrous oxide, compressed	122	1070	Organic peroxide, solid, n.o.s.	146	9187
Nitrous oxide, refrigerated liquid	122	2201	Organic peroxides, mixtures	146	2756
Nitrous oxide and Carbon dioxide mixture	126	1015	Organic peroxides, n.o.s. (including trial quantities)	148	2899
Nitroxylenes	152	1665	Organic peroxides, samples, n.o.s.	146	2255
Nitroxylol	152	1665	Organic peroxide type B, liquid	146	3101
Nonanes	128	1920	Organic peroxide type B, liquid, temperature controlled	148	3111
Nonyltrichlorosilane	156	1799	Organic peroxide type B, solid	146	3102
2,5-Norbornadiene	127P	2251	Organic peroxide type B, solid, temperature controlled	148	3112
2,5-Norbornadiene, inhibited	127P	2251	Organic peroxide type C, liquid	146	3103
Octadecyltrichlorosilane	156	1800	Organic peroxide type C, liquid, temperature controlled	148	3113
Octadiene	128P	2309	Organic peroxide type C, solid	146	3104
Octafluorobut-2-ene	126	2422	Organic peroxide type C, solid, temperature controlled	148	3114
Octafluorocyclobutane	126	1976			
Octafluoropropane	126	2424			
Octanes	128	1262			
Octanoyl peroxide	148	2129			
Octyl aldehydes	129	1191			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Organic peroxide type D, liquid	145	3105	Organochlorine pesticide, liquid, flammable, poisonous	131	2762
Organic peroxide type D, liquid, temperature controlled	148	3115	Organochlorine pesticide, liquid, flammable, toxic	131	2762
Organic peroxide type D, solid	145	3106	Organochlorine pesticide, liquid, poisonous	151	2996
Organic peroxide type D, solid, temperature controlled	148	3116	Organochlorine pesticide, liquid, poisonous, flammable	131	2995
Organic peroxide type E, liquid	145	3107	Organochlorine pesticide, liquid, toxic	151	2996
Organic peroxide type E, liquid, temperature controlled	148	3117	Organochlorine pesticide, liquid, toxic, flammable	131	2995
Organic peroxide type E, solid	145	3108	Organochlorine pesticide, solid, poisonous	151	2761
Organic peroxide type E, solid, temperature controlled	148	3118	Organochlorine pesticide, solid, toxic	151	2761
Organic peroxide type F, liquid	145	3109	Organometallic compound, poisonous, n.o.s.	151	3282
Organic peroxide type F, liquid, temperature controlled	148	3119	Organometallic compound, toxic, n.o.s.	151	3282
Organic peroxide type F, solid	145	3110	Organometallic compound, water-reactive, flammable, n.o.s.	138	3207
Organic peroxide type F, solid, temperature controlled	148	3120	Organometallic compound dispersion, water-reactive, flammable, n.o.s.	138	3207
Organic phosphate, dry	152	2783	Organometallic compound solution, water-reactive, flammable, n.o.s.	138	3207
Organic phosphate, solid	152	2783	Organophosphorus compound, poisonous, flammable, n.o.s.	131	3279
Organic phosphate compound, dry	152	2783	Organophosphorus compound, poisonous, n.o.s.	151	3278
Organic phosphate compound, solid	152	2783	Organophosphorus compound, toxic, flammable, n.o.s.	131	3279
Organic phosphate compound mixed with compressed gas	123	1955	Organophosphorus compound, toxic, n.o.s.	151	3278
Organic phosphate mixed with compressed gas	123	1955	Organophosphorus pesticide, liquid, flammable, poisonous	131	2784
Organic phosphorus compound, dry	152	2783			
Organic phosphorus compound, solid	152	2783			
Organic phosphorus compound mixed with compressed gas	123	1955			
Organic pigments, self-heating	135	3313			
Organoarsenic compound, n.o.s.	151	3280			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Organophosphorus pesticide, liquid, flammable, toxic	131	2784	Other regulated substance	171	8027
Organophosphorus pesticide, liquid, poisonous	152	3018	Other regulated substances, liquid, n.o.s.	171	3082
Organophosphorus pesticide, liquid, poisonous, flammable	131	3017	Other regulated substances, solid, n.o.s.	171	3077
Organophosphorus pesticide, liquid, toxic	152	3018	Oxalates, water soluble	154	2449
Organophosphorus pesticide, liquid, toxic, flammable	131	3017	Oxidizer, corrosive, liquid, n.o.s.	140	9193
Organophosphorus pesticide, solid, poisonous	152	2783	Oxidizer, corrosive, solid, n.o.s.	140	9194
Organophosphorus pesticide, solid, toxic	152	2783	Oxidizer, poisonous, liquid, n.o.s.	142	9199
Organotin compound, liquid, n.o.s.	153	2788	Oxidizer, poisonous, solid, n.o.s.	141	9200
Organotin compound, solid, n.o.s.	153	3146	Oxidizing liquid, corrosive, n.o.s.	140	3098
Organotin pesticide, liquid, flammable, poisonous	131	2787	Oxidizing liquid, n.o.s.	140	3139
Organotin pesticide, liquid, flammable, toxic	131	2787	Oxidizing liquid, poisonous, n.o.s.	142	3099
Organotin pesticide, liquid, poisonous	153	3020	Oxidizing liquid, toxic, n.o.s.	142	3099
Organotin pesticide, liquid, poisonous, flammable	131	3019	Oxidizing solid, corrosive, n.o.s.	140	3085
Organotin pesticide, liquid, toxic	153	3020	Oxidizing solid, flammable, n.o.s.	140	3137
Organotin pesticide, liquid, toxic, flammable	131	3019	Oxidizing solid, n.o.s.	140	1479
Organotin pesticide, solid, poisonous	153	2786	Oxidizing solid, poisonous, n.o.s.	141	3087
Organotin pesticide, solid, toxic	153	2786	Oxidizing solid, self-heating, n.o.s.	135	3100
ORM-A, n.o.s.	159	1693	Oxidizing solid, toxic, n.o.s.	141	3087
ORM-B, n.o.s.	154	1760	Oxidizing solid, water-reactive, n.o.s.	144	3121
ORM-E, liquid, n.o.s.	171	9188	Oxidizing substances, liquid, corrosive, n.o.s.	140	3098
ORM-E, solid, n.o.s.	171	9188	Oxidizing substances, liquid, n.o.s.	140	3139
Osmium tetroxide	154	2471	Oxidizing substances, liquid, poisonous, n.o.s.	142	3099
			Oxidizing substances, liquid, toxic, n.o.s.	142	3099

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Oxidizing substances, self-heating, n.o.s.	135	3100	Paint related material (corrosive)	153	3066
Oxidizing substances, solid, corrosive, n.o.s.	140	3085	Paint related material (flammable)	128	1263
Oxidizing substances, solid, flammable, n.o.s.	140	3137	Paper, unsaturated oil treated	133	1379
Oxidizing substances, solid, n.o.s.	140	1479	Paraformaldehyde	133	2213
Oxidizing substances, solid, poisonous, n.o.s.	141	3087	Paraldehyde	129	1264
Oxidizing substances, solid, self-heating, n.o.s.	135	3100	Parathion	152	2783
Oxidizing substances, solid, toxic, n.o.s.	141	3087	Parathion and compressed gas mixture	123	1967
Oxidizing substances, solid, which in contact with water emit flammable gases, n.o.s.	144	3121	Parathion mixture, dry	152	2783
Oxygen	122	1072	Parathion mixture, liquid	152	2783
Oxygen, compressed	122	1072	PCB	171	2315
Oxygen, refrigerated liquid (cryogenic liquid)	122	1073	PD	152	1556
Oxygen and Carbon dioxide mixture	122	1014	Pelargonyl peroxide	148	2130
Oxygen and Carbon dioxide mixture, compressed	122	1014	Pentaborane	135	1380
Oxygen and Rare gases mixture	122	1980	Pentachloroethane	151	1669
Oxygen and Rare gases mixture, compressed	122	1980	Pentachlorophenol	154	3155
Oxygen difluoride	124	2190	Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s., with more than 10% but not more than 20% PETN	113	3344
Oxygen difluoride, compressed	124	2190	Pentafluoroethane	126	3220
Oxygen generator, chemical	140	3356	Pentafluoroethane and Ethylene oxide mixture, with not more than 7.9% Ethylene oxide	126	3298
Oxygen generators, small	140	8037	Pentamethylheptane	128	2286
Paint (corrosive)	154	1760	Pentan-2,4-dione	131	2310
Paint (corrosive)	153	3066	n-Pentane	128	1265
Paint (flammable)	128	1263	2,4-Pentanedione	131	2310
Paint related material (corrosive)	154	1760	Pentane-2,4-dione	131	2310
			Pentanes	128	1265
			Pentanol	129	1105
			1-Pentene	127	1108
			1-Pentol	153P	2705

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Peracetic acid, solution	147	2131	Pesticide, liquid, flammable, toxic	131	3021
Percarbonates, inorganic, n.o.s.	140	3217	Pesticide, liquid, poisonous, flammable, n.o.s.	131	2903
Perchlorate, n.o.s.	140	1481	Pesticide, liquid, poisonous, n.o.s.	151	2902
Perchlorates, inorganic, aqueous solution, n.o.s.	140	3211	Pesticide, liquid, toxic, flammable, n.o.s.	131	2903
Perchlorates, inorganic, n.o.s.	140	1481	Pesticide, liquid, toxic, n.o.s.	151	2902
Perchloric acid, with more than 50% but not more than 72% acid	143	1873	Pesticide, solid, poisonous	151	2588
Perchloric acid, with not more than 50% acid	140	1802	Pesticide, solid, poisonous, n.o.s.	151	2588
Perchloroethylene	160	1897	Pesticide, solid, toxic, n.o.s.	151	2588
Perchloromethyl mercaptan	157	1670	Pesticide, water-reactive	135	2210
Perchloryl fluoride	124	3083	Petrol	128	1203
Perfluoroethyl vinyl ether	115	3154	Petroleum crude oil	128	1267
Perfluoro(ethyl vinyl ether)	115	3154	Petroleum distillates, n.o.s.	128	1268
Perfluoromethyl vinyl ether	115	3153	Petroleum ether	128	1271
Perfluoro(methyl vinyl ether)	115	3153	Petroleum gases, liquefied	115	1075
Perfumery products, with flammable solvents	127	1266	Petroleum naphtha	128	1255
Permanganate, n.o.s.	140	1482	Petroleum oil	128	1270
Permanganates, inorganic, aqueous solution, n.o.s.	140	3214	Petroleum products, n.o.s.	128	1268
Permanganates, inorganic, n.o.s.	140	1482	Petroleum spirit	128	1271
Peroxides, inorganic, n.o.s.	140	1483	Phenacyl bromide	153	2645
Peroxyacetic acid, solution	147	2131	Phenetidines	153	2311
Persulfates, inorganic, aqueous solution, n.o.s.	140	3216	Phenol, liquid	153	2821
Persulfates, inorganic, n.o.s.	140	3215	Phenol, molten	153	2312
Persulphates, inorganic, aqueous solution, n.o.s.	140	3216	Phenol, solid	153	1671
Persulphates, inorganic, n.o.s.	140	3215	Phenol solution	153	2821
Pesticide, liquid, flammable, poisonous	131	3021	Phenolates, liquid	154	2904
			Phenolates, solid	154	2905
			Phenolsulfonic acid, liquid	153	1803
			Phenolsulphonic acid, liquid	153	1803

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Phenoxyacetic acid derivative pesticide, liquid, flammable, poisonous	131	3346	Phenyldichloroarsine	152	1556
Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic	131	3346	Phenylenediamines	153	1673
Phenoxyacetic acid derivative pesticide, liquid, poisonous	153	3348	Phenylhydrazine	153	2572
Phenoxyacetic acid derivative pesticide, liquid, poisonous, flammable	131	3347	Phenyl isocyanate	155	2487
Phenoxyacetic acid derivative pesticide, liquid, toxic	153	3348	Phenyl mercaptan	131	2337
Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable	131	3347	Phenylmercuric acetate	151	1674
Phenoxyacetic acid derivative pesticide, liquid, toxic	153	3348	Phenylmercuric compound, n.o.s.	151	2026
Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable	131	3347	Phenylmercuric hydroxide	151	1894
Phenoxyacetic acid derivative pesticide, solid, poisonous	153	3345	Phenylmercuric nitrate	151	1895
Phenoxyacetic acid derivative pesticide, solid, toxic	153	3345	Phenylphosphorus dichloride	137	2798
Phenoxy pesticide, liquid, flammable, poisonous	131	2766	Phenylphosphorus thiodichloride	137	2799
Phenoxy pesticide, liquid, flammable, toxic	131	2766	Phenyltrichlorosilane	156	1804
Phenoxy pesticide, liquid, poisonous	152	3000	Phenyl urea pesticide, liquid, flammable, poisonous	131	2768
Phenoxy pesticide, liquid, poisonous, flammable	131	2999	Phenyl urea pesticide, liquid, flammable, toxic	131	2768
Phenoxy pesticide, liquid, toxic	152	3000	Phenyl urea pesticide, liquid, poisonous	151	3002
Phenoxy pesticide, liquid, toxic, flammable	131	2999	Phenyl urea pesticide, liquid, poisonous, flammable	131	3001
Phenoxy pesticide, solid, poisonous	152	2765	Phenyl urea pesticide, liquid, toxic	151	3002
Phenoxy pesticide, solid, toxic	152	2765	Phenyl urea pesticide, liquid, toxic, flammable	131	3001
Phenylacetonitrile, liquid	152	2470	Phenyl urea pesticide, solid, poisonous	151	2767
Phenylacetyl chloride	156	2577	Phenyl urea pesticide, solid, toxic	151	2767
Phenylcarbylamine chloride	151	1672	Phosgene	125	1076
Phenyl chloroformate	156	2746	Phosgene oxime	154	2811
			9-Phosphabicyclononanes	135	2940
			Phosphine	119	2199
			Phosphoric acid	154	1805

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Phosphoric anhydride	137	1807	Phosphorus sesquisulphide, free from yellow and white Phosphorus	139	1341
Phosphorous acid	154	2834	Phosphorus tribromide	137	1808
Phosphorous acid, ortho	154	2834	Phosphorus trichloride	137	1809
Phosphorus, amorphous	133	1338	Phosphorus trioxide	157	2578
Phosphorus, amorphous, red	133	1338	Phosphorus trisulfide, free from yellow and white Phosphorus	139	1343
Phosphorus, white, dry or under water or in solution	136	1381	Phosphorus trisulphide, free from yellow and white Phosphorus	139	1343
Phosphorus, white, molten	136	2447	Phthalic anhydride	156	2214
Phosphorus, yellow, dry or under water or in solution	136	1381	Phthalimide derivative pesticide, liquid, flammable, poisonous	131	2774
Phosphorus heptasulfide, free from yellow and white Phosphorus	139	1339	Phthalimide derivative pesticide, liquid, flammable, toxic	131	2774
Phosphorus heptasulphide, free from yellow and white Phosphorus	139	1339	Phthalimide derivative pesticide, liquid, poisonous	151	3008
Phosphorus oxybromide	137	1939	Phthalimide derivative pesticide, liquid, poisonous, flammable	131	3007
Phosphorus oxybromide, molten	137	2576	Phthalimide derivative pesticide, liquid, toxic	151	3008
Phosphorus oxybromide, solid	137	1939	Phthalimide derivative pesticide, liquid, toxic, flammable	131	3007
Phosphorus oxychloride	137	1810	Phthalimide derivative pesticide, solid, poisonous	151	2773
Phosphorus pentabromide	137	2691	Phthalimide derivative pesticide, solid, toxic	151	2773
Phosphorus pentachloride	137	1806	Picollines	130	2313
Phosphorus pentafluoride	125	2198	Picric acid, wet, with not less than 10% water	113	1344
Phosphorus pentafluoride, compressed	125	2198	Picrite, wetted	113	1336
Phosphorus pentasulfide, free from yellow and white Phosphorus	139	1340	Pinacolyl methylphosphonofluoridate	153	2810
Phosphorus pentasulphide, free from yellow and white Phosphorus	139	1340			
Phosphorus pentoxide	137	1807			
Phosphorus sesquisulfide, free from yellow and white Phosphorus	139	1341			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Pinane hydroperoxide	147	2162	Poisonous liquid, flammable, n.o.s.	131	2929
alpha-Pinene	127	2368	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	131	2929
Pinene (alpha)	127	2368	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	131	2929
Pine oil	129	1272	Poisonous liquid, flammable, organic, n.o.s.	131	2929
Piperazine	153	2579	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	131	2929
Piperidine	132	2401	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	131	2929
Plastic molding compound	171	3314	Poisonous liquid, inorganic, n.o.s.	151	3287
Plastic molding material	171	–	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	151	3287
Plastic, nitrocellulose-based, spontaneously combustible, n.o.s.	135	2006	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	151	3287
Plastics moulding compound	171	3314	Poisonous liquid, n.o.s.	123	1955
Plastics, nitrocellulose-based, self-heating, n.o.s.	135	2006	Poisonous liquid, n.o.s.	153	2810
Poison B, liquid, n.o.s.	153	2810	Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)	153	2810
Poison B, solid, n.o.s.	154	2811	Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)	153	2810
Poisonous gas, flammable, n.o.s.	119	1953	Poisonous liquid, organic, n.o.s.	153	2810
Poisonous gas, n.o.s.	123	1955	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone A)	153	2810
Poisonous liquid, corrosive, inorganic, n.o.s.	154	3289	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)	153	2810
Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	154	3289	Poisonous liquid, oxidizing, n.o.s.	142	3122
Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	154	3289			
Poisonous liquid, corrosive, n.o.s.	154	2927			
Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)	154	2927			
Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)	154	2927			
Poisonous liquid, flammable, n.o.s.	119	1953			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	142	3122	Poisonous solid, self-heating, n.o.s.	136	3124
Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	142	3122	Poisonous solid, water-reactive, n.o.s.	139	3125
Poisonous liquid, water-reactive, n.o.s.	139	3123	Poisonous solid, which in contact with water emits flammable gases, n.o.s.	139	3125
Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	139	3123	Polyalkylamines, n.o.s.	132	2733
Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	139	3123	Polyalkylamines, n.o.s.	132	2734
Poisonous liquid, which in contact with water emits flammable gases, n.o.s.	139	3123	Polyalkylamines, n.o.s.	153	2735
Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	139	3123	Polyamines, flammable, corrosive, n.o.s.	132	2733
Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	139	3123	Polyamines, liquid, corrosive, flammable, n.o.s.	132	2734
Poisonous solid, corrosive, inorganic, n.o.s.	154	3290	Polyamines, liquid, corrosive, n.o.s.	153	2735
Poisonous solid, corrosive, n.o.s.	154	2928	Polyamines, solid, corrosive, n.o.s.	154	3259
Poisonous solid, flammable, n.o.s.	134	2930	Polychlorinated biphenyls	171	2315
Poisonous solid, flammable, organic, n.o.s.	134	2930	Polychlorinated biphenyls, liquid	171	2315
Poisonous solid, inorganic, n.o.s.	151	3288	Polychlorinated biphenyls, solid	171	2315
Poisonous solid, n.o.s.	154	2811	Polyester resin kit	146	2255
Poisonous solid, organic, n.o.s.	154	2811	Polyester resin kit	127	3269
Poisonous solid, oxidizing, n.o.s.	141	3086	Polyhalogenated biphenyls, liquid	171	3151
			Polyhalogenated biphenyls, solid	171	3152
			Polyhalogenated terphenyls, liquid	171	3151
			Polyhalogenated terphenyls, solid	171	3152
			Polymeric beads, expandable	133	2211
			Polymerizable material, stabilized with dry ice	171P	--
			Polystyrene beads, expandable	133	2211
			Potassium	138	2257

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Potassium, metal	138	2257	Potassium metavanadate	151	2864
Potassium, metal alloys	138	1420	Potassium monoxide	154	2033
Potassium, metal liquid alloy	138	1420	Potassium nitrate	140	1486
Potassium arsenate	151	1677	Potassium nitrate and Sodium nitrate mixture	140	1499
Potassium arsenite	154	1678	Potassium nitrate and Sodium nitrite mixture	140	1487
Potassium bifluoride	154	1811	Potassium nitrite	140	1488
Potassium bisulfite solution	154	2693	Potassium perchlorate	140	1489
Potassium bisulphite solution	154	2693	Potassium permanganate	140	1490
Potassium borohydride	138	1870	Potassium peroxide	144	1491
Potassium bromate	140	1484	Potassium persulfate	140	1492
Potassium chlorate	140	1485	Potassium persulphate	140	1492
Potassium chlorate, aqueous solution	140	2427	Potassium phosphide	139	2012
Potassium chlorate, solution	140	2427	Potassium selenate	151	2630
Potassium chromate	171	9142	Potassium selenite	151	2630
Potassium cuprocyanide	157	1679	Potassium silicofluoride	151	2655
Potassium cyanide	157	1680	Potassium sodium alloys	138	1422
Potassium dichloro-s-triazinetriene, dry	140	2465	Potassium sulfide, anhydrous	135	1382
Potassium dithionite	135	1929	Potassium sulfide, hydrated, with not less than 30% water of crystallization	153	1847
Potassium fluoride	154	1812	Potassium sulfide, hydrated, with not less than 30% water of hydration	153	1847
Potassium fluoroacetate	151	2628	Potassium sulfide, with less than 30% water of crystallization	135	1382
Potassium fluorosilicate	151	2655	Potassium sulfide, with less than 30% water of hydration	135	1382
Potassium hydrogendifluoride	154	1811	Potassium sulphide, anhydrous	135	1382
Potassium hydrogen fluoride, solution	154	1811	Potassium sulphide, hydrated, with not less than 30% water of crystallization	153	1847
Potassium hydrogen sulfate	154	2509	Potassium sulphide, hydrated, with not less than 30% water of hydration	153	1847
Potassium hydrogen sulphate	154	2509	Potassium sulphide, with not less than 30% water of hydration	135	1382
Potassium hydrosulfite	135	1929	Potassium sulphide, hydrated, with not less than 30% water of crystallization	153	1847
Potassium hydrosulphite	135	1929	Potassium sulphide, hydrated, with not less than 30% water of hydration	153	1847
Potassium hydroxide, dry, solid	154	1813			
Potassium hydroxide, flake	154	1813			
Potassium hydroxide, solid	154	1813			
Potassium hydroxide, solution	154	1814			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Potassium sulphide, with less than 30% water of crystallization	135	1382	Propylene	115	1075
Potassium sulphide, with less than 30% water of hydration	135	1382	Propylene	115	1077
Potassium superoxide	143	2466	Propylene, Ethylene and Acetylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene	116	3138
Printing ink, flammable	129	1210	Propylene chlorohydrin	131	2611
Printing ink related material	129	1210	1,2-Propylenediamine	132	2258
Propadiene, inhibited	116P	2200	1,3-Propylenediamine	132	2258
Propadiene and Methylacetylene mixture, stabilized	116P	1060	Propylene dichloride	130	1279
Propane	115	1075	Propyleneimine, inhibited	131P	1921
Propane	115	1978	Propylene oxide	127P	1280
Propane-Ethane mixture, refrigerated liquid	115	1961	Propylene oxide and Ethylene oxide mixture, with not more than 30% Ethylene oxide	129P	2983
Propane mixture	115	1075	Propylene tetramer	128	2850
Propane mixture	115	1978	Propyl formates	129	1281
Propanethiols	130	2402	n-Propyl isocyanate	155	2482
n-Propanol	129	1274	Propyl mercaptan	130	2402
Propargyl alcohol	131	1986	n-Propyl nitrate	131	1865
Propionaldehyde	129	1275	Propyltrichlorosilane	155	1816
Propionic acid	132	1848	Pyrethroid pesticide, liquid, flammable, poisonous	131	3350
Propionic anhydride	156	2496	Pyrethroid pesticide, liquid, flammable, toxic	131	3350
Propionitrile	131	2404	Pyrethroid pesticide, liquid, poisonous	151	3352
Propionyl chloride	132	1815	Pyrethroid pesticide, liquid, poisonous, flammable	131	3351
Propionyl peroxide	148	2132	Pyrethroid pesticide, liquid, toxic	151	3352
n-Propyl acetate	129	1276	Pyrethroid pesticide, liquid, toxic, flammable	131	3351
normal Propyl alcohol	129	1274	Pyrethroid pesticide, solid, poisonous	151	3349
Propyl alcohol, normal	129	1274			
Propylamine	132	1277			
n-Propyl benzene	127	2364			
Propyl chloride	129	1278			
n-Propyl chloroformate	155	2740			

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Pyrethroid pesticide, solid, toxic	151	3349	Radioactive material, excepted package, articles manufactured from depleted Uranium	161	2910
Pyridine	129	1282	Radioactive material, excepted package, articles manufactured from natural Thorium	161	2909
Pyrophoric alloy, n.o.s.	135	1383	Radioactive material, excepted package, articles manufactured from natural Thorium	161	2910
Pyrophoric liquid, inorganic, n.o.s.	135	3194	Radioactive material, excepted package, articles manufactured from natural Thorium	161	2910
Pyrophoric liquid, n.o.s.	135	2845	Radioactive material, excepted package, articles manufactured from natural Uranium	161	2909
Pyrophoric liquid, organic, n.o.s.	135	2845	Radioactive material, excepted package, articles manufactured from natural Uranium	161	2910
Pyrophoric metal, n.o.s.	135	1383	Radioactive material, excepted package, articles manufactured from natural Uranium	161	2908
Pyrophoric organometallic compound, n.o.s.	135	3203	Radioactive material, excepted package, empty packaging	161	2910
Pyrophoric organometallic compound, water-reactive, n.o.s.	135	3203	Radioactive material, excepted package, empty packaging	161	2910
Pyrophoric solid, inorganic, n.o.s.	135	3200	Radioactive material, excepted package, instruments or articles	161	2910
Pyrophoric solid, n.o.s.	135	2846	Radioactive material, excepted package, instruments or articles	161	2911
Pyrophoric solid, organic, n.o.s.	135	2846	Radioactive material, excepted package, limited quantity of material	161	2910
Pyrosulfuryl chloride	137	1817	Radioactive material, fissile, n.o.s.	165	2918
Pyrosulphuryl chloride	137	1817	Radioactive material, instruments or articles	161	2911
Pyroxylin plastic, rod, sheet, roll, tube or scrap	133	1325	Radioactive material, limited quantity, n.o.s.	161	2910
Pyrrolidine	132	1922	Radioactive material, low specific activity (LSA), n.o.s.	162	2912
Quinoline	154	2656	Radioactive material, low specific activity (LSA-I)	162	2912
Radioactive material, articles manufactured from depleted Uranium	161	2909			
Radioactive material, articles manufactured from natural Thorium	161	2909			
Radioactive material, articles manufactured from natural Uranium	161	2909			
Radioactive material, empty packages	161	2908			
Radioactive material, excepted package, articles manufactured from depleted Uranium	161	2909			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Radioactive material, low specific activity (LSA-II)	162	3321	Radioactive material, Type B(M) package	163	2917
Radioactive material, low specific activity (LSA-II), fissile	165	3324	Radioactive material, Type B(M) package, fissile	165	3329
Radioactive material, low specific activity (LSA-III)	162	3322	Radioactive material, Type B(U) package	163	2916
Radioactive material, low specific activity (LSA-III), fissile	165	3325	Radioactive material, Type B(U) package, fissile	165	3328
Radioactive material, n.o.s.	163	2982	Radioactive material, Type C package	163	3323
Radioactive material, special form, n.o.s.	164	2974	Radioactive material, Type C package, fissile	165	3330
Radioactive material, surface contaminated objects (SCO)	162	2913	Radioactive material, Uranium hexafluoride, fissile	166	2977
Radioactive material, surface contaminated objects (SCO-I)	162	2913	Radioactive material, Uranium hexafluoride, non-fissile or fissile-excepted	166	2978
Radioactive material, surface contaminated objects (SCO-I), fissile	165	3326	Rags, oily	133	1856
Radioactive material, surface contaminated objects (SCO-II)	162	2913	Rare gases and Nitrogen mixture	121	1981
Radioactive material, surface contaminated objects (SCO-II), fissile	165	3326	Rare gases and Nitrogen mixture, compressed	121	1981
Radioactive material, transported under special arrangement	163	2919	Rare gases and Oxygen mixture	122	1980
Radioactive material, transported under special arrangement, fissile	165	3331	Rare gases and Oxygen mixture, compressed	122	1980
Radioactive material, Type A package	163	2915	Rare gases mixture	121	1979
Radioactive material, Type A package, fissile	165	3327	Rare gases mixture, compressed	121	1979
Radioactive material, Type A package, special form	164	3332	Receptacles, small, containing gas	115	2037
Radioactive material, Type A package, special form, fissile	165	3333	Red phosphorus	133	1338
			Red phosphorus, amorphous	133	1338
			Refrigerant gas, n.o.s.	126	1078
			Refrigerant gas, n.o.s. (flammable)	115	1954
			Refrigerant gas R-12	126	1028
			Refrigerant gas R-12 and Refrigerant gas R-152a azeotropic mixture with 74% Refrigerant gas R-12	126	2602

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Refrigerant gas R-12B1	126	1974	Refrigerant gas R-227	126	3296
Refrigerant gas R-13	126	1022	Refrigerant gas R-404A	126	3337
Refrigerant gas R-13 and Refrigerant gas R-23 azeotropic mixture with 60% Refrigerant gas R-13	126	2599	Refrigerant gas R-407A	126	3338
Refrigerant gas R-13B1	126	1009	Refrigerant gas R-407B	126	3339
Refrigerant gas R-14, compressed	126	1982	Refrigerant gas R-407C	126	3340
Refrigerant gas R-21	126	1029	Refrigerant gas R-500 (azeotropic mixture of Refrigerant gas R-12 and Refrigerant gas R-152a with approximately 74% Refrigerant gas R-12)	126	2602
Refrigerant gas R-22	126	1018	Refrigerant gas R-502	126	1973
Refrigerant gas R-23	126	1984	Refrigerant gas R-503 (azeotropic mixture of Refrigerant gas R-13 and Refrigerant gas R-23 with approximately 60% Refrigerant gas R-13)	126	2599
Refrigerant gas R-23 and Refrigerant gas R-13 azeotropic mixture with 60% Refrigerant gas R-13	126	2599	Refrigerant gas R-1216	126	1858
Refrigerant gas R-32	115	3252	Refrigerant gas R-1132a	116P	1959
Refrigerant gas R-40	115	1063	Refrigerant gas R-1318	126	2422
Refrigerant gas R-41	115	2454	Refrigerant gas RC-318	126	1976
Refrigerant gas R-114	126	1958	Refrigerating machine	128	1993
Refrigerant gas R-115	126	1020	Refrigerating machines	115	8023
Refrigerant gas R-116, compressed	126	2193	Refrigerating machines, containing Ammonia solutions (UN2073)	126	2857
Refrigerant gas R-124	126	1021	Refrigerating machines, containing Ammonia solutions (UN2672)	126	2857
Refrigerant gas R-125	126	3220	Refrigerating machines, containing flammable, liquefied gas	115	1954
Refrigerant gas R-133a	126	1983	Refrigerating machines, containing flammable, non-poisonous, non-corrosive, liquefied gas	115	1954
Refrigerant gas R-134a	126	3159			
Refrigerant gas R-143a	115	2035			
Refrigerant gas R-142b	115	2517			
Refrigerant gas R-152a	115	1030			
Refrigerant gas R-152a and Refrigerant gas R-12 azeotropic mixture with 74% Refrigerant gas R-12	126	2602			
Refrigerant gas R-161	115	2453			
Refrigerant gas R-218	126	2424			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Refrigerating machines, containing flammable, non-toxic, liquefied gas	115	3358	Seat-belt pre-tensioners	171	3268
Refrigerating machines, containing non-flammable, liquefied gas	126	2857	Seat-belt pre-tensioners, compressed gas	126	3353
Refrigerating machines, containing non-flammable, non-poisonous, liquefied gas	126	2857	Seat-belt pre-tensioners, pyrotechnic	171	3268
Refrigerating machines, containing non-flammable, non-poisonous, non-corrosive, liquefied gas	126	2857	Seed cake, with more than 1.5% oil and not more than 11% moisture	135	1386
Refrigerating machines, containing non-flammable, non-poisonous, non-corrosive, liquefied gas	126	2857	Seed cake, with not more than 1.5% oil and not more than 11% moisture	135	2217
Refrigerating machines, containing non-flammable, non-toxic, liquefied gas	126	2857	Selenates	151	2630
Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	126	2857	Selenic acid	154	1905
Regulated medical waste, n.o.s.	158	3291	Selenites	151	2630
Regulated medical waste	158	9275	Selenium compound, n.o.s.	151	3283
Resin solution	127	1866	Selenium disulfide	153	2657
Resorcinol	153	2876	Selenium disulphide	153	2657
Rosin oil	127	1286	Selenium hexafluoride	125	2194
Rubber scrap, powdered or granulated	133	1345	Selenium oxide	154	2811
Rubber shoddy, powdered or granulated	133	1345	Selenium oxychloride	157	2879
Rubber solution	127	1287	Selenium powder	152	2658
Rubidium	138	1423	Self-heating liquid, corrosive, inorganic, n.o.s.	136	3188
Rubidium hydroxide	154	2678	Self-heating liquid, corrosive, organic, n.o.s.	136	3185
Rubidium hydroxide, solid	154	2678	Self-heating liquid, inorganic, n.o.s.	135	3186
Rubidium hydroxide, solution	154	2677	Self-heating liquid, organic, n.o.s.	135	3183
Rubidium metal	138	1423	Self-heating liquid, poisonous, inorganic, n.o.s.	136	3187
SA	119	2188	Self-heating liquid, poisonous, organic, n.o.s.	136	3184
Sarin	153	2810	Self-heating liquid, toxic, inorganic, n.o.s.	136	3187
Seat-belt modules	171	3268	Self-heating liquid, toxic, organic, n.o.s.	136	3184

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Self-heating metal powders, n.o.s.	135	3189	Self-reactive liquid type B, temperature controlled	150	3231
Self-heating solid, corrosive, inorganic, n.o.s.	136	3192	Self-reactive liquid type C	149	3223
Self-heating solid, corrosive, organic, n.o.s.	136	3126	Self-reactive liquid type C, temperature controlled	150	3233
Self-heating solid, inorganic, n.o.s.	135	3190	Self-reactive liquid type D	149	3225
Self-heating solid, inorganic, poisonous, n.o.s.	136	3191	Self-reactive liquid type D, temperature controlled	150	3235
Self-heating solid, inorganic, toxic, n.o.s.	136	3191	Self-reactive liquid type E	149	3227
Self-heating solid, organic, n.o.s.	135	3088	Self-reactive liquid type E, temperature controlled	150	3237
Self-heating solid, organic, poisonous, n.o.s.	136	3128	Self-reactive liquid type F	149	3229
Self-heating solid, organic, toxic, n.o.s.	136	3128	Self-reactive liquid type F, temperature controlled	150	3239
Self-heating solid, oxidizing, n.o.s.	135	3127	Self-reactive solid type B	149	3222
Self-heating solid, poisonous, inorganic, n.o.s.	136	3191	Self-reactive solid type B, temperature controlled	150	3232
Self-heating solid, poisonous, organic, n.o.s.	136	3128	Self-reactive solid type C	149	3224
Self-heating solid, toxic, inorganic, n.o.s.	136	3191	Self-reactive solid type C, temperature controlled	150	3234
Self-heating solid, toxic, organic, n.o.s.	136	3128	Self-reactive solid type D	149	3226
Self-heating substance, solid, corrosive, n.o.s.	136	3126	Self-reactive solid type D, temperature controlled	150	3236
Self-heating substances, solid, n.o.s.	135	3088	Self-reactive solid type E	149	3228
Self-heating substances, solid, oxidizing, n.o.s.	135	3127	Self-reactive solid type E, temperature controlled	150	3238
Self-heating substances, solid, poisonous, n.o.s.	136	3128	Self-reactive solid type F	149	3230
Self-heating substances, solid, toxic, n.o.s.	136	3128	Self-reactive solid type F, temperature controlled	150	3240
Self-reactive liquid type B	149	3221	Self-reactive substances, samples, n.o.s.	149	3031
			Self-reactive substances, trial quantities, n.o.s.	149	3032
			Shale oil	128	1288
			Silane	116	2203
			Silicofluorides, n.o.s.	151	2856

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Silane, compressed	116	2203	Sodium bisulphate, solution	154	2837
Silicon powder, amorphous	170	1346	Sodium borohydride	138	1426
Silicon tetrachloride	157	1818	Sodium borohydride and Sodium hydroxide solution, with not more than 12% Sodium borohydride and not more than 40% Sodium hydroxide	157	3320
Silicon tetrafluoride	125	1859			
Silicon tetrafluoride, compressed	125	1859			
Silver arsenite	151	1683	Sodium bromate	141	1494
Silver cyanide	151	1684	Sodium cacodylate	152	1688
Silver nitrate	140	1493	Sodium chlorate	140	1495
Silver picrate, wetted with not less than 30% water	113	1347	Sodium chlorate, aqueous solution	140	2428
Sludge acid	153	1906	Sodium chlorite	143	1496
Smokeless powder for small arms	133	1325	Sodium chlorite, solution, with more than 5% available Chlorine	154	1908
Smokeless powder for small arms	133	3178	Sodium chloroacetate	151	2659
Soda lime, with more than 4% Sodium hydroxide	154	1907	Sodium chromate	171	9145
Sodium	138	1428	Sodium cuprocyanide, solid	157	2316
Sodium aluminate, solid	154	2812	Sodium cuprocyanide, solution	157	2317
Sodium aluminate, solution	154	1819	Sodium cyanide	157	1689
Sodium aluminum hydride	138	2835	Sodium 2-diazo-1-naphthol-4-sulfonate	149	3040
Sodium ammonium vanadate	154	2863	Sodium 2-diazo-1-naphthol-4-sulphonate	149	3040
Sodium arsanilate	154	2473	Sodium 2-diazo-1-naphthol-5-sulfonate	149	3041
Sodium arsenate	151	1685	Sodium 2-diazo-1-naphthol-5-sulphonate	149	3041
Sodium arsenite, aqueous solution	154	1686	Sodium dichloroisocyanurate	140	2465
Sodium arsenite, solid	151	2027	Sodium dichloro-s-triazinetrione	140	2465
Sodium azide	153	1687	Sodium dinitro-o-cresolate, wetted with not less than 15% water	113	1348
Sodium bifluoride, solid	154	2439	Sodium dinitro-ortho-cresolate, wetted	113	1348
Sodium bifluoride, solution	154	2439	Sodium dithionite	135	1384
Sodium bisulfate, solid	154	1821			
Sodium bisulfate, solution	154	2837			
Sodium bisulphate, solid	154	1821			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Sodium dodecylbenzenesulfonate (branched chain)	171	9146	Sodium hydrosulphide, solution	154	2922
Sodium dodecylbenzenesulphonate (branched chain)	171	9146	Sodium hydrosulphide, with less than 25% water of crystallization	135	2318
Sodium fluoride	154	1690	Sodium hydrosulphide, with not less than 25% water of crystallization	154	2949
Sodium fluoride, solid	154	1690	Sodium hydrosulphite	135	1384
Sodium fluoride, solution	154	1690	Sodium hydroxide, dry	154	1823
Sodium fluoroacetate	151	2629	Sodium hydroxide, bead	154	1823
Sodium fluorosilicate	154	2674	Sodium hydroxide, flake	154	1823
Sodium hydride	138	1427	Sodium hydroxide, granular	154	1823
Sodium hydrogendifluoride	154	2439	Sodium hydroxide, solid	154	1823
Sodium hydrogen fluoride	154	2439	Sodium hydroxide, solution	154	1824
Sodium hydrogen sulfate, solid	154	1821	Sodium methylate	138	1431
Sodium hydrogen sulfate, solution	154	2837	Sodium methylate, alcohol mixture	132	1289
Sodium hydrogen sulphate, solid	154	1821	Sodium methylate, dry	138	1431
Sodium hydrogen sulphate, solution	154	2837	Sodium methylate, solution in alcohol	132	1289
Sodium hydrosulfide, solid	154	2923	Sodium monoxide	157	1825
Sodium hydrosulfide, solid, with less than 25% water of crystallization	135	2318	Sodium nitrate	140	1498
Sodium hydrosulfide, solution	154	2922	Sodium nitrate and Potassium nitrate mixture	140	1499
Sodium hydrosulfide, with less than 25% water of crystallization	135	2318	Sodium nitrite	140	1500
Sodium hydrosulfide, with not less than 25% water of crystallization	154	2949	Sodium nitrite and Potassium nitrate mixtures	140	1487
Sodium hydrosulfite	135	1384	Sodium nitrite mixture	140	1487
Sodium hydrosulphide, solid	154	2923	Sodium pentachlorophenate	154	2567
Sodium hydrosulphide, solid, with less than 25% water of crystallization	135	2318	Sodium percarbonates	140	2467
			Sodium perchlorate	140	1502
			Sodium permanganate	140	1503
			Sodium peroxide	144	1504
			Sodium peroxoborate, anhydrous	140	3247

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Sodium persulfate	140	1505	Stannic phosphides	139	1433
Sodium persulphate	140	1505	Stannous chloride, solid	154	1759
Sodium phenolate, solid	153	2497	Steel swarf	170	2793
Sodium phosphate, dibasic	171	9147	Stibine	119	2676
Sodium phosphate, tribasic	171	9148	Straw, wet, damp or contaminated with oil	133	1327
Sodium phosphide	139	1432	Strontium arsenite	151	1691
Sodium picramate, wetted with not less than 20% water	113	1349	Strontium chlorate	143	1506
Sodium potassium alloys	138	1422	Strontium chlorate, solid	143	1506
Sodium selenite	151	2630	Strontium chlorate, solution	143	1506
Sodium silicofluoride	154	2674	Strontium chromate	171	9149
Sodium sulfide, anhydrous	135	1385	Strontium nitrate	140	1507
Sodium sulfide, hydrated, with not less than 30% water	153	1849	Strontium perchlorate	140	1508
Sodium sulfide, with less than 30% water of crystallization	135	1385	Strontium peroxide	143	1509
Sodium sulphide, anhydrous	135	1385	Strontium phosphide	139	2013
Sodium sulphide, hydrated, with not less than 30% water	153	1849	Strychnine	151	1692
Sodium sulphide, with less than 30% water of crystallization	135	1385	Strychnine salts	151	1692
Sodium superoxide	143	2547	Styrene monomer, inhibited	128P	2055
Solids containing corrosive liquid, n.o.s.	154	3244	Substances, which in contact with water emit flammable gases, liquid, corrosive, n.o.s.	138	3129
Solids containing flammable liquid, n.o.s.	133	3175	Substances, which in contact with water emit flammable gases, liquid, n.o.s.	138	3148
Solids containing poisonous liquid, n.o.s.	151	3243	Substances, which in contact with water emit flammable gases, liquid, poisonous, n.o.s.	139	3130
Solids containing toxic liquid, n.o.s.	151	3243	Substances, which in contact with water emit flammable gases, liquid, toxic, n.o.s.	139	3130
Soman	153	2810	Substances, which in contact with water emit flammable gases, solid, corrosive, n.o.s.	138	3131
Spirits of Nitroglycerin, not exceeding 1% Nitroglycerin	127	1204	Substances, which in contact with water emit flammable gases, solid, flammable, n.o.s.	138	3132
Stannic chloride, anhydrous	137	1827			
Stannic chloride, pentahydrate	154	2440			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Substances, which in contact with water emit flammable gases, solid, n.o.s.	138	2813	Sulfur	133	1350
Substances, which in contact with water emit flammable gases, solid, oxidizing, n.o.s.	138	3133	Sulfur, molten	133	2448
Substances, which in contact with water emit flammable gases, solid, poisonous, n.o.s.	139	3134	Sulfur chlorides	137	1828
Substances, which in contact with water emit flammable gases, solid, self-heating, n.o.s.	138	3135	Sulfur dioxide	125	1079
Substituted nitrophenol pesticide, liquid, flammable, poisonous	131	2780	Sulfur dioxide, liquefied	125	1079
Substituted nitrophenol pesticide, liquid, flammable, toxic	131	2780	Sulfur hexafluoride	126	1080
Substituted nitrophenol pesticide, liquid, poisonous, flammable	131	3013	Sulfuric acid	137	1830
Substituted nitrophenol pesticide, liquid, toxic	153	3014	Sulfuric acid, fuming	137	1831
Substituted nitrophenol pesticide, liquid, toxic, flammable	131	3013	Sulfuric acid, fuming, with less than 30% free Sulfur trioxide	137	1831
Substituted nitrophenol pesticide, solid, poisonous	153	2779	Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide	137	1831
Substituted nitrophenol pesticide, solid, toxic	153	2779	Sulfuric acid, spent	137	1832
Succinic acid peroxide	146	2135	Sulfuric acid, with more than 51% acid	137	1830
Sulfamic acid	154	2967	Sulfuric acid, with not more than 51% acid	157	2796
			Sulfuric acid and Hydrofluoric acid mixtures	157	1786
			Sulfurous acid	154	1833
			Sulfur tetrafluoride	125	2418
			Sulfur trioxide	137	1829
			Sulfur trioxide, inhibited	137	1829
			Sulfur trioxide, stabilized	137	1829
			Sulfur trioxide, uninhibited	137	1829
			Sulfur trioxide and Chlorosulfonic acid mixture	137	1754
			Sulfuryl chloride	137	1834
			Sulfuryl fluoride	123	2191
			Sulphamic acid	154	2967
			Sulphur	133	1350
			Sulphur, molten	133	2448
			Sulphur chlorides	137	1828
			Sulphur dioxide	125	1079

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Sulphur dioxide, liquefied	125	1079	Tear gas substance, solid, n.o.s.	159	1693
Sulphur hexafluoride	126	1080	Tellurium compound, n.o.s.	151	3284
Sulphuric acid	137	1830	Tellurium hexafluoride	125	2195
Sulphuric acid, fuming	137	1831	Terpene hydrocarbons, n.o.s.	128	2319
Sulphuric acid, fuming, with less than 30% free Sulphur trioxide	137	1831	Terpinolene	128	2541
Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide	137	1831	Tetrabromoethane	159	2504
Sulphuric acid, spent	137	1832	1,1,2,2-Tetrachloroethane	151	1702
Sulphuric acid, with more than 51% acid	137	1830	Tetrachloroethane	151	1702
Sulphuric acid, with not more than 51% acid	157	2796	Tetrachloroethylene	160	1897
Sulphuric acid and Hydrofluoric acid mixtures	157	1786	Tetraethyl dithiopyrophosphate	153	1704
Sulphurous acid	154	1833	Tetraethyl dithiopyrophosphate, mixture, dry or liquid	153	1704
Sulphur tetrafluoride	125	2418	Tetraethyl dithiopyrophosphate and gases, in solution	123	1703
Sulphur trioxide	137	1829	Tetraethyl dithiopyrophosphate and gases, mixtures	123	1703
Sulphur trioxide, inhibited	137	1829	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 more than 200 ppm but not more than 5000 ppm)	123	1703
Sulphur trioxide, stabilized	137	1829	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 not more than 200 ppm)	123	1703
Sulphur trioxide, uninhibited	137	1829	Tetraethylenepentamine	153	2320
Sulphur trioxide and Chlorosulphonic acid mixture	137	1754	Tetraethyl lead, liquid	131	1649
Sulphuryl chloride	137	1834	Tetraethyl pyrophosphate, liquid	152	2783
Sulphuryl fluoride	123	2191	Tetraethyl pyrophosphate, liquid	152	3018
Tabun	153	2810	Tetraethyl pyrophosphate, solid	152	2783
Tars, liquid	130	1999	Tetraethyl pyrophosphate and compressed gas mixtures	123	1705
TDE (1,1-Dichloro-2,2-bis (p-chlorophenyl)ethane)	151	2761	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 more than 200 ppm but not more than 5000 ppm)	123	1705
Tear gas candles	159	1700			
Tear gas devices	159	1693			
Tear gas grenades	159	1700			
Tear gas substance, liquid, n.o.s.	159	1693			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Tetraethyl pyrophosphate and compressed gas mixtures (LC50 not more than 200 ppm)	123	1705	Thallium compound, n.o.s.	151	1707
Tetraethyl pyrophosphate mixture, dry	152	2783	Thallium nitrate	141	2727
Tetraethyl silicate	132	1292	Thallium sulfate, solid	151	1707
1,1,1,2-Tetrafluoroethane	126	3159	Thallium sulphate, solid	151	1707
Tetrafluoroethane and Ethylene oxide mixture, with not more than 5.6% Ethylene oxide	126	3299	4-Thiapentanal	152	2785
Tetrafluoroethylene, inhibited	116P	1081	Thia-4-pentanal	152	2785
Tetrafluoromethane	126	1982	Thickened GD	153	2810
Tetrafluoromethane, compressed	126	1982	Thioacetic acid	129	2436
1,2,3,6-Tetrahydrobenzaldehyde	132	2498	Thiocarbamate pesticide, liquid, flammable, poisonous	131	2772
Tetrahydrofuran	127	2056	Thiocarbamate pesticide, liquid, flammable, toxic	131	2772
Tetrahydrofurfurylamine	129	2943	Thiocarbamate pesticide, liquid, poisonous	151	3006
Tetrahydrophthalic anhydrides	156	2698	Thiocarbamate pesticide, liquid, poisonous, flammable	131	3005
1,2,3,6-Tetrahydropyridine	129	2410	Thiocarbamate pesticide, liquid, toxic	151	3006
1,2,5,6-Tetrahydropyridine	129	2410	Thiocarbamate pesticide, liquid, toxic, flammable	131	3005
Tetrahydrothiophene	129	2412	Thiocarbamate pesticide, solid, poisonous	151	2771
Tetralin hydroperoxide	145	2136	Thiocarbamate pesticide, solid, toxic	151	2771
Tetramethylammonium hydroxide	153	1835	Thioglycol	153	2966
1,1,3,3-Tetramethylbutyl hydroperoxide	145	2160	Thioglycolic acid	153	1940
1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate	148	2161	Thiolactic acid	153	2936
Tetramethylmethylenediamine	132	9069	Thionyl chloride	137	1836
Tetramethylsilane	130	2749	Thiophene	130	2414
Tetranitromethane	143	1510	Thiophosgene	157	2474
Tetrapropyl orthotitanate	128	2413	Thiophosphoryl chloride	157	1837
Textile treating compound or mixture, liquid (corrosive)	154	1760	Thiourea dioxide	135	3341
Thallium chlorate	141	2573	Thiram	151	2771
			Thorium metal, pyrophoric	162	2975
			Thorium nitrate, solid	162	2976

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Tinctures, medicinal	127	1293	Toluene sulfonic acid, solid, with more than 5% free Sulfuric acid	153	2583
Tin tetrachloride	137	1827	Toluene sulfonic acid, solid, with not more than 5% free Sulfuric acid	153	2585
Tin tetrachloride, pentahydrate	154	2440	Toluene sulphonic acid, liquid, with more than 5% free Sulphuric acid	153	2584
Titanium disulfide	135	3174	Toluene sulphonic acid, liquid, with not more than 5% free Sulphuric acid	153	2586
Titanium disulphide	135	3174	Toluene sulphonic acid, solid, with more than 5% free Sulphuric acid	153	2583
Titanium hydride	170	1871	Toluene sulphonic acid, solid, with not more than 5% free Sulphuric acid	153	2585
Titanium powder, dry	135	2546	Toluidines	153	1708
Titanium powder, wetted with not less than 25% water	170	1352	Toluidines, liquid	153	1708
Titanium sponge granules	170	2878	Toluidines, solid	153	1708
Titanium sponge powders	170	2878	2,4-Toluylenediamine	151	1709
Titanium sulfate, solution	154	1760	Toxaphene	151	2761
Titanium sulphate, solution	154	1760	Toxic liquid, corrosive, inorganic, n.o.s.	154	3289
Titanium tetrachloride	137	1838	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	154	3289
Titanium tetrachloride and Vanadium oxytrichloride, mixture	137	2443	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	154	3289
Titanium trichloride, pyrophoric	135	2441	Toxic liquid, corrosive, organic, n.o.s.	154	2927
Titanium trichloride mixture	157	2869	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)	154	2927
Titanium trichloride mixture, pyrophoric	135	2441	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone B)	154	2927
TNT, wetted with not less than 30% water	113	1356			
Toe puffs, nitrocellulose base	133	1353			
Toluene	130	1294			
2,4-Toluenediamine	151	1709			
Toluenediamine	151	1709			
Toluene diisocyanate	156	2078			
Toluene sulfonic acid, liquid, with more than 5% free Sulfuric acid	153	2584			
Toluene sulfonic acid, liquid, with not more than 5% free Sulfuric acid	153	2586			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Toxic liquid, flammable, n.o.s.	131	2929	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	139	3123
Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	131	2929	Toxic liquid, which in contact with water emits flammable gases, n.o.s.	139	3123
Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	131	2929	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	139	3123
Toxic liquid, flammable, organic, n.o.s.	131	2929	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	139	3123
Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	131	2929	Toxic solid, corrosive, inorganic, n.o.s.	154	3290
Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	131	2929	Toxic solid, corrosive, organic, n.o.s.	154	2928
Toxic liquid, inorganic, n.o.s.	151	3287	Toxic solid, flammable, n.o.s.	134	2930
Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	151	3287	Toxic solid, flammable, organic, n.o.s.	134	2930
Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	151	3287	Toxic solid, inorganic, n.o.s.	151	3288
Toxic liquid, n.o.s.	153	2810	Toxic solid, n.o.s.	154	2811
Toxic liquid, n.o.s. (Inhalation Hazard Zone A)	153	2810	Toxic solid, organic, n.o.s.	154	2811
Toxic liquid, n.o.s. (Inhalation Hazard Zone B)	153	2810	Toxic solid, oxidizing, n.o.s.	141	3086
Toxic liquid, organic, n.o.s.	153	2810	Toxic solid, self-heating, n.o.s.	136	3124
Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone A)	153	2810	Toxic solid, water-reactive, n.o.s.	139	3125
Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)	153	2810	Toxic solid, which in contact with water emits flammable gases, n.o.s.	139	3125
Toxic liquid, oxidizing, n.o.s.	142	3122	Toxins	153	--
Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	142	3122	Toxins, extracted from living sources, liquid, n.o.s.	153	3172
Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	142	3122	Toxins, extracted from living sources, n.o.s.	153	3172
Toxic liquid, water-reactive, n.o.s.	139	3123	Toxins, extracted from living sources, solid, n.o.s.	153	3172
Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	139	3123			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Triallylamine	132	2610	Trichlorosilane	139	1295
Triallyl borate	156	2609	Trichloro-s-triazinetrione, dry	140	2468
Triazine pesticide, liquid, flammable, poisonous	131	2764	(mono)-(Trichloro)-tetra-(monopotassium dichloro)-penta-s-triazinetrione, dry	140	2468
Triazine pesticide, liquid, flammable, toxic	131	2764	Tricresyl phosphate	151	2574
Triazine pesticide, liquid, poisonous	151	2998	Triethanolamine dodecylbenzenesulfonate	171	9151
Triazine pesticide, liquid, poisonous, flammable	131	2997	Triethanolamine dodecylbenzenesulphonate	171	9151
Triazine pesticide, liquid, toxic	151	2998	Triethylamine	132	1296
Triazine pesticide, liquid, toxic, flammable	131	2997	Triethylenetetramine	153	2259
Triazine pesticide, solid, poisonous	151	2763	Triethyl phosphite	129	2323
Triazine pesticide, solid, toxic	151	2763	Trifluoroacetic acid	154	2699
Tri-(1-aziridinyl)phosphine oxide, solution	152	2501	Trifluoroacetyl chloride	125	3057
Tributylamine	153	2542	Trifluorochloroethylene	119P	1082
Tributylphosphane	135	3254	Trifluorochloroethylene, inhibited	119P	1082
Tributylphosphine	135	3254	1,1,1-Trifluoroethane	115	2035
Trichlorfon	152	2783	Trifluoroethane, compressed	115	2035
Trichloroacetic acid	153	1839	Trifluoromethane	126	1984
Trichloroacetic acid, solution	153	2564	Trifluoromethane, refrigerated liquid	120	3136
Trichloroacetyl chloride	156	2442	Trifluoromethane and Chlorotrifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane	126	2599
Trichlorobenzenes, liquid	153	2321	2-Trifluoromethylaniline	153	2942
Trichlorobutene	152	2322	3-Trifluoromethylaniline	153	2948
1,1,1-Trichloroethane	160	2831	Triisobutylene	128	2324
Trichloroethylene	160	1710	Triisocyanatoisocyanurate of Isophoronediiisocyanate, solution (70%)	127	2906
Trichloroisocyanuric acid, dry	140	2468	Triisopropyl borate	129	2616
Trichlorophenol	153	2020	Trimethoxysilane	132	9269
2,4,5-Trichlorophenoxyacetic acid	152	2765			
2,4,5-Trichlorophenoxypropionic acid	152	2765			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Trimethylacetyl chloride	132	2438	Uranium hexafluoride, low specific activity	166	2978
Trimethylamine, anhydrous	118	1083	Uranium hexafluoride, non-fissile	166	2978
Trimethylamine, aqueous solution	132	1297	Uranium metal, pyrophoric	162	2979
1,3,5-Trimethylbenzene	129	2325	Uranyl acetate	162	9180
Trimethyl borate	129	2416	Uranyl nitrate, hexahydrate, solution	162	2980
Trimethylchlorosilane	155	1298	Uranyl nitrate, solid	162	2981
Trimethylcyclohexylamine	153	2326	Urea hydrogen peroxide	140	1511
Trimethylhexamethylenediamines	153	2327	Urea nitrate, wetted with not less than 20% water	113	1357
Trimethylhexamethylene diisocyanate	156	2328	Urea peroxide	140	1511
Trimethyl phosphite	129	2329	Valeraldehyde	129	2058
Trinitroaniline, wetted	113	9073	Valeryl chloride	132	2502
Trinitrobenzene, wetted with not less than 30% water	113	1354	Vanadium compound, n.o.s.	151	3285
Trinitrobenzoic acid, wetted with not less than 30% water	113	1355	Vanadium oxytrichloride	137	2443
Trinitrophenol, wetted with not less than 30% water	113	1344	Vanadium oxytrichloride and Titanium tetrachloride, mixture	137	2443
Trinitrotoluene, wetted with not less than 30% water	113	1356	Vanadium pentoxide	151	2862
Tripropylamine	132	2260	Vanadium tetrachloride	137	2444
Tripropylene	128	2057	Vanadium trichloride	157	2475
Tris-(1-aziridinyl)phosphine oxide, solution	152	2501	Vanadium trioxide	154	2860
Tris-(2-chloroethyl) amine	153	2810	Vanadyl sulfate	151	2931
Tungsten hexafluoride	125	2196	Vanadyl sulphate	151	2931
Turpentine	128	1299	Vehicle, flammable gas powered	128	3166
Turpentine substitute	128	1300	Vehicle, flammable liquid powered	128	3166
Undecane	128	2330	Vinyl acetate	129P	1301
Uranium hexafluoride, fissile containing more than 1% Uranium-235	166	2977	Vinyl acetate, inhibited	129P	1301
Uranium hexafluoride, fissile-excepted	166	2978	Vinyl bromide, inhibited	116P	1085
			Vinyl butyrate, inhibited	129P	2838
			Vinyl chloride	116P	1086
			Vinyl chloride, inhibited	116P	1086

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Vinyl chloride, stabilized	116P	1086	Waste Type 19	154	9319
Vinyl chloroacetate	155	2589	Waste Type 20	154	9320
Vinyl ethyl ether	127P	1302	Waste Type 21	154	9321
Vinyl ethyl ether, inhibited	127P	1302	Waste Type 22	154	9322
Vinyl fluoride, inhibited	116P	1860	Waste Type 23	154	9323
Vinylidene chloride, inhibited	129P	1303	Waste Type 24	152	9324
Vinyl isobutyl ether	127P	1304	Waste Type 25	127	9325
Vinyl isobutyl ether, inhibited	127P	1304	Waste Type 26	152	9326
Vinyl methyl ether	116P	1087	Waste Type 27	131	9327
Vinyl methyl ether, inhibited	116P	1087	Waste Type 28	131	9328
Vinylpyridines, inhibited	131P	3073	Waste Type 29	153	9329
Vinyltoluenes, inhibited	130P	2618	Waste Type 30	153	9330
Vinyltrichlorosilane	155	1305	Waste Type 31	129	9331
Vinyltrichlorosilane, inhibited	155	1305	Waste Type 32	129	9332
VX	153	2810	Waste Type 33	129	9333
Waste Type 1	153	9301	Waste Type 34	129	9334
Waste Type 2	153	9302	Waste Type 35	153	9335
Waste Type 3	131	9303	Waste Type 36	153	9336
Waste Type 4	153	9304	Waste Type 37	153	9337
Waste Type 5	131	9305	Waste Type 38	153	9338
Waste Type 6	154	9306	Waste Type 39	153	9339
Waste Type 7	154	9307	Waste Type 40	153	9340
Waste Type 8	153	9308	Waste Type 41	132	9341
Waste Type 9	153	9309	Waste Type 42	129	9342
Waste Type 10	153	9310	Waste Type 43	154	9343
Waste Type 11	153	9311	Waste Type 44	132	9344
Waste Type 12	153	9312	Waste Type 45	132	9345
Waste Type 13	153	9313	Waste Type 46	153	9346
Waste Type 14	153	9314	Waste Type 47	132	9347
Waste Type 15	153	9315	Waste Type 48	153	9348
Waste Type 16	154	9316	Waste Type 49	153	9349
Waste Type 17	154	9317	Waste Type 50	153	9350
Waste Type 18	154	9318	Waste Type 51	153	9351

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Waste Type 52	153	9352	Waste Type 85	154	9385
Waste Type 53	153	9353	Waste Type 86	154	9386
Waste Type 54	153	9354	Waste Type 87	154	9387
Waste Type 55	153	9355	Waste Type 88	151	9388
Waste Type 56	153	9356	Waste Type 89	154	9389
Waste Type 57	153	9357	Waste Type 90	154	9390
Waste Type 58	153	9358	Waste Type 91	153	9391
Waste Type 59	151	9359	Waste Type 92	154	9392
Waste Type 60	132	9360	Waste Type 93	153	9393
Waste Type 61	151	9361	Waste Type 94	151	9394
Waste Type 62	151	9362	Waste Type 95	153	9395
Waste Type 63	151	9363	Waste Type 96	151	9396
Waste Type 64	151	9364	Waste Type 97	153	9397
Waste Type 65	151	9365	Waste Type 99	137	9399
Waste Type 66	151	9366	Waste Type 100	137	9400
Waste Type 67	152	9367	Water pump system	126	1956
Waste Type 68	154	9368	Water-reactive liquid, corrosive, n.o.s.	138	3129
Waste Type 69	151	9369	Water-reactive liquid, n.o.s.	138	3148
Waste Type 70	151	9370	Water-reactive liquid, poisonous, n.o.s.	139	3130
Waste Type 71	133	9371	Water-reactive liquid, toxic, n.o.s.	139	3130
Waste Type 72	151	9372	Water-reactive solid, corrosive, n.o.s.	138	3131
Waste Type 73	151	9373	Water-reactive solid, flammable, n.o.s.	138	3132
Waste Type 74	127	9374	Water-reactive solid, n.o.s.	138	2813
Waste Type 75	153	9375	Water-reactive solid, oxidizing, n.o.s.	138	3133
Waste Type 76	153	9376	Water-reactive solid, poisonous, n.o.s.	139	3134
Waste Type 77	131	9377	Water-reactive solid, self-heating, n.o.s.	138	3135
Waste Type 78	153	9378	Water-reactive solid, toxic, n.o.s.	139	3134
Waste Type 79	153	9379			
Waste Type 80	151	9380			
Waste Type 81	154	9381			
Waste Type 82	154	9382			
Waste Type 83	154	9383			
Waste Type 84	151	9384			

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Water-reactive substances, liquid, corrosive, n.o.s.	138	3129	Xylenes	130	1307
Water-reactive substances, liquid, n.o.s.	138	3148	Xylenols	153	2261
Water-reactive substances, liquid, poisonous, n.o.s.	139	3130	Xylidines	153	1711
Water-reactive substances, liquid, toxic, n.o.s.	139	3130	Xylyl bromide	152	1701
Water-reactive substances, solid, corrosive, n.o.s.	138	3131	Yellow phosphorus, dry	136	1381
Water-reactive substances, solid, flammable, n.o.s.	138	3132	Yellow phosphorus, in solution	136	1381
Water-reactive substances, solid, n.o.s.	138	2813	Yellow phosphorus, molten	136	2447
Water-reactive substances, solid, oxidizing, n.o.s.	138	3133	Yellow phosphorus, under water	136	1381
Water-reactive substances, solid, poisonous, n.o.s.	139	3134	Zinc acetate	171	9153
Water-reactive substances, solid, self-heating, n.o.s.	138	3135	Zinc ammonium chloride	171	9154
Water-reactive substances, solid, toxic, n.o.s.	139	3134	Zinc ammonium nitrite	140	1512
Wheelchair, electric, with batteries	154	3171	Zinc arsenate	151	1712
White asbestos	171	2590	Zinc arsenate and Zinc arsenite mixture	151	1712
White phosphorus, dry	136	1381	Zinc arsenite	151	1712
White phosphorus, in solution	136	1381	Zinc arsenite and Zinc arsenate mixture	151	1712
White phosphorus, molten	136	2447	Zinc ashes	138	1435
White phosphorus, under water	136	1381	Zinc bisulfite solution	154	2693
Wood preservatives, liquid	129	1306	Zinc bisulphite solution	154	2693
Wool waste, wet	133	--	Zinc borate	171	9155
Xanthates	135	3342	Zinc bromate	140	2469
Xenon	121	2036	Zinc bromide	171	9156
Xenon, compressed	121	2036	Zinc carbonate	171	9157
Xenon, refrigerated liquid (cryogenic liquid)	120	2591	Zinc chlorate	140	1513
			Zinc chloride, anhydrous	154	2331
			Zinc chloride, solution	154	1840
			Zinc cyanide	151	1713
			Zinc dithionite	171	1931
			Zinc dross	138	1435
			Zinc dust	138	1436
			Zinc fluoride	151	9158
			Zinc fluorosilicate	151	2855

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
Zinc formate	171	9159	Zirconium sulfate	171	9163
Zinc hydrosulfite	171	1931	Zirconium sulphate	171	9163
Zinc hydrosulphite	171	1931	Zirconium suspended in a flammable liquid	170	1308
Zinc nitrate	140	1514	Zirconium suspended in a liquid (flammable)	170	1308
Zinc permanganate	140	1515	Zirconium tetrachloride	137	2503
Zinc peroxide	143	1516			
Zinc phenolsulfonate	171	9160			
Zinc phenolsulphonate	171	9160			
Zinc phosphide	139	1714			
Zinc powder	138	1436			
Zinc residue	138	1435			
Zinc resinate	133	2714			
Zinc selenate	151	2630			
Zinc selenite	151	2630			
Zinc silicofluoride	151	2855			
Zinc skimmings	138	1435			
Zinc sulfate	171	9161			
Zinc sulphate	171	9161			
Zirconium, dry, coiled wire, finished metal sheets or strips	170	2858			
Zirconium, dry, finished sheets, strips or coiled wire	135	2009			
Zirconium hydride	138	1437			
Zirconium metal, liquid, suspension	170	1308			
Zirconium metal, powder, wet	170	1358			
Zirconium nitrate	140	2728			
Zirconium picramate, wetted with not less than 20% water	113	1517			
Zirconium potassium fluoride	171	9162			
Zirconium powder, dry	135	2008			
Zirconium powder, wetted with not less than 25% water	170	1358			
Zirconium scrap	135	1932			

NOTES

GUIDES

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May explode from heat, shock, friction or contamination.
- May react violently or explosively on contact with air, water or foam.
- May be ignited by heat, sparks or flames.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Inhalation, ingestion or contact with substance may cause severe injury, infection, disease or death.
- High concentration of gas may cause asphyxiation without warning.
- Contact may cause burns to skin and eyes.
- Fire or contact with water may produce irritating, toxic and/or corrosive gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations.

EVACUATION**Fire**

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: Material may react with extinguishing agent.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks

- Cool containers with flooding quantities of water until well after fire is out.
- Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills • Dike far ahead of liquid spill for later disposal.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Shower and wash with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **MAY EXPLODE AND THROW FRAGMENTS 1600 meters (1 MILE) OR MORE IF FIRE REACHES CARGO.**
- For information on "Compatibility Group" letters, refer to Glossary section.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 500 meters (1/3 mile) in all directions.
- Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- **Consider initial evacuation for 800 meters (1/2 mile) in all directions.**

Fire

- If rail car or trailer is involved in a fire and heavily encased explosives such as bombs or artillery projectiles are suspected, ISOLATE for 1600 m (1 mile) in all directions; also, initiate evacuation including emergency responders for 1600 m (1 mile) in all directions.
- When heavily encased explosives are not involved, evacuate the area for 800 meters (1/2 mile) in all directions.

* For information on "Compatibility Group" letters, refer to the Glossary section.

EMERGENCY RESPONSE

FIRE

CARGO Fires

- **DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!**
- Stop all traffic and clear the area for at least 1600 meters (1 mile) in all directions and let burn.
- Do not move cargo or vehicle if cargo has been exposed to heat.

TIRE or VEHICLE Fires

- Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 meters (330 feet) OF ELECTRIC DETONATORS.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

* For information on "Compatibility Group" letters, refer to the Glossary section.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Flammable/combustible material.
- May be ignited by heat, sparks or flames.
- **DRIED OUT material may explode if exposed to heat, flame, friction or shock; Treat as an explosive (GUIDE 112).**
- **Keep material wet with water or treat as an explosive (Guide 112).**
- Runoff to sewer may create fire or explosion hazard.

HEALTH

- Some are toxic and may be fatal if inhaled, swallowed or absorbed through skin.
- Contact may cause burns to skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- **Consider initial evacuation for 500 meters (1/3 mile) in all directions.**

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****CARGO Fires**

- **DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!**
- Stop all traffic and clear the area for at least 800 meters (1/2 mile) in all directions and let burn.
- **Do not move cargo or vehicle if cargo has been exposed to heat.**

TIRE or VEHICLE Fires

- **Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.**
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.

Small Spills

- Flush area with flooding quantities of water.

Large Spills

- Wet down with water and dike for later disposal.
- **KEEP "WETTED" PRODUCT WET BY SLOWLY ADDING FLOODING QUANTITIES OF WATER.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **MAY EXPLODE AND THROW FRAGMENTS 500 meters (1/3 MILE) OR MORE IF FIRE REACHES CARGO.**
- For information on "Compatibility Group" letters, refer to Glossary section.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- **Consider initial evacuation for 250 meters (800 feet) in all directions.**

Fire

- If rail car or trailer is involved in a fire, **ISOLATE** for 500 meters (1/3 mile) in all directions; also initiate evacuation including emergency responders for 500 meters (1/3 mile) in all directions.

* For information on "Compatibility Group" letters, refer to the Glossary section.

EMERGENCY RESPONSE**FIRE****CARGO Fires**

- **DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!**
- Stop all traffic and clear the area for at least 500 meters (1/3 mile) in all directions and let burn.
- **Do not move cargo or vehicle if cargo has been exposed to heat.**

TIRE or VEHICLE Fires

- **Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.**
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- **DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 meters (330 feet) OF ELECTRIC DETONATORS.**
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SUPPLEMENTAL INFORMATION

- Packages bearing the 1.4S label or packages containing material classified as 1.4S are designed or packaged in such a manner that when involved in a fire, may burn vigorously with localized detonations and projection of fragments.
- Effects are usually confined to immediate vicinity of packages.
- If fire threatens cargo area containing packages bearing the 1.4S label or packages containing material classified as 1.4S, consider isolating at least 15 meters (50 feet) in all directions. Fight fire with normal precautions from a reasonable distance.

* For information on "Compatibility Group" letters, refer to the Glossary section.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **EXTREMELY FLAMMABLE.**
- Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Some may be irritating if inhaled at high concentrations.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 800 meters (1/2 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray or fog.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- Prevent spreading of vapors through sewers, ventilation systems and confined areas.
- Isolate area until gas has dispersed.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **EXTREMELY FLAMMABLE.**
- Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Silane will ignite spontaneously in air.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Some may be toxic if inhaled at high concentrations.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 800 meters (1/2 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray or fog.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Stop leak if you can do it without risk.
- Do not touch or walk through spilled material.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; Extremely Hazardous.**
- May be fatal if inhaled or absorbed through skin.
- Initial odor may be irritating or foul and may deaden your sense of smell.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- These materials are extremely flammable.
- May form explosive mixtures with air.
- May be ignited by heat, sparks or flames.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Runoff may create fire or explosion hazard.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- Consider igniting spill or leak to eliminate toxic gas concerns.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **EXTREMELY FLAMMABLE.**
- May be ignited by heat, sparks or flames.
- May form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Some of these materials may react violently with water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- May cause toxic effects if inhaled.
- Vapors are extremely irritating.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 800 meters (1/2 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled or absorbed through skin.**
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Flammable; may be ignited by heat, sparks or flames.
- May form explosive mixtures with air.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Some of these materials may react violently with water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.
- Runoff may create fire or explosion hazard.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires

- Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- **FOR CHLOROSILANES, DO NOT USE WATER**; use AFFF alcohol-resistant medium expansion foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- **FOR CHLOROSILANES**, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Vapors may cause dizziness or asphyxiation without warning.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.

FIRE OR EXPLOSION

- **Non-flammable gases.**
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 meters (80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids or solids.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Use extinguishing agent suitable for type of surrounding fire.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Ventilate the area.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Vapors may cause dizziness or asphyxiation without warning.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Contact with liquefied gas may cause frostbite.

FIRE OR EXPLOSION

- **Non-flammable gases.**
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Use extinguishing agent suitable for type of surrounding fire.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Substance does not burn but will support combustion.
- Some may react explosively with fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Runoff may create fire or explosion hazard.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 500 meters (1/3 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Use extinguishing agent suitable for type of surrounding fire.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Isolate area until gas has dispersed.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled or absorbed through skin.**
- Vapors may be irritating.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Some may burn, but none ignite readily.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Do not get water inside containers.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled or absorbed through skin.**
- Fire will produce irritating, corrosive and/or toxic gases.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Substance does not burn but will support combustion.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- These are strong oxidizers and will react vigorously or explosively with many materials including fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Some will react violently with air, moist air and/or water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

Small Fires: Water only; no dry chemical, CO₂ or Halon® .

- Contain fire and let burn. If fire must be fought, water spray or fog is recommended.
- Do not get water inside containers.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled.**
- Vapors are extremely irritating and corrosive.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Some may burn, but none ignite readily.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Some of these materials may react violently with water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Do not get water inside containers.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Some may burn, but none ignite readily.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 500 meters (1/3 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Use extinguishing agent suitable for type of surrounding fire.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- Some of these materials, if spilled, may evaporate leaving a flammable residue.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires

- Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Use water spray or fog; do not use straight streams.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.
- Substance may be transported hot.

HEALTH

- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Use water spray or fog; do not use straight streams.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- May cause toxic effects if inhaled or absorbed through skin.
- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires • Dry chemical, CO₂, water spray or alcohol-resistant foam.

- Do not use dry chemical extinguishers to control fires involving nitromethane or nitroethane.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- May cause toxic effects if inhaled or absorbed through skin.
- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- **Do not use straight streams.**
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills •Dike far ahead of liquid spill for later disposal.

- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled, ingested or absorbed through skin.**
- Inhalation or contact with some of these materials will irritate or burn skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.**
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion and poison hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires • Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Use water spray or fog; do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.

Small Spills • Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Flammable/combustible materials.
- May be ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- May cause toxic effects if inhaled or ingested/swallowed.
- Contact with substance may cause severe burns to skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION

Large Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Some of these materials may react violently with water.

Small Fires • Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Do not get water inside containers.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
 - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
 - All equipment used when handling the product must be grounded.
 - Do not touch or walk through spilled material.
 - Stop leak if you can do it without risk.
 - Prevent entry into waterways, sewers, basements or confined areas.
 - A vapor suppressing foam may be used to reduce vapors.
 - Absorb with earth, sand or other non-combustible material and transfer to containers (except for Hydrazine).
 - Use clean non-sparking tools to collect absorbed material.
- Large Spills** • Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Flammable/combustible material.
- May be ignited by friction, heat, sparks or flames.
- Some may burn rapidly with flare burning effect.
- Powders, dusts, shavings, borings, turnings or cuttings may explode or burn with explosive violence.
- Substance may be transported in a molten form.
- May re-ignite after fire is extinguished.

HEALTH

- Fire may produce irritating and/or toxic gases.
- Contact may cause burns to skin and eyes.
- Contact with molten substance may cause severe burns to skin and eyes.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂, sand, earth, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Cool containers with flooding quantities of water until well after fire is out.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Removal of solidified molten material from skin requires medical assistance.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Flammable/combustible material.
- May be ignited by heat, sparks or flames.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.

HEALTH

- TOXIC; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Use water spray or fog; do not use straight streams.
- Do not get water inside containers.
- Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Prevent entry into waterways, sewers, basements or confined areas.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Flammable/combustible material.
- May ignite on contact with moist air or moisture.
- May burn rapidly with flare-burning effect.
- Some react vigorously or explosively on contact with water.
- Some may decompose explosively when heated or involved in a fire.
- May re-ignite after fire is extinguished.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire will produce irritating, corrosive and/or toxic gases.
- Inhalation of decomposition products may cause severe injury or death.
- Contact with substance may cause severe burns to skin and eyes.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- DO NOT USE WATER, CO₂ OR FOAM ON MATERIAL ITSELF.

- Some of these materials may react violently with water.

EXCEPTION: For Dithionite (Hydrosulfite/Hydrosulphite) UN1384, UN1923 and UN1929, USE FLOODING AMOUNTS OF WATER for SMALL AND LARGE fires to stop the reaction. Smothering will not work for these materials. They do not need air to burn.

Small Fires

- Dry chemical, soda ash, lime or DRY sand, EXCEPT for UN1384, UN1923 and UN1929 .

Large Fires

- DRY sand, dry chemical, soda ash or lime, EXCEPT for UN1384, UN1923 and UN1929 , or withdraw from area and let fire burn.

- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers or in contact with substance.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leak with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

EXCEPTION: For Dithionite (Hydrosulfite/Hydrosulphite) spills, UN1384, UN1923 and UN1929, dissolve with 5 parts water and collect for proper disposal.

- Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Extremely flammable; will ignite itself if exposed to air.
- Burns rapidly, releasing dense, white, irritating fumes.
- Substance may be transported in a molten form.
- May re-ignite after fire is extinguished.

HEALTH

- Fire will produce irritating, corrosive and/or toxic gases.
- TOXIC; ingestion of substance or inhalation of decomposition products will cause severe injury or death.
- Contact with substance may cause severe burns to skin and eyes.
- Some effects may be experienced due to skin absorption.
- Runoff from fire control may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Water spray, wet sand or wet earth.

Large Fires

- Water spray or fog.
- **Do not scatter spilled material with high pressure water streams.**
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.

Small Spills

- Cover with water, sand or earth. Shovel into metal container and keep material under water.

Large Spills

- Dike for later disposal and cover with wet sand or earth.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, keep exposed skin areas immersed in water or covered with wet bandages until medical attention is received.
- Removal of solidified molten material from skin requires medical assistance.
- Remove and isolate contaminated clothing and shoes at the site and place in metal container filled with water. Fire hazard if allowed to dry.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Contact with molten substance may cause severe burns to skin and eyes.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Substance will react with water (some violently), releasing corrosive and/or toxic gases.
- Flammable/toxic gases may accumulate in confined areas (basement, tanks, hopper/tank cars etc.)
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.
- Substance may be transported in a molten form.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- When material is not involved in fire: do not use water on material itself.

Small Fires

- Dry chemical or CO₂.
- Move containers from fire area if you can do it without risk.

Large Fires

- Flood fire area with large quantities of water, while knocking down vapors with water fog. If insufficient water supply: knock down vapors only.

Fire involving Tanks or Car/Trailer Loads

- Cool containers with flooding quantities of water until well after fire is out.
- Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Removal of solidified molten material from skin requires medical assistance.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Produce flammable gases on contact with water.
- May ignite on contact with water or moist air.
- Some react vigorously or explosively on contact with water.
- May be ignited by heat, sparks or flames.
- May re-ignite after fire is extinguished.
- Some are transported in highly flammable liquids.
- Runoff may create fire or explosion hazard.

HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce corrosive solutions on contact with water.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate the area before entry.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT USE WATER OR FOAM.**

Small Fires

- Dry chemical, soda ash, lime or sand.

Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- Move containers from fire area if you can do it without risk.

Magnesium Fires

- DRY sand, sodium chloride powder, graphite powder or Met-L-X[®] powder.

Lithium Fires

- DRY sand, sodium chloride powder, graphite powder, copper powder or Lith-X[®] powder.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- **DO NOT GET WATER on spilled substance or inside containers.**

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Dike for later disposal; do not apply water unless directed to do so.

Powder Spills • Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Produce flammable and toxic gases on contact with water.
- May ignite on contact with water or moist air.
- Some react vigorously or explosively on contact with water.
- May be ignited by heat, sparks or flames.
- May re-ignite after fire is extinguished.
- Some are transported in highly flammable liquids.
- Runoff may create fire or explosion hazard.

HEALTH

- Highly toxic: contact with water produces toxic gas, may be fatal if inhaled.
- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce corrosive solutions on contact with water.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate the area before entry.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT USE WATER OR FOAM. (FOAM MAY BE USED FOR CHLOROSILANES, SEE BELOW)**

Small Fires

- Dry chemical, soda ash, lime or sand.

Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- **FOR CHLOROSILANES, DO NOT USE WATER; use AFFF alcohol-resistant medium expansion foam; DO NOT USE dry chemicals, soda ash or lime on chlorosilane fires (large or small) as they may release large quantities of hydrogen gas which may explode.**
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- **DO NOT GET WATER on spilled substance or inside containers.**
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- **FOR CHLOROSILANES, use AFFF alcohol-resistant medium expansion foam to reduce vapors.**

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Dike for later disposal; do not apply water unless directed to do so.

Powder Spills • Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult. • Remove and isolate contaminated clothing and shoes. • In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- These substances will accelerate burning when involved in a fire.
- Some may decompose explosively when heated or involved in a fire.
- May explode from heat or contamination.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Inhalation, ingestion or contact (skin, eyes) with vapors or substance may cause severe injury, burns, or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Use water. Do not use dry chemicals or foams. CO₂ or Halon® may provide limited control.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Do not get water inside containers.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Liquid Spills

- Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- **Following product recovery, flush area with water.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- These substances will accelerate burning when involved in a fire.
- May explode from heat or contamination.
- Some may burn rapidly.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Toxic by ingestion.
- Inhalation of dust is toxic.
- Fire may produce irritating, corrosive and/or toxic gases.
- Contact with substance may cause severe burns to skin and eyes.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Use water. Do not use dry chemicals or foams. CO₂ or Halon® may provide limited control.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Large Spills

- Dike far ahead of spill for later disposal.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- These substances will accelerate burning when involved in a fire.
- May explode from heat or contamination.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors or substance may cause severe injury, burns or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Toxic/flammable fumes may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Use water. Do not use dry chemicals or foams. CO₂ or Halon® may provide limited control.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not get water inside containers.

Small Liquid Spills

- Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- May explode from friction, heat or contamination.
- These substances will accelerate burning when involved in a fire.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Some will react explosively with hydrocarbons (fuels).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Fire may produce irritating and/or toxic gases.
- Toxic fumes or dust may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Use water. Do not use dry chemicals or foams. CO₂ or Halon® may provide limited control.

Large Fires

- Flood fire area with water from a distance.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Move containers from fire area if you can do it without risk.
- Do not get water inside containers: a violent reaction may occur.
- Cool containers with flooding quantities of water until well after fire is out.
- Dike fire-control water for later disposal.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills

- Flush area with flooding quantities of water.

Large Spills

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May ignite combustibles (wood, paper, oil, clothing, etc.).
- React vigorously and/or explosively with water.
- Produce toxic and/or corrosive substances on contact with water.
- Flammable/toxic gases may accumulate in tanks and hopper cars.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation or contact with vapor, substance, or decomposition products may cause severe injury or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT USE WATER OR FOAM.**

Small Fires

- Dry chemical, soda ash or lime.

Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- **DO NOT GET WATER on spilled substance or inside containers.**

Small Spills

- Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

Large Spills

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May explode from heat or contamination.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.
- Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Water spray or fog is preferred; if water not available use dry chemical, CO₂ or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Use water spray or fog; do not use straight streams.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Keep substance wet using water spray.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May explode from heat, shock, friction or contamination.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.
- Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Water spray or fog is preferred; if water not available use dry chemical, CO₂ or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Use water spray or fog; do not use straight streams.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Keep substance wet using water spray.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May explode from heat or contamination.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Contact of vapor or substance with eyes may cause blindness within minutes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Toxic fumes or dust may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Water spray or fog is preferred; if water not available use dry chemical, CO₂ or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Use water spray or fog; do not use straight streams.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Keep substance wet using water spray.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May explode from heat, contamination or loss of temperature control.
- These materials are particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently and catch fire.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May ignite spontaneously if exposed to air.
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.
- Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- **DO NOT allow the substance to warm up. Obtain liquid nitrogen, dry ice or ice for cooling. If none can be obtained, evacuate the area immediately.**

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- The temperature of the substance must be maintained at or below the "Control Temperature" at all times.

Small Fires

- Water spray or fog is preferred; if water not available use dry chemical, CO₂ or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Use water spray or fog; do not use straight streams.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- **BEWARE OF POSSIBLE CONTAINER EXPLOSION.**
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Self-decomposition or self-ignition may be triggered by heat, chemical reaction, friction or impact.
- May be ignited by heat, sparks or flames.
- Some may decompose explosively when heated or involved in a fire.
- May burn violently. Decomposition may be self-accelerating and produce large amounts of gases.
- Vapors or dust may form explosive mixtures with air.

HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce irritating, toxic and/or corrosive gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- **BEWARE OF POSSIBLE CONTAINER EXPLOSION.**
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Self-decomposition or self-ignition may be triggered by heat, chemical reaction, friction or impact.
- Self-accelerating decomposition may occur if the specific control temperature is not maintained.
- These materials are particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently and catch fire.
- May be ignited by heat, sparks or flames.
- Some may decompose explosively when heated or involved in a fire.
- May burn violently. Decomposition may be self-accelerating and produce large amounts of gases.
- Vapors or dust may form explosive mixtures with air.

HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce irritating, toxic and/or corrosive gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- **DO NOT allow the substance to warm up. Obtain liquid nitrogen, dry ice or ice for cooling. If none can be obtained, evacuate the area immediately.**

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- The temperature of the substance must be maintained at or below the "Control Temperature" at all times.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- **BEWARE OF POSSIBLE CONTAINER EXPLOSION.**
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **Highly toxic**, may be fatal if inhaled, swallowed or absorbed through skin.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Containers may explode when heated.
- Runoff may pollute waterways.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Use water spray or fog; do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Cover with plastic sheet to prevent spreading.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- **Highly toxic**, may be fatal if inhaled, swallowed or absorbed through skin.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Combustible material: may burn but does not ignite readily.
- Containers may explode when heated.
- Runoff may pollute waterways.
- Substance may be transported in a molten form.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Use water spray or fog; do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Cover with plastic sheet to prevent spreading.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC**; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Combustible material: may burn but does not ignite readily.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.
- Runoff may pollute waterways.
- Substance may be transported in a molten form.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Dry chemical, CO₂, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC**; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.).
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Dry chemical, CO₂, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapors may travel to source of ignition and flash back.
- Substance will react with water (some violently) releasing flammable, toxic or corrosive gases and runoff.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- **Bromoacetates and chloroacetates are extremely irritating/lachrymators.**
- Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO₂, dry chemical, dry sand, alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- **FOR CHLOROSILANES, DO NOT USE WATER**; use AFFF alcohol-resistant medium expansion foam.
- Move containers from fire area if you can do it without risk.
- Use water spray or fog; do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- **FOR CHLOROSILANES**, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- **DO NOT GET WATER on spilled substance or inside containers.**
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Combustible material: may burn but does not ignite readily.
- Substance will react with water (some violently) releasing flammable, toxic or corrosive gases and runoff.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapors may travel to source of ignition and flash back.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO₂, dry chemical, dry sand, alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- **FOR CHLOROSILANES, DO NOT USE WATER**; use AFFF alcohol-resistant medium expansion foam.
- Move containers from fire area if you can do it without risk.
- Use water spray or fog; do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- **FOR CHLOROSILANES**, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- **DO NOT GET WATER on spilled substance or inside containers.**
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC**; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars etc.).
- Substance will react with water (some violently), releasing corrosive and/or toxic gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO₂ (except for Cyanides), dry chemical, dry sand, alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Use water spray or fog; do not use straight streams.
- Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- DO NOT GET WATER INSIDE CONTAINERS.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Inhalation or contact with substance may cause infection, disease, or death.
- Runoff from fire control may cause pollution.
- **Note: Damaged packages containing solid CO₂ as a refrigerant may produce water or frost from condensation of air. Do not touch this liquid as it could be contaminated by the contents of the parcel.**

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- Some may be transported in flammable liquids.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Obtain identity of substance involved.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, soda ash, lime or sand.

Large Fires

- Use extinguishing agent suitable for type of surrounding fire.
- Move containers from fire area if you can do it without risk.
- Do not scatter spilled material with high pressure water streams.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Absorb with earth, sand or other non-combustible material.
- Cover damaged package or spilled material with damp towel or rag and keep wet with liquid bleach or other disinfectant.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to a safe isolated area.

CAUTION: Victim may be a source of contamination.

- Call 911 or emergency medical service.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- **For further assistance, contact your local Poison Control Center.**
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- Inhalation of vapors or dust is extremely irritating.
- May cause burning of eyes and flow of tears.
- May cause coughing, difficult breathing and nausea.
- Brief exposure effects last only a few minutes.
- Exposure in an enclosed area may be very harmful.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- Containers may explode when heated.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.

Small Spills

- Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects should disappear after individual has been exposed to fresh air for approximately 10 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Vapors may cause dizziness or suffocation.
- Exposure in an enclosed area may be very harmful.
- Contact may irritate or burn skin and eyes.
- Fire may produce irritating and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- Most vapors are heavier than air.
- Air/vapor mixtures may explode when ignited.
- Container may explode in heat of fire.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Dry chemical, CO₂, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Stop leak if you can do it without risk.

Small Liquid Spills

- Take up with sand, earth or other noncombustible absorbent material.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability increases as potential hazard of radioactive content increases.
- Very low levels of contained radioactive materials and low radiation levels outside packages result in low risks to people. Damaged packages may release measurable amounts of radioactive material, but the resulting risks are expected to be low.
- Some radioactive materials cannot be detected by commonly available instruments.
- Packages do not have RADIOACTIVE I, II, or III labels. Some may have EMPTY labels or may have the word "Radioactive" in the package marking.

FIRE OR EXPLOSION

- Some of these materials may burn, but most do not ignite readily.
- Many have cardboard outer packaging; content (physically large or small) can be of many different physical forms.
- Radioactivity does not change flammability or other properties of materials.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions. Radiation Authority is usually responsible for decisions about radiological consequences and closure of emergencies.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- Presence of radioactive material will not influence the fire control processes and should not influence selection of techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Cover liquid spill with sand, earth or other noncombustible absorbent material.
- Cover powder spill with plastic sheet or tarp to minimize spreading.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Injured persons contaminated by contact with released material are not a serious hazard to health care personnel, equipment or facilities.
- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability increases as potential hazard of radioactive content increases.
- Undamaged packages are safe. Contents of damaged packages may cause higher external radiation exposure, or both external and internal radiation exposure if contents are released.
- Low radiation hazard when material is inside container. If material is released from package or bulk container, hazard will vary from low to moderate. Level of hazard will depend on the type and amount of radioactivity, the kind of material it is in, and/or the surfaces it is on.
- Some material may be released from packages during accidents of moderate severity but risks to people are not great.
- Released radioactive materials or contaminated objects usually will be visible if packaging fails.
- Some exclusive use shipments of bulk and packaged materials will not have "RADIOACTIVE" labels. • Placards, markings, and shipping papers provide identification.
- Some packages may have a "RADIOACTIVE" label and a second hazard label. The second hazard is usually greater than the radiation hazard; so follow this Guide as well as the response Guide for the second hazard class label.
- Some radioactive materials cannot be detected by commonly available instruments.
- Runoff from control of cargo fire may cause low-level pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but most do not ignite readily.
- Uranium and Thorium metal cuttings may ignite spontaneously if exposed to air (see Guide 136).
- Nitrates are oxidizers and may ignite other combustibles (see Guide 141).

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions. Radiation Authority is usually responsible for decisions about radiological consequences and closure of emergencies.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. • Stay upwind. • Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- Presence of radioactive material will not influence the fire control processes and should not influence selection of techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).
- Dike fire-control water for later disposal.

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Cover liquid spill with sand, earth or other noncombustible absorbent material.
- Dike to collect large liquid spills.
- Cover powder spill with plastic sheet or tarp to minimize spreading.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Injured persons contaminated by contact with released material are not a serious hazard to health care personnel, equipment or facilities.
- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability increases as potential hazard of radioactive content increases.
- Undamaged packages are safe. Contents of damaged packages may cause higher external radiation exposure, or both external and internal radiation exposure if contents are released.
- Type A packages (cartons, boxes, drums, articles, etc.) identified as "Type A" by marking on packages or by shipping papers contain non-life endangering amounts. Partial releases might be expected if "Type A" packages are damaged in moderately severe accidents.
- Type B packages, and the rarely occurring Type C packages, (large and small, usually metal) contain the most hazardous amounts. They can be identified by package markings or by shipping papers. Life threatening conditions may exist only if contents are released or package shielding fails. Because of design, evaluation, and testing of packages, these conditions would be expected only for accidents of utmost severity.
- The rarely occurring "Special Arrangement" shipments may be of Type A, Type B or Type C packages. Package type will be marked on packages, and shipment details will be on shipping papers.
- Radioactive White-I labels indicate radiation levels outside single, isolated, undamaged packages are very low (less than 0.005 mSv/h (0.5 mrem/h)).
- Radioactive Yellow-II and Yellow-III labeled packages have higher radiation levels. The transport index (TI) on the label identifies the maximum radiation level in mrem/h one meter from a single, isolated, undamaged package.
- Some radioactive materials cannot be detected by commonly available instruments.
- Water from cargo fire control may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but most do not ignite readily.
- Radioactivity does not change flammability or other properties of materials.
- Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F) for a period of 30 minutes.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions. Radiation Authority is usually responsible for decisions about radiological consequences and closure of emergencies.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
 - Stay upwind.
 - Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- Presence of radioactive material will not influence the fire control processes and should not influence selection of techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).
- Dike fire-control water for later disposal.

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Damp surfaces on undamaged or slightly damaged packages are seldom an indication of packaging failure. Most packaging for liquid content have inner containers and/or inner absorbent materials.
- Cover liquid spill with sand, earth or other noncombustible absorbent material.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Injured persons contaminated by contact with released material are not a serious hazard to health care personnel, equipment or facilities.
- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability increases as potential hazard of radioactive content increases.
- Undamaged packages are safe; contents of damaged packages may cause external radiation exposure, and much higher external exposure if contents (source capsules) are released.
- Contamination and internal radiation hazards are not expected, but not impossible.
- Type A packages (cartons, boxes, drums, articles, etc.) identified as "Type A" by marking on packages or by shipping papers contain non-life endangering amounts. Radioactive sources may be released if "Type A" packages are damaged in moderately severe accidents.
- Type B packages, and the rarely occurring Type C packages, (large and small, usually metal) contain the most hazardous amounts. They can be identified by package markings or by shipping papers. Life threatening conditions may exist only if contents are released or package shielding fails. Because of design, evaluation, and testing of packages, these conditions would be expected only for accidents of utmost severity.
- Radioactive White-I labels indicate radiation levels outside single, isolated, undamaged packages are very low (less than 0.005 mSv/h (0.5 mrem/h)).
- Radioactive Yellow-II and Yellow-III labeled packages have higher radiation levels. The transport index (TI) on the label identifies the maximum radiation level in mrem/h one meter from a single, isolated, undamaged package.
- Radiation from the package contents, usually in durable metal capsules, can be detected by most radiation instruments.
- Water from cargo fire control is not expected to cause pollution.

FIRE OR EXPLOSION

- Packagings can burn completely without risk of content loss from sealed source capsule.
- Radioactivity does not change flammability or other properties of materials.
- Radioactive source capsules and Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F).

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions. Radiation Authority is usually responsible for decisions about radiological consequences and closure of emergencies.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Stay upwind. • Keep unauthorized personnel away.
- Delay final cleanup until instructions or advice is received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- Presence of radioactive material will not influence the fire control processes and should not influence selection of techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Damp surfaces on undamaged or slightly damaged packages are seldom an indication of packaging failure. Contents are seldom liquid. Content is usually a metal capsule, easily seen if released from package.
- If source capsule is identified as being out of package, **DO NOT TOUCH**. Stay away and await advice from Radiation Authority.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Persons exposed to special form sources are not likely to be contaminated with radioactive material.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Injured persons contaminated by contact with released material are not a serious hazard to health care personnel, equipment or facilities.
- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability increases as potential radiation and criticality hazards of the content increase.
- Undamaged packages are safe. Contents of damaged packages may cause higher external radiation exposure, or both external and internal radiation exposure if contents are released.
- Type AF or IF packages, identified by package markings, do not contain life-threatening amounts of material. External radiation levels are low and packages are designed, evaluated, and tested to control releases and to prevent a fission chain reaction under severe transport conditions.
- Type B(U)F, B(M)F and CF packages (identified by markings on packages or shipping papers) contain potentially life endangering amounts. Because of design, evaluation, and testing of packages, fission chain reactions are prevented and releases are not expected to be life endangering for all accidents except those of utmost severity.
- The rarely occurring "Special Arrangement" shipments may be of Type AF, BF or CF packages. Package type will be marked on packages, and shipment details will be on shipping papers.
- The transport index (TI) shown on labels or a shipping paper might not indicate the radiation level at one meter from a single, isolated, undamaged package; instead, it might relate to controls needed during transport because of the fissile properties of the materials.
- Some radioactive materials cannot be detected by commonly available instruments.
- Water from cargo fire control is not expected to cause pollution.

FIRE OR EXPLOSION

- These materials are seldom flammable. Packages are designed to withstand fires without damage to contents.
- Radioactivity does not change flammability or other properties of materials.
- Type AF, IF, B(U)F, B(M)F and CF packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F) for a period of 30 minutes.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions. Radiation Authority is usually responsible for decisions about radiological consequences and closure of emergencies.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
 - Stay upwind.
 - Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- Presence of radioactive material will not influence the fire control processes and should not influence selection of techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Damp surfaces on undamaged or slightly damaged packages are seldom an indication of packaging failure. Most packaging for liquid content have inner containers and/or inner absorbent materials.

Liquid Spills

- Package contents are seldom liquid. If any radioactive contamination resulting from a liquid release is present, it probably will be low-level.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Injured persons contaminated by contact with released material are not a serious hazard to health care personnel, equipment or facilities.
- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability increases as potential radiation and criticality hazards of the content increase.
- Chemical hazard greatly exceeds radiation hazard.
- Substance reacts with water and water vapor in air to form toxic and corrosive hydrogen fluoride gas and an extremely irritating and corrosive, white-colored, water-soluble residue.
- If inhaled, may be fatal.
- Direct contact causes burns to skin, eyes, and respiratory tract.
- Low-level radioactive material; very low radiation hazard to people.
- Runoff from control of cargo fire may cause low-level pollution.

FIRE OR EXPLOSION

- Substance does not burn.
- Containers in protective overpacks (horizontal cylindrical shape with short legs for tie-downs), are identified with "AF" or "B(U)F" on shipping papers or by markings on the overpacks. They are designed and evaluated to withstand severe conditions including total engulfment in flames at temperatures of 800°C (1475°F).
- Bare filled cylinders, identified with UN2978 as part of the marking, may rupture in heat of engulfing fire; bare empty (except for residue) cylinders will not rupture in fires.
- The material may react violently with fuels.
- Radioactivity does not change flammability or other properties of materials.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions. Radiation Authority is usually responsible for decisions about radiological consequences and closure of emergencies.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. • Stay upwind. • Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- DO NOT USE WATER OR FOAM ON MATERIAL ITSELF.
- Move containers from fire area if you can do it without risk.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Cool containers with flooding quantities of water until well after fire is out.
- If this is impossible, withdraw from area and let fire burn.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Without fire or smoke, leak will be evident by visible and irritating vapors and residue forming at the point of release.
- Use fine water spray to reduce vapors; do not put water directly on point of material release from container.
- Residue buildup may self-seal small leaks.
- Dike far ahead of spill to collect runoff water.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Injured persons contaminated by contact with released material are not a serious hazard to health care personnel, equipment or facilities.
- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled.**
- Vapors are extremely irritating.
- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Substance does not burn but will support combustion.
- This is a strong oxidizer and will react vigorously or explosively with many materials including fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Vapor explosion and poison hazard indoors, outdoors or in sewers.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, soda ash, lime or sand.

Large Fires

- Water spray, fog (flooding amounts).
- Do not get water inside containers.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- If you have not donned special protective clothing approved for this material, do not expose yourself to any risk of this material touching you.
- **Do not direct water at spill or source of leak.**
- A fine water spray remotely directed to the edge of the spill pool can be used to direct and maintain a hot flare fire which will burn the spilled material in a controlled manner.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; Extremely Hazardous.**
- Inhalation extremely dangerous; may be fatal.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Odorless, will not be detected by sense of smell.

FIRE OR EXPLOSION

- **EXTREMELY FLAMMABLE.**
- May be ignited by heat, sparks or flames.
- Flame may be invisible.
- Containers may explode when heated.
- Vapor explosion and poison hazard indoors, outdoors or in sewers.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Runoff may create fire or explosion hazard.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

Small Fires

- Dry chemical, CO₂ or water spray.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Substance is transported in molten form at a temperature above 705°C (1300°F).
- Violent reaction with water; contact may cause an explosion or may produce a flammable gas.
- Will ignite combustible materials (wood, paper, oil, debris, etc.).
- Contact with nitrates or other oxidizers may cause an explosion.
- Contact with containers or other materials, including cold, wet or dirty tools, may cause an explosion.
- Contact with concrete will cause spalling and small pops.

HEALTH

- Contact causes severe burns to skin and eyes.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear flame retardant structural firefighters' protective clothing, including faceshield, helmet and gloves, this will provide limited thermal protection.

EMERGENCY RESPONSE**FIRE**

- Do Not Use Water, except in life threatening situations and then only in a fine spray.
- Do not use halogenated extinguishing agents or foam.
- Move combustibles out of path of advancing pool if you can do so without risk.
- Extinguish fires started by molten material by using appropriate method for the burning material; keep water, halogenated extinguishing agents and foam away from the molten material.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Do not attempt to stop leak, due to danger of explosion.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Substance is very fluid, spreads quickly, and may splash. Do not try to stop it with shovels or other objects.
- Dike far ahead of spill; use dry sand to contain the flow of material.
- Where possible allow molten material to solidify naturally.
- Avoid contact even after material solidifies. Molten, heated and cold aluminum look alike; do not touch unless you know it is cold.
- Clean up under the supervision of an expert after material has solidified.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- For severe burns, immediate medical attention is required.
- Removal of solidified molten material from skin requires medical assistance.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May react violently or explosively on contact with water.
- Some are transported in flammable liquids.
- May be ignited by friction, heat, sparks or flames.
- Some of these materials will burn with intense heat.
- Dusts or fumes may form explosive mixtures in air.
- Containers may explode when heated.
- May re-ignite after fire is extinguished.

HEALTH

- Oxides from metallic fires are a severe health hazard.
- Inhalation or contact with substance or decomposition products may cause severe injury or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 50 meters (160 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT USE WATER, FOAM OR CO₂.**
- Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard, particularly if fire is in a confined environment (i.e., building, cargo hold, etc.).
- Use DRY sand, graphite powder, dry sodium chloride based extinguishers, G-1[®] or Met-L-X[®] powder.
- Confining and smothering metal fires is preferable rather than applying water.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- If impossible to extinguish, protect surroundings and allow fire to burn itself out.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Some may burn but none ignite readily.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Containers may explode when heated.
- Some may be transported hot.

HEALTH

- Inhalation of material may be harmful.
- Contact may cause burns to skin and eyes.
- Inhalation of Asbestos dust may have a damaging effect on the lungs.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Fire**

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Do not scatter spilled material with high pressure water streams.
- Dike fire-control water for later disposal.

Fire involving Tanks

- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent dust cloud.
- Avoid inhalation of asbestos dust.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Spills

- Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Cover powder spill with plastic sheet or tarp to minimize spreading.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Inhalation of vapors or contact with substance will result in contamination and potential harmful effects.
- Fire will produce irritating, corrosive and/or toxic gases.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may react upon heating to produce corrosive and/or toxic fumes.
- Runoff may pollute waterways.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When any large container is involved in a fire, consider initial evacuation for 500 meters (1/3 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Use extinguishing agent suitable for type of surrounding fire.
- **Do not direct water at the heated metal.**

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Do not use steel or aluminum tools or equipment.
- Cover with earth, sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- For mercury, use a mercury spill kit.
- Mercury spill areas may be subsequently treated with calcium sulphide/calcium sulfide or with sodium thiosulphate/sodium thiosulfate wash to neutralize any residual mercury.

FIRST AID

- Move victim to fresh air. • Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

NOTES

INTRODUCTION TO THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

The Table of Initial Isolation and Protective Action Distances suggests distances useful to protect people from vapors resulting from spills involving dangerous goods which are considered toxic by inhalation (TIH), including certain chemical warfare agents, or which produce toxic gases upon contact with water. The Table provides first responders with initial guidance until technically qualified emergency response personnel are available. **Distances show areas likely to be affected during the first 30 minutes after materials are spilled and could increase with time.**

The **Initial Isolation Zone** defines an area SURROUNDING the incident in which persons may be exposed to dangerous (upwind) and life threatening (downwind) concentrations of material. The **Protective Action Zone** defines an area DOWNWIND from the incident in which persons may become incapacitated and unable to take protective action and/or incur serious or irreversible health effects. The Table provides specific guidance for small and large spills occurring day or night.

Adjusting distances for a specific incident involves many interdependent variables and should be made only by personnel technically qualified to make such adjustments. For this reason, no precise guidance can be provided in this document to aid in adjusting the table distances; however, general guidance follows.

Factors That May Change the Protective Action Distances

The guide for a material clearly indicates the evacuation distance required to protect against fragmentation hazard. If the material becomes involved in a **FIRE**, the toxic hazard may become less important than the fire or explosion hazard.

If more than one tank car, cargo tank, portable tank, or large cylinder involved in the incident is leaking, LARGE SPILL distances may need to be increased.

For material with a protective action distance of 11.0+ km (7.0+ miles), the actual distance can be larger in certain atmospheric conditions. If the dangerous goods vapor plume is channeled in a valley or between many tall buildings, distances may be larger than shown in the Table due to less mixing of the plume with the atmosphere. Daytime spills in regions with known strong inversions or snow cover, or occurring near sunset, accompanied by a steady wind, may require an increase in protective action distance. When these conditions are present, airborne contaminants mix and disperse more slowly and may travel much farther downwind. In addition, protective action distances may be larger for liquid spills when either the material or outdoor temperature exceeds 30 °C (86 °F).

Materials which react with water to produce significant toxic gases are included in the Table of Initial Isolation and Protective Action Distances. Note that some materials which are TIH (e.g., bromine trifluoride, thionyl chloride, etc.) produce additional TIH materials when spilled

in water. For these materials, two entries are provided in the Table of Initial Isolation and Protective Action Distances. If it is not clear whether the spill is on land or in water, or in cases where the spill occurs both on land and in water, choose the larger Protective Action Distance. Following the Table of Initial Isolation and Protective Action Distances is a table that lists the materials which, when spilled in water, produce toxic gases and the toxic gases that these water reactive materials produce.

When a water reactive TIH producing material is spilled into a river or stream, the source of the toxic gas may move with the current or stretch from the spill point downstream for a substantial distance.

Certain chemical warfare agents have been added to the Table of Initial Isolation and Protective Action Distances. The distances shown were calculated using worst case scenarios for these agents **when used as a weapon**.

PROTECTIVE ACTION DECISION FACTORS TO CONSIDER

The choice of protective options for a given situation depends on a number of factors. For some cases, evacuation may be the best option; in others, sheltering in-place may be the best course. Sometimes, these two actions may be used in combination. In any emergency, officials need to quickly give the public instructions. The public will need continuing information and instructions while being evacuated or sheltered in-place.

Proper evaluation of the factors listed below will determine the effectiveness of evacuation or in-place protection. The importance of these factors can vary with emergency conditions. In specific emergencies, other factors may need to be identified and considered as well. This list indicates what kind of information may be needed to make the initial decision.

The Dangerous Goods

- Degree of health hazard
- Amount involved
- Containment/control of release
- Rate of vapor movement

The Population Threatened

- Location
- Number of people
- Time available to evacuate or shelter in-place
- Ability to control evacuation or shelter in-place
- Building types and availability
- Special institutions or populations, e.g., nursing homes, hospitals, prisons

Weather Conditions

- Effect on vapor and cloud movement
- Potential for change
- Effect on evacuation or protection in-place

PROTECTIVE ACTIONS

Protective Actions are those steps taken to preserve the health and safety of emergency responders and the public during an incident involving releases of dangerous goods. The Table of Initial Isolation and Protective Action Distances (green-bordered pages) predicts the size of downwind areas which could be affected by a cloud of toxic gas. People in this area should be evacuated and/or sheltered in-place inside buildings.

Isolate Hazard Area and Deny Entry means keep everybody away from the area if they are not directly involved in emergency response operations. Unprotected emergency responders should not be allowed to enter the isolation zone. This "isolation" task is done first to establish control over the area of operations. This is the first step for any protective actions that may follow. See the Table of Isolation and Protective Action Distances (green-bordered pages) for more detailed information on specific materials.

Evacuate means move all people from a threatened area to a safer place. To perform an evacuation, there must be enough time for people to be warned, to get ready, and to leave an area. If there is enough time, evacuation is the best protective action. Begin evacuating people nearby and those outdoors in direct view of the scene. When additional help arrives, expand the area to be evacuated downwind and crosswind to at least the extent recommended in this guidebook. Even after people move to the distances recommended, they may not be completely safe from harm. They should not be permitted to congregate at such distances. Send evacuees to a definite place, by a specific route, far enough away so they will not have to be moved again if the wind shifts.

Shelter In-Place means people should seek shelter inside a building and remain inside until the danger passes. **Sheltering in-place is used when evacuating the public would cause greater risk than staying where they are, or when an evacuation cannot be performed.** Direct the people inside to **close all doors and windows** and to **shut off all ventilating, heating and cooling systems.** In-place protection may not be the best option if (a) the vapors are flammable; (b) if it will take a long time for the gas to clear the area; or (c) if buildings cannot be closed tightly. Vehicles can offer some protection for a short period if the windows are closed and the ventilating systems are shut off. Vehicles are not as effective as buildings for in-place protection.

It is vital to maintain communications with competent persons inside the buildings so that they are advised about changing conditions. **Persons protected-in-place should be warned to stay far from windows** because of the danger from glass and projected metal fragments in a fire and/or explosion.

Every dangerous goods incident is different. Each will have special problems and concerns. Action to protect the public must be selected carefully. These pages can help with **initial** decisions on how to protect the public. Officials must continue to gather information and monitor the situation until the threat is removed.

BACKGROUND ON THE INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCE TABLE

Initial Isolation and Protective Action Distances in this guidebook were determined for small and large spills occurring during day or night. The overall analysis was statistical in nature and utilized state-of-the-art emission rate and dispersion models; statistical release data from the U.S. DOT HMIS (Hazardous Materials Incident Reporting System) database; 5 years of meteorological observations from over 120 locations in United States, Canada and Mexico; and the most current toxicological exposure guidelines.

For each chemical, thousands of hypothetical releases were modeled to account for the statistical variation in both release amount and atmospheric conditions. Based on this statistical sample, the 90% percentile Protective Action Distance for each chemical and category was selected to appear in the Table. A brief description of the analysis is provided below. A detailed report outlining the methodology and data used in the generation of the Initial Isolation and Protective Action Distances may be obtained from the U.S. Department of Transportation, Research and Special Programs Administration.

Release amounts and emission rates into the atmosphere were statistically modeled based on (1) data from the U.S. DOT HMIS database; (2) container types and sizes authorized for transport as specified in 49 CFR §172.101 and Part 173; (3) physical properties of the materials involved, and (4) atmospheric data from a historical database. The emission model calculated the release of vapor due to evaporation of pools on the ground, direct release of vapors from the container, or a combination of both, as would occur for liquefied gases which can flash to form both a vapor/aerosol mixture and an evaporating pool. In addition, the emission model also calculated the emission of toxic vapor by-products generated from spilling water-reactive chemicals in water. Spills that involve releases of approximately 200 liters or less are considered Small Spills, while spills that involve quantities greater than 200 liters are considered Large Spills.

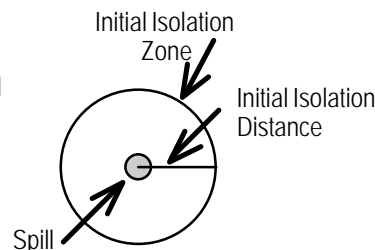
Downwind dispersion of the vapor was estimated for each case modeled. Atmospheric parameters affecting the dispersion, and the emission rate, were selected in a statistical fashion from a database containing hourly meteorological data from 120 cities in United States, Canada and Mexico. The dispersion calculation accounted for the time dependent emission rate from the source as well as the density of the vapor plume (i.e., heavy gas effects). Since atmospheric mixing is less effective at dispersing vapor plumes during nighttime, day and night were separated in the analysis. In the Table, "Day" refers to time periods after sunrise and before sunset, while "Night" includes all hours between sunset and sunrise.

Toxicological short-term exposure guidelines for the chemicals were applied to determine the downwind distance to which persons may become incapacitated and unable to take protective action or may incur serious health effects. Toxicological exposure guidelines were chosen from (1) emergency response guidelines, (2) occupational health guidelines, or (3) lethal concentrations determined from animal studies, as recommended by an independent panel of toxicological experts from industry and academia.

**HOW TO USE THE TABLE OF INITIAL ISOLATION AND
PROTECTIVE ACTION DISTANCES**

- (1) The responder should already have:
 - Identified the material by its ID Number and Name; (if an ID Number cannot be found, use the name of material index in the blue-bordered pages to locate that number.)
 - Found the three-digit guide for that material in order to consult the emergency actions recommended jointly with this table;
 - **Noted the wind direction.**
- (2) Look in this Table (the green-bordered pages) for the ID Number and Name of the Material involved in the incident. Some ID Numbers have more than one shipping name listed– look for the specific name of the material. (If the shipping name is not known and the Table lists more than one name for the same ID Number, use the entry with the largest protective action distances.)
- (3) Determine if the incident involves a SMALL or LARGE spill and if DAY or NIGHT. Generally, a SMALL SPILL is one which involves a single, small package (e.g., a drum containing up to approximately 200 liters), a small cylinder, or a small leak from a large package. A LARGE SPILL is one which involves a spill from a large package, or multiple spills from many small packages. DAY is any time after sunrise and before sunset. NIGHT is any time between sunset and sunrise.

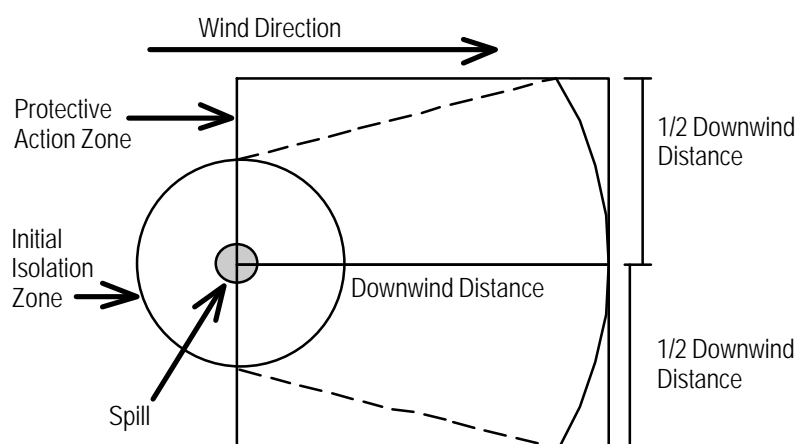
- (4) Look up the initial ISOLATION distance. Direct all persons to move, in a crosswind direction, away from the spill to the distance specified– in meters and feet.



- (5) Look up the initial PROTECTIVE ACTION DISTANCE shown in the Table. For a given dangerous goods, spill size, and whether day or night, the Table gives the downwind distance– in kilometers and miles– for which protective actions should be considered. For practical purposes, the Protective Action Zone (i.e., the area in which people are at risk of harmful exposure) is a square, whose length and width are the same as the downwind distance shown in the Table.

- (6) Initiate Protective Actions to the extent possible, beginning with those closest to the spill site and working away from the site in the downwind direction. When a water-reactive TIH producing material is spilled into a river or stream, the source of the toxic gas may move with the current or stretch from the spill point downstream for a substantial distance.

The shape of the area in which protective actions should be taken (the Protective Action Zone) is shown in this figure. The spill is located at the center of the small circle. The larger circle represents the INITIAL ISOLATION zone around the spill.



NOTE: See "Introduction To The Table Of Initial Isolation And Protective Action Distances" for factors which may increase or decrease Protective Action Distances.

Call the emergency response telephone number listed on the shipping paper, or the appropriate response agency as soon as possible for additional information on the material, safety precautions, and mitigation procedures.

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)							
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-					
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)				
1005	Ammonia, anhydrous	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	60 m	(200 ft)	0.5 km	(0.3 mi)	1.1 km	(0.7 mi)
1005	Ammonia, anhydrous, liquefied												
1005	Ammonia, solution, with more than 50% Ammonia												
1005	Anhydrous ammonia												
1005	Anhydrous ammonia, liquefied												
1008	Boron trifluoride	30 m	(100 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	215 m	(700 ft)	1.6 km	(1.0 mi)	5.1 km	(3.2 mi)
1008	Boron trifluoride, compressed												
1016	Carbon monoxide	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	125 m	(400 ft)	0.6 km	(0.4 mi)	1.8 km	(1.1 mi)
1016	Carbon monoxide, compressed												
1017	Chlorine	30 m	(100 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	275 m	(900 ft)	2.7 km	(1.7 mi)	6.8 km	(4.2 mi)
1023	Coal gas	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	60 m	(200 ft)	0.3 km	(0.2 mi)	0.5 km	(0.3 mi)
1023	Coal gas, compressed												
1026	Cyanogen	30 m	(100 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	305 m	(1000 ft)	3.1 km	(1.9 mi)	7.7 km	(4.8 mi)
1026	Cyanogen, liquefied												
1026	Cyanogen gas												
1040	Ethylene oxide	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	60 m	(200 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)
1040	Ethylene oxide with Nitrogen												
1045	Fluorine	30 m	(100 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	185 m	(600 ft)	1.4 km	(0.9 mi)	4.0 km	(2.5 mi)
1045	Fluorine, compressed												
1048	Hydrogen bromide, anhydrous	30 m	(100 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	125 m	(400 ft)	1.1 km	(0.7 mi)	3.4 km	(2.1 mi)
1050	Hydrogen chloride, anhydrous	30 m	(100 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	1.6 km	(1.0 mi)	4.3 km	(2.7 mi)
1051	AC (when used as a weapon)	60 m	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	460 m	(1500 ft)	1.6 km	(1.0 mi)	3.9 km	(2.4 mi)

1051	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	400 m (1300 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)
1051	Hydrocyanic acid, liquefied						
1051	Hydrogen cyanide, anhydrous, stabilized						
1051	Hydrogen cyanide, stabilized						
1052	Hydrogen fluoride, anhydrous	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
1053	Hydrogen sulfide	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	215 m (700 ft)	1.4 km (0.9 mi)	4.3 km (2.7 mi)
1053	Hydrogen sulfide, liquefied						
1053	Hydrogen sulphide						
1053	Hydrogen sulphide, liquefied						
1062	Methyl bromide	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.5 km (0.3 mi)	1.4 km (0.9 mi)
1064	Methyl mercaptan	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.8 km (0.5 mi)	2.7 km (1.7 mi)
1067	Dinitrogen tetroxide	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	305 m (1000 ft)	1.3 km (0.8 mi)	3.9 km (2.4 mi)
1067	Dinitrogen tetroxide, liquefied						
1067	Nitrogen dioxide						
1067	Nitrogen dioxide, liquefied						
1067	Nitrogen peroxide, liquid						
1067	Nitrogen tetroxide, liquid						
1069	Nitrosyl chloride	30 m (100 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	365 m (1200 ft)	3.5 km (2.2 mi)	9.8 km (6.1 mi)
1071	Oil gas	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
1071	Oil gas, compressed						
1076	CG (when used as a weapon)	155 m (500 ft)	1.3 km (0.8 mi)	3.2 km (2.0 mi)	765 m (2500 ft)	7.2 km (4.5 mi)	11.0+ km (7.0+ mi)
1076	Diphosgene	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m (300 ft)	1.0 km (0.6 mi)	1.9 km (1.2 mi)
1076	DP (when used as a weapon)	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.5 km (2.8 mi)
1076	Phosgene	95 m (300 ft)	0.8 km (0.5 mi)	2.7 km (1.7 mi)	765 m (2500 ft)	6.6 km (4.1 mi)	11.0 km (6.9 mi)
1079	Sulfur dioxide	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
1079	Sulfur dioxide, liquefied						
1079	Sulphur dioxide						
1079	Sulphur dioxide, liquefied						

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1082 1082	Trifluorochloroethylene Trifluorochloroethylene, inhibited	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
1092	Acrolein, inhibited	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	400 m	(1300 ft)	3.9 km (2.4 mi)	7.9 km (4.9 mi)
1098	Allyl alcohol	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)
1135	Ethylene chlorohydrin	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.3 km (0.8 mi)
1143 1143	Crotonaldehyde, inhibited Crotonaldehyde, stabilized	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
1162	Dimethyldichlorosilane (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m	(400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
1163 1163	1,1-Dimethylhydrazine Dimethylhydrazine, unsymmetrical	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
1182	Ethyl chloroformate	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.4 km (0.9 mi)
1185	Ethyleneimine, inhibited	30 m	(100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	155 m	(500 ft)	1.4 km (0.9 mi)	3.5 km (2.2 mi)
1238	Methyl chloroformate	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	155 m	(500 ft)	1.6 km (1.0 mi)	3.4 km (2.1 mi)
1239	Methyl chloromethyl ether	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m	(400 ft)	1.1 km (0.7 mi)	2.7 km (1.7 mi)
1242	Methyldichlorosilane (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
1244	Methylhydrazine	30 m	(100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	125 m	(400 ft)	1.1 km (0.7 mi)	2.7 km (1.7 mi)
1250	Methyltrichlorosilane (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m	(400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
1251 1251	Methyl vinyl ketone Methyl vinyl ketone, stabilized	155 m	(500 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	915 m	(3000 ft)	8.7 km (5.4 mi)	11.0+ km (7.0+ mi)

1259	Nickel carbonyl	60 m (200 ft)	0.6 km (0.4 mi)	2.1 km (1.3 mi)	215 m (700 ft)	2.1 km (1.3 mi)	4.3 km (2.7 mi)
1295	Trichlorosilane (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.3 km (0.8 mi)	3.2 km (2.0 mi)
1298	Trimethylchlorosilane (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m (300 ft)	0.8 km (0.5 mi)	2.3 km (1.4 mi)
1340	Phosphorus pentasulfide, free from yellow or white Phosphorus (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	1.3 km (0.8 mi)	3.2 km (2.0 mi)
1340	Phosphorus pentasulphide, free from yellow or white Phosphorus (when spilled in water)						
1360	Calcium phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.3 km (3.3 mi)
1380	Pentaborane	155 m (500 ft)	1.3 km (0.8 mi)	3.7 km (2.3 mi)	765 m (2500 ft)	6.6 km (4.1 mi)	10.6 km (6.6 mi)
1384	Sodium dithionite (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)
1384	Sodium hydrosulfite (when spilled in water)						
1384	Sodium hydrosulphite (when spilled in water)						
1397	Aluminum phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	245 m (800 ft)	2.4 km (1.5 mi)	6.4 km (4.0 mi)
1412	Lithium amide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m (300 ft)	0.8 km (0.5 mi)	1.9 km (1.2 mi)
1419	Magnesium aluminum phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.5 km (3.4 mi)
1432	Sodium phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	1.4 km (0.9 mi)	4.0 km (2.5 mi)
1433	Stannic phosphides (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.7 km (2.9 mi)
1510	Tetranitromethane	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.3 km (0.8 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1541	Acetone cyanohydrin, stabilized (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m	(300 ft)	0.8 km (0.5 mi)	2.1 km (1.3 mi)
1556	MD (when used as a weapon)	30 m	(100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	125 m	(400 ft)	1.3 km (0.8 mi)	3.5 km (2.2 mi)
1556	Methylchloroarsine	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
1556	PD (when used as a weapon)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)
1560	Arsenic chloride	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.4 km (0.9 mi)
1560	Arsenic trichloride	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.4 km (0.9 mi)
1569	Bromoacetone	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m	(300 ft)	0.8 km (0.5 mi)	1.9 km (1.2 mi)
1580	Chloropicrin	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	185 m	(600 ft)	1.8 km (1.1 mi)	4.0 km (2.5 mi)
1581	Chloropicrin and Methyl bromide mixture	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m	(400 ft)	1.3 km (0.8 mi)	3.1 km (1.9 mi)
1581	Methyl bromide and Chloropicrin mixtures	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m	(400 ft)	1.3 km (0.8 mi)	3.1 km (1.9 mi)
1581	Methyl bromide and more than 2% Chloropicrin mixture, liquid	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m	(700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1582	Chloropicrin and Methyl chloride mixture	30 m	(100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	95 m	(300 ft)	1.0 km (0.6 mi)	3.2 km (2.0 mi)
1582	Methyl chloride and Chloropicrin mixtures	30 m	(100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	95 m	(300 ft)	1.0 km (0.6 mi)	3.2 km (2.0 mi)
1583	Chloropicrin, absorbed	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	185 m	(600 ft)	1.8 km (1.1 mi)	4.0 km (2.5 mi)
1583	Chloropicrin mixture, n.o.s.	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m	(700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1589	CK (when used as a weapon)	60 m	(200 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)	400 m	(1300 ft)	4.0 km (2.5 mi)	8.0 km (5.0 mi)

1589	Cyanogen chloride, inhibited	60 m (200 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)	275 m (900 ft)	2.7 km (1.7 mi)	6.8 km (4.2 mi)
1595 1595	Dimethyl sulfate Dimethyl sulphate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)
1605	Ethylene dibromide	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
1612	Hexaethyl tetraphosphate and compressed gas mixture	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)
1613 1613	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper) Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	125 m (400 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)
1614 1614	Hydrogen cyanide, anhydrous, stabilized (absorbed) Hydrogen cyanide, stabilized (absorbed)	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	400 m (1300 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)
1647 1647	Ethylene dibromide and Methyl bromide mixture, liquid Methyl bromide and Ethylene dibromide mixture, liquid	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
1660 1660	Nitric oxide Nitric oxide, compressed	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	155 m (500 ft)	1.3 km (0.8 mi)	3.5 km (2.2 mi)
1670	Perchloromethyl mercaptan	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
1680	Potassium cyanide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.8 km (0.5 mi)	2.6 km (1.6 mi)
1689	Sodium cyanide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	2.6 km (1.6 mi)
1694	CA (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	1.6 km (1.0 mi)	4.2 km (2.6 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1695	Chloroacetone, stabilized	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.3 km (0.8 mi)
1697	CN (when used as a weapon)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m	(400 ft)	1.1 km (0.7 mi)	3.2 km (2.0 mi)
1698	Adamsite (when used as a weapon)	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m	(600 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
1698	DM (when used as a weapon)								
1699	DA (when used as a weapon)	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m	(600 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
1703	Tetraethyl dithiopyrophosphate and gases, in solution	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	365 m	(1200 ft)	3.7 km (2.3 mi)	6.9 km (4.3 mi)
1703	Tetraethyl dithiopyrophosphate and gases, mixtures								
1703	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 more than 200 ppm but not more than 5000 ppm)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m	(400 ft)	0.8 km (0.5 mi)	2.9 km (1.8 mi)
1703	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 not more than 200 ppm)	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	365 m	(1200 ft)	3.7 km (2.3 mi)	6.9 km (4.3 mi)
1705	Tetraethyl pyrophosphate and compressed gas mixtures	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	400 m	(1300 ft)	4.0 km (2.5 mi)	7.2 km (4.5 mi)
1705	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 more than 200 ppm but not more than 5000 ppm)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m	(400 ft)	0.8 km (0.5 mi)	2.9 km (1.8 mi)
1705	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 not more than 200 ppm)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	400 m	(1300 ft)	4.0 km (2.5 mi)	7.2 km (4.5 mi)

1714	Zinc phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	1.8 km (1.1 mi)	5.1 km (3.2 mi)
1716	Acetyl bromide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.8 km (0.5 mi)	2.3 km (1.4 mi)
1717	Acetyl chloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	2.7 km (1.7 mi)
1722	Allyl chloroformate	155 m (500 ft)	1.3 km (0.8 mi)	2.7 km (1.7 mi)	610 m (2000 ft)	6.1 km (3.8 mi)	10.8 km (6.7 mi)
1724	Allyltrimethylchlorosilane, stabilized (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.0 km (0.6 mi)	2.9 km (1.8 mi)
1725	Aluminum bromide, anhydrous (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	2.7 km (1.7 mi)
1726	Aluminum chloride, anhydrous (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
1728	Amyltrimethylchlorosilane (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
1732	Antimony pentafluoride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	1.6 km (1.0 mi)	3.7 km (2.3 mi)
1736	Benzoyl chloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)
1741	Boron trichloride	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)
1744	Bromine	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.0 km (2.5 mi)
1744	Bromine, solution						
1745	Bromine pentafluoride (when spilled on land)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
1745	Bromine pentafluoride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	215 m (700 ft)	1.9 km (1.2 mi)	4.2 km (2.6 mi)
1746	Bromine trifluoride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1746	Bromine trifluoride (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	2.1 km (1.3 mi)	5.5 km (3.4 mi)
1747	Butyltrichlorosilane (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)
1749	Chlorine trifluoride	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m	(1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
1752	Chloroacetyl chloride (when spilled on land)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m	(300 ft)	0.8 km (0.5 mi)	1.6 km (1.0 mi)
1752	Chloroacetyl chloride (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)
1754	Chlorosulfonic acid (when spilled on land)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)
1754	Chlorosulfonic acid (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.4 km (0.9 mi)
1754	Chlorosulfonic acid and Sulfur trioxide mixture (when spilled on land)	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m	(1000 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1754	Chlorosulfonic acid and Sulfur trioxide mixture (when spilled in water)								
1754	Chlorosulphonic acid (when spilled on land)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)
1754	Chlorosulphonic acid (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.4 km (0.9 mi)

1754	Chlorosulphonic acid and Sulphur trioxide mixture (when spilled on land)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m (1000 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1754	Chlorosulphonic acid and Sulphur trioxide mixture (when spilled in water)						
1754	Sulfur trioxide and Chlorosulfonic acid mixture (when spilled on land)						
1754	Sulfur trioxide and Chlorosulfonic acid mixture (when spilled in water)						
1754	Sulphur trioxide and Chlorosulphonic acid mixture (when spilled on land)						
1754	Sulphur trioxide and Chlorosulphonic acid mixture (when spilled in water)						
1758	Chromium oxychloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)
1777	Fluorosulfonic acid (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.4 km (0.9 mi)
1777	Fluorosulphonic acid (when spilled in water)						
1801	Octyltrichlorosilane (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.8 km (0.5 mi)	2.4 km (1.5 mi)
1806	Phosphorus pentachloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.0 km (0.6 mi)	2.9 km (1.8 mi)
1809	Phosphorus trichloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.7 km (1.7 mi)
1809	Phosphorus trichloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.6 km (1.6 mi)
1810	Phosphorus oxychloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m (300 ft)	0.8 km (0.5 mi)	1.8 km (1.1 mi)
1810	Phosphorus oxychloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	2.6 km (1.6 mi)

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1818	Silicon tetrachloride (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m	(400 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)
1828	Sulfur chlorides (when spilled on land)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
1828	Sulfur chlorides (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	2.3 km (1.4 mi)
1828	Sulphur chlorides (when spilled on land)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
1828	Sulphur chlorides (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	2.3 km (1.4 mi)
1829	Sulfur trioxide	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m	(1000 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1829	Sulfur trioxide, inhibited								
1829	Sulfur trioxide, stabilized								
1829	Sulfur trioxide, uninhibited								
1829	Sulphur trioxide								
1829	Sulphur trioxide, inhibited								
1829	Sulphur trioxide, stabilized								
1829	Sulphur trioxide, uninhibited								
1831	Oleum	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m	(1000 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1831	Oleum, with not less than 30% free Sulfur trioxide								
1831	Oleum, with not less than 30% free Sulphur trioxide								
1831	Sulfuric acid, fuming								
1831	Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide								
1831	Sulphuric acid, fuming								
1831	Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide								

1834	Sulfuryl chloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)
1834	Sulfuryl chloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.4 km (1.5 mi)
1834	Sulphuryl chloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)
1834	Sulphuryl chloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.4 km (1.5 mi)
1836	Thionylchloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
1836	Thionylchloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	335 m (1100 ft)	3.2 km (2.0 mi)	7.1 km (4.4 mi)
1838	Titanium tetrachloride (when spilled on land)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
1838	Titanium tetrachloride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
1859	Silicon tetrafluoride	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
1859	Silicon tetrafluoride, compressed						
1892	ED (when used as a weapon)	30 m (100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	125 m (400 ft)	1.3 km (0.8 mi)	2.6 km (1.6 mi)
1892	Ethylchloroarsine	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
1898	Acetyl iodide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)
1911	Diborane	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	2.7 km (1.7 mi)
1911	Diborane, compressed						
1923	Calcium dithionite (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)
1923	Calcium hydrosulfite (when spilled in water)						
1923	Calcium hydrosulphite (when spilled in water)						

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		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1939	Phosphorus oxybromide (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m	(300 ft)	0.6 km (0.4 mi)	1.9 km (1.2 mi)
1939	Phosphorus oxybromide, solid (when spilled in water)								
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	185 m	(600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m	(3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m	(1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m	(700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	185 m	(600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m	(3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m	(1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m	(700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)

1953	Compressed gas, poisonous, flammable, n.o.s.	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)						
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m (1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
1953	Compressed gas, toxic, flammable, n.o.s.	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)						
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m (1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
1953	Liquefied gas, flammable, poisonous, n.o.s.	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)						

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				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m (1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)		
1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)		
1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)		
1953 1953	Liquefied gas, flammable, toxic, n.o.s. Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)		
1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m (1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)		
1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)		
1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)		
1953	Poisonous gas, flammable, n.o.s.	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)		
1953	Poisonous liquid, flammable, n.o.s.	155 m (500 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	915 m (3000 ft)	8.7 km (5.4 mi)	11.0+ km (7.0+ mi)		
1955 1955	Compressed gas, poisonous, n.o.s. Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)		
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)		

1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
1955 1955	Compressed gas, toxic, n.o.s. Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
1955 1955	Liquefied gas, poisonous, n.o.s. Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
1955 1955	Liquefied gas, toxic, n.o.s. Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1955	Methyl bromide and nonflammable, nonliquefied compressed gas mixture	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m	(300 ft)	0.5 km (0.3 mi)	1.4 km (0.9 mi)
1955	Organic phosphate compound mixed with compressed gas	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	400 m	(1300 ft)	4.0 km (2.5 mi)	7.2 km (4.5 mi)
1955	Organic phosphate mixed with compressed gas								
1955	Organic phosphorus compound mixed with compressed gas								
1967	Insecticide gas, poisonous, n.o.s.	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	400 m	(1300 ft)	4.0 km (2.5 mi)	7.2 km (4.5 mi)
1967	Insecticide gas, toxic, n.o.s.								
1967	Parathion and compressed gas mixture	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m	(300 ft)	1.0 km (0.6 mi)	3.2 km (2.0 mi)
1975	Dinitrogen tetroxide and Nitric oxide mixture	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	155 m	(500 ft)	1.3 km (0.8 mi)	3.5 km (2.2 mi)
1975	Nitric oxide and Dinitrogen tetroxide mixture								
1975	Nitric oxide and Nitrogen dioxide mixture								
1975	Nitric oxide and Nitrogen tetroxide mixture								
1975	Nitrogen dioxide and Nitric oxide mixture								
1975	Nitrogen tetroxide and Nitric oxide mixture								
1994	Iron pentacarbonyl	30 m	(100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)	125 m	(400 ft)	1.1 km (0.7 mi)	2.4 km (1.5 mi)
2004	Magnesium diamide (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)

2011	Magnesium phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	245 m (800 ft)	2.3 km (1.4 mi)	6.0 km (3.7 mi)
2012	Potassium phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	1.3 km (0.8 mi)	4.0 km (2.5 mi)
2013	Strontium phosphide (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	1.3 km (0.8 mi)	3.7 km (2.3 mi)
2032	Nitric acid, fuming	95 m (300 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)	400 m (1300 ft)	1.3 km (0.8 mi)	3.5 km (2.2 mi)
2032	Nitric acid, red fuming						
2186	Hydrogen chloride, refrigerated liquid	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
2188	Arsine	60 m (200 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)	335 m (1100 ft)	3.2 km (2.0 mi)	6.6 km (4.1 mi)
2188	SA (when used as a weapon)	60 m (200 ft)	0.8 km (0.5 mi)	2.4 km (1.5 mi)	400 m (1300 ft)	4.0 km (2.5 mi)	8.0 km (5.0 mi)
2189	Dichlorosilane	30 m (100 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	245 m (800 ft)	2.4 km (1.5 mi)	6.3 km (3.9 mi)
2190	Oxygen difluoride	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2190	Oxygen difluoride, compressed						
2191	Sulfuryl fluoride	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.8 km (0.5 mi)	2.3 km (1.4 mi)
2191	Sulphuryl fluoride						
2192	Germane	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	275 m (900 ft)	2.7 km (1.7 mi)	6.6 km (4.1 mi)
2194	Selenium hexafluoride	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi)	6.0 km (3.7 mi)
2195	Tellurium hexafluoride	60 m (200 ft)	0.6 km (0.4 mi)	2.3 km (1.4 mi)	365 m (1200 ft)	3.5 km (2.2 mi)	7.6 km (4.7 mi)
2196	Tungsten hexafluoride	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	155 m (500 ft)	1.3 km (0.8 mi)	3.7 km (2.3 mi)
2197	Hydrogen iodide, anhydrous	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m (300 ft)	0.8 km (0.5 mi)	2.6 km (1.6 mi)
2198	Phosphorus pentafluoride	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	125 m (400 ft)	1.1 km (0.7 mi)	3.5 km (2.2 mi)
2198	Phosphorus pentafluoride, compressed						
2199	Phosphine	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	490 m (1600 ft)	1.8 km (1.1 mi)	5.5 km (3.4 mi)
2202	Hydrogen selenide, anhydrous	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
2204	Carbonyl sulfide	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	215 m (700 ft)	1.9 km (1.2 mi)	5.6 km (3.5 mi)
2204	Carbonyl sulphide						

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
2232 2232	Chloroacetaldehyde 2-Chloroethanal	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)
2334	Allylamine	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m	(300 ft)	1.0 km (0.6 mi)	2.4 km (1.5 mi)
2337	Phenyl mercaptan	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)
2382 2382	1,2-Dimethylhydrazine Dimethylhydrazine, symmetrical	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
2407	Isopropyl chloroformate	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m	(300 ft)	0.8 km (0.5 mi)	1.9 km (1.2 mi)
2417 2417	Carbonyl fluoride Carbonyl fluoride, compressed	30 m	(100 ft)	0.2 km (0.1 mi)	1.1 km (0.7 mi)	125 m	(400 ft)	1.0 km (0.6 mi)	3.1 km (1.9 mi)
2418 2418	Sulfur tetrafluoride Sulphur tetrafluoride	60 m	(200 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)	305 m	(1000 ft)	2.9 km (1.8 mi)	6.9 km (4.3 mi)
2420	Hexafluoroacetone	30 m	(100 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	365 m	(1200 ft)	3.7 km (2.3 mi)	8.5 km (5.3 mi)
2421	Nitrogen trioxide	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	155 m	(500 ft)	0.6 km (0.4 mi)	2.1 km (1.3 mi)
2438	Trimethylacetyl chloride	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
2442	Trichloroacetyl chloride (when spilled on land)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.4 km (0.9 mi)
2442	Trichloroacetyl chloride (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)
2474	Thiophosgene	60 m	(200 ft)	0.6 km (0.4 mi)	1.8 km (1.1 mi)	275 m	(900 ft)	2.6 km (1.6 mi)	5.0 km (3.1 mi)
2477	Methylisothiocyanate	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
2480	Methyl isocyanate	95 m	(300 ft)	0.8 km (0.5 mi)	2.7 km (1.7 mi)	490 m	(1600 ft)	4.8 km (3.0 mi)	9.8 km (6.1 mi)
2481	Ethylisocyanate	215 m	(700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)

2482	n-Propylisocyanate	125 m (400 ft)	1.1 km (0.7 mi)	2.4 km (1.5 mi)	765 m (2500 ft)	6.3 km (3.9 mi)	10.6 km (6.6 mi)
2483	Isopropyl isocyanate	185 m (600 ft)	1.8 km (1.1 mi)	3.9 km (2.4 mi)	430 m (1400 ft)	4.2 km (2.6 mi)	7.4 km (4.6 mi)
2484	tert-Butyl isocyanate	125 m (400 ft)	1.0 km (0.6 mi)	2.4 km (1.5 mi)	550 m (1800 ft)	5.3 km (3.3 mi)	10.3 km (6.4 mi)
2485	n-Butyl isocyanate	95 m (300 ft)	0.8 km (0.5 mi)	1.6 km (1.0 mi)	335 m (1100 ft)	3.1 km (1.9 mi)	6.3 km (3.9 mi)
2486	Isobutylisocyanate	60 m (200 ft)	0.6 km (0.4 mi)	1.4 km (0.9 mi)	155 m (500 ft)	1.6 km (1.0 mi)	3.2 km (2.0 mi)
2487	Phenylisocyanate	30 m (100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	155 m (500 ft)	1.3 km (0.8 mi)	2.6 km (1.6 mi)
2488	Cyclohexylisocyanate	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.8 km (0.5 mi)	1.4 km (0.9 mi)
2495	Iodine pentafluoride (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m (400 ft)	1.1 km (0.7 mi)	3.1 km (1.9 mi)
2521	Diketene, inhibited	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
2534	Methylchlorosilane	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
2548	Chlorine pentafluoride	30 m (100 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	365 m (1200 ft)	3.7 km (2.3 mi)	8.7 km (5.4 mi)
2576	Phosphorus oxybromide, molten (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.6 km (0.4 mi)	1.9 km (1.2 mi)
2600	Carbon monoxide and Hydrogen mixture	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	125 m (400 ft)	0.6 km (0.4 mi)	1.8 km (1.1 mi)
2600	Carbon monoxide and Hydrogen mixture, compressed						
2600	Hydrogen and Carbon monoxide mixture						
2600	Hydrogen and Carbon monoxide mixture, compressed						
2605	Methoxymethylisocyanate	60 m (200 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	125 m (400 ft)	1.3 km (0.8 mi)	2.6 km (1.6 mi)
2606	Methylorthosilicate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)
2644	Methyl iodide	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)
2646	Hexachlorocyclopentadiene	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)
2668	Chloroacetonitrile	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
2676	Stibine	30 m (100 ft)	0.3 km (0.2 mi)	1.6 km (1.0 mi)	245 m (800 ft)	2.3 km (1.4 mi)	6.0 km (3.7 mi)

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ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
2691	Phosphorus pentabromide (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m	(300 ft)	0.8 km (0.5 mi)	2.4 km (1.5 mi)
2692	Boron tribromide (when spilled on land)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.4 km (0.9 mi)
2692	Boron tribromide (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
2740	n-Propyl chloroformate	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.4 km (0.9 mi)
2742	sec-Butyl chloroformate	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)
2742	Isobutyl chloroformate	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
2743	n-Butyl chloroformate	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	0.5 km (0.3 mi)
2806	Lithium nitride (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m	(300 ft)	0.8 km (0.5 mi)	2.1 km (1.3 mi)
2810	Bis-(2-chloroethyl) ethylamine	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)
2810	Bis-(2-chloroethyl) methylamine								
2810	Bis-(2-chloroethyl) sulfide								
2810	Bis-(2-chloroethyl) sulphide								
2810	Buzz (when used as a weapon)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)
2810	BZ (when used as a weapon)								
2810	CS (when used as a weapon)	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	245 m	(800 ft)	2.6 km (1.6 mi)	5.6 km (3.5 mi)
2810	DC (when used as a weapon)	30 m	(100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.3 km (3.3 mi)
2810	O-Ethyl S-(2-diisopropylaminoethyl) methylphosphonothiolate	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)

2810	Ethyl N,N-dimethylphosphoramidocyanidate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.0 km (0.6 mi)
2810	GA (when used as a weapon)	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)	155 m (500 ft)	1.6 km (1.0 mi)	3.1 km (1.9 mi)
2810	GB (when used as a weapon)	155 m (500 ft)	1.6 km (1.0 mi)	3.4 km (2.1 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2810	GD (when used as a weapon)	95 m (300 ft)	0.8 km (0.5 mi)	1.8 km (1.1 mi)	765 m (2500 ft)	6.8 km (4.2 mi)	10.5 km (6.5 mi)
2810	GF (when used as a weapon)	30 m (100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)	245 m (800 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
2810	H (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.1 km (0.7 mi)
2810	HD (when used as a weapon)						
2810	HL (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	1.8 km (1.1 mi)
2810	HN-1 (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.3 km (0.8 mi)
2810	HN-2 (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
2810	HN-3 (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)
2810	Isopropyl methylphosphonofluoridate	125 m (400 ft)	1.3 km (0.8 mi)	2.3 km (1.4 mi)	550 m (1800 ft)	5.3 km (3.3 mi)	8.7 km (5.4 mi)
2810	L (Lewisite) (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	1.8 km (1.1 mi)
2810	Lewisite (when used as a weapon)						
2810	Mustard (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)
2810	Mustard Lewisite (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	1.0 km (0.6 mi)	1.8 km (1.1 mi)
2810	Pinacolyl methylphosphonofluoridate	60 m (200 ft)	0.5 km (0.3 mi)	0.8 km (0.5 mi)	215 m (700 ft)	2.1 km (1.3 mi)	3.1 km (1.9 mi)
2810	Poisonous liquid, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2810	Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)						

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
2810	Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
2810	Poisonous liquid, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2810	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone A)								
2810	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.0 km (2.5 mi)
2810	Sarin (when used as a weapon)	155 m	(500 ft)	1.6 km (1.0 mi)	3.4 km (2.1 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2810	Soman (when used as a weapon)	95 m	(300 ft)	0.8 km (0.5 mi)	1.8 km (1.1 mi)	765 m	(2500 ft)	6.8 km (4.2 mi)	10.5 km (6.5 mi)
2810	Tabun (when used as a weapon)	30 m	(100 ft)	0.3 km (0.2 mi)	0.6 km (0.4 mi)	155 m	(500 ft)	1.6 km (1.0 mi)	3.1 km (1.9 mi)
2810	Thickened GD (when used as a weapon)	95 m	(300 ft)	0.8 km (0.5 mi)	1.8 km (1.1 mi)	765 m	(2500 ft)	6.8 km (4.2 mi)	10.5 km (6.5 mi)
2810	Toxic liquid, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2810	Toxic liquid, n.o.s. (Inhalation Hazard Zone A)								
2810	Toxic liquid, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
2810	Toxic liquid, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2810	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone A)								

2810	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.0 km (2.5 mi)
2810	Tris-(2-chloroethyl) amine	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)
2810	VX (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.6 km (0.4 mi)	1.0 km (0.6 mi)
2811	CX (when used as a weapon)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m (300 ft)	1.0 km (0.6 mi)	3.1 km (1.9 mi)
2826	Ethylchlorothioformate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	0.8 km (0.5 mi)
2845	Ethylphosphonous dichloride, anhydrous	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	155 m (500 ft)	1.6 km (1.0 mi)	3.4 km (2.1 mi)
2845	Methyl phosphonous dichloride	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
2901	Bromine chloride	30 m (100 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	155 m (500 ft)	1.6 km (1.0 mi)	4.0 km (2.5 mi)
2927	Ethylphosphonothioic dichloride, anhydrous	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)
2927	Ethylphosphorodichloridate	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)
2927	Poisonous liquid, corrosive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2927	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)						
2927	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	245 m (800 ft)	1.6 km (1.0 mi)	5.0 km (2.5 mi)
2927	Toxic liquid, corrosive, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
2927	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)						
2927	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	245 m (800 ft)	1.6 km (1.0 mi)	5.0 km (2.5 mi)
2929	Poisonous liquid, flammable, n.o.s. (when "Inhalation	155 m (500 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	915 m (3000 ft)	8.7 km (5.4 mi)	11.0+ km (7.0+ mi)

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2929	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.7 km (1.7 mi)
2977	Radioactive material, Uranium hexafluoride, fissile (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m (300 ft)	1.0 km (0.6 mi)	3.1 km (1.9 mi)
2977	Uranium hexafluoride, fissile containing more than 1% Uranium-235 (when spilled in water)						
2978	Radioactive material, Uranium hexafluoride, non fissile or fissile-excepted (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	95 m (300 ft)	1.0 km (0.6 mi)	3.1 km (1.9 mi)
2978	Uranium hexafluoride, fissile-excepted (when spilled in water)						
2978	Uranium hexafluoride, low specific activity (when spilled in water)						
2978	Uranium hexafluoride, non-fissile (when spilled in water)						
2985	Chlorosilanes, flammable, corrosive, n.o.s. (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
2985	Chlorosilanes, n.o.s. (when spilled in water)						
2986	Chlorosilanes, corrosive, flammable, n.o.s. (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
2986	Chlorosilanes, n.o.s. (when spilled in water)						
2987	Chlorosilanes, corrosive, n.o.s. (when spilled in water)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
2987	Chlorosilanes, n.o.s. (when spilled in water)						

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

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		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
2988	Chlorosilanes, n.o.s. (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m	(400 ft)	1.1 km (0.7 mi)	2.9 km (1.8 mi)
2988	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s. (when spilled in water)								
3023	2-Methyl-2-heptanethiol	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
3023	tert-Octyl mercaptan								
3048	Aluminum phosphide pesticide (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	215 m	(700 ft)	1.9 km (1.2 mi)	5.3 km (3.3 mi)
3049	Metal alkyl halides, n.o.s. (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)
3049	Metal alkyl halides, water-reactive, n.o.s. (when spilled in water)								
3049	Metal aryl halides, n.o.s. (when spilled in water)								
3049	Metal aryl halides, water-reactive, n.o.s. (when spilled in water)								
3052	Aluminum alkyl halides (when spilled in water)	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)
3057	Trifluoroacetyl chloride	30 m	(100 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	430 m	(1400 ft)	4.0 km (2.5 mi)	8.5 km (5.3 mi)
3079	Methacrylonitrile, inhibited	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)
3083	Perchloryl fluoride	30 m	(100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m	(700 ft)	2.3 km (1.4 mi)	5.6 km (3.5 mi)

3122	Poisonous liquid, oxidizing, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	155 m (500 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	915 m (3000 ft)	8.7 km (5.4 mi)	11.0+ km (7.0+ mi)
3122	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)						
3122	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.7 km (1.7 mi)
3122	Toxic liquid, oxidizing, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	155 m (500 ft)	1.3 km (0.8 mi)	3.4 km (2.1 mi)	915 m (3000 ft)	8.7 km (5.4 mi)	11.0+ km (7.0+ mi)
3122	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)						
3122	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	1.1 km (0.7 mi)	2.7 km (1.7 mi)
3123	Poisonous liquid, water-reactive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3123	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)						
3123	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)						
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3123	Toxic liquid, water-reactive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3123	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)								
3123	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km (1.2 mi)	4.3 km (2.7 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)								
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
3160	Liquefied gas, poisonous, flammable, n.o.s.	185 m	(600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m	(3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)								
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m	(100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m	(1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)

3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3160	Liquefied gas, toxic, flammable, n.o.s.	185 m (600 ft)	1.8 km (1.1 mi)	5.6 km (3.5 mi)	915 m (3000 ft)	10.8 km (6.7 mi)	11.0+ km (7.0+ mi)
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)						
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	30 m (100 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	305 m (1000 ft)	3.1 km (1.9 mi)	7.7 km (4.8 mi)
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.2 km (0.1 mi)	1.0 km (0.6 mi)	215 m (700 ft)	2.1 km (1.3 mi)	5.6 km (3.5 mi)
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3162	Liquefied gas, poisonous, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)						
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3162	Liquefied gas, toxic, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)						
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3246 3246	Methanesulfonyl chloride Methanesulphonyl chloride	95 m	(300 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.1 km (3.2 mi)
3275 3275	Nitriles, poisonous, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Nitriles, toxic, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)
3276 3276	Nitriles, poisonous, n.o.s. Nitriles, toxic, n.o.s.	30 m	(100 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	60 m	(200 ft)	0.6 km (0.4 mi)	1.6 km (1.0 mi)
3278 3278	Organophosphorus compound, poisonous, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Organophosphorus compound, toxic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
3279 3279	Organophosphorus compound, poisonous, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Organophosphorus compound, toxic, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	60 m	(200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)

3280	Organoarsenic compound, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	30 m (100 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	1.8 km (1.1 mi)	4.3 km (2.7 mi)
3281	Metal carbonyls, n.o.s.	60 m (200 ft)	0.6 km (0.4 mi)	2.1 km (1.3 mi)	215 m (700 ft)	2.1 km (1.3 mi)	4.3 km (2.7 mi)
3287	Poisonous liquid, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	155 m (500 ft)	1.3 km (0.8 mi)	3.7 km (2.3 mi)	765 m (2500 ft)	6.6 km (4.1 mi)	10.6 km (6.6 mi)
3287	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)						
3287	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
3287	Toxic liquid, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	155 m (500 ft)	1.3 km (0.8 mi)	3.7 km (2.3 mi)	765 m (2500 ft)	6.6 km (4.1 mi)	10.6 km (6.6 mi)
3287	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)						
3287	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.3 km (0.8 mi)	245 m (800 ft)	2.3 km (1.4 mi)	5.0 km (3.1 mi)
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m (300 ft)	0.6 km (0.4 mi)	1.8 km (1.1 mi)	400 m (1300 ft)	2.6 km (1.6 mi)	5.0 km (3.1 mi)
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)						
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.0 km (2.5 mi)
3289	Toxic liquid, corrosive, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m (300 ft)	0.6 km (0.4 mi)	1.8 km (1.1 mi)	400 m (1300 ft)	2.6 km (1.6 mi)	5.0 km (3.1 mi)
3289	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)						

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3289	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.0 km (2.5 mi)
3294	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper)	30 m	(100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	215 m	(700 ft)	0.6 km (0.4 mi)	1.9 km (1.2 mi)
3300	Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide	30 m	(100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m	(200 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)
3300	Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide								
3303	Compressed gas, poisonous, oxidizing, n.o.s.	430 m	(1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)								
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m	(1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m	(700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)

3303	Compressed gas, toxic, oxidizing, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)						
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m (1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3304	Compressed gas, poisonous, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3304	Compressed gas, toxic, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)						

"+" means distance can be larger in certain atmospheric conditions

3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m (1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m (1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)

"+" means distance can be larger in certain atmospheric conditions

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ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s.	430 m	(1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)								
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m	(1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m	(700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3307	Liquefied gas, toxic, oxidizing, n.o.s.	430 m	(1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)								
3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m	(1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m	(700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)

3308	Liquefied gas, poisonous, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3308	Liquefied gas, toxic, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s.	430 m	(1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)								
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m	(1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m	(600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m	(600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	430 m	(1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m	(3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)								
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m	(1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m	(600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)

3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	335 m (1100 ft)	3.4 km (2.1 mi)	7.7 km (4.8 mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	185 m (600 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)
3318	Ammonia solution, with more than 50% Ammonia	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.5 km (0.3 mi)	1.1 km (0.7 mi)
3355	Insecticide gas, poisonous, flammable, n.o.s.	430 m (1400 ft)	4.2 km (2.6 mi)	8.4 km (5.2 mi)	915 m (3000 ft)	11.0+ km (7.0+ mi)	11.0+ km (7.0+ mi)
3355	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)						
3355	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	60 m (200 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	430 m (1400 ft)	4.0 km (2.5 mi)	9.8 km (6.1 mi)
3355	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m (100 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	215 m (700 ft)	3.1 km (1.9 mi)	7.2 km (4.5 mi)
3355	Insecticide gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	1.6 km (1.0 mi)	4.3 km (2.7 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)							
		First ISOLATE in all Directions Meters (Feet)		Then PROTECT persons Downwind during-		First ISOLATE in all Directions Meters (Feet)		Then PROTECT persons Downwind during-					
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)				
3355	Insecticide gas, toxic, flammable, n.o.s.	430 m	(1400 ft)	4.2 km	(2.6 mi)	8.4 km	(5.2 mi)	915 m	(3000 ft)	11.0+ km	(7.0+ mi)	11.0+ km	(7.0+ mi)
3355	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)												
3355	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	60 m	(200 ft)	0.5 km	(0.3 mi)	1.6 km	(1.0 mi)	430 m	(1400 ft)	4.0 km	(2.5 mi)	9.8 km	(6.1 mi)
3355	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	30 m	(100 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	215 m	(700 ft)	3.1 km	(1.9 mi)	7.2 km	(4.5 mi)
3355	Insecticide gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	1.6 km	(1.0 mi)	4.3 km	(2.7 mi)
9191	Chlorine dioxide, hydrate, frozen (when spilled in water)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)
9192	Fluorine, refrigerated liquid (cryogenic liquid)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	185 m	(600 ft)	1.4 km	(0.9 mi)	4.0 km	(2.5 mi)
9202	Carbon monoxide, refrigerated liquid (cryogenic liquid)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	125 m	(400 ft)	0.6 km	(0.4 mi)	1.8 km	(1.1 mi)
9206	Methyl phosphonic dichloride	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)
9263	Chloropivaloylchloride	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	30 m	(100 ft)	0.3 km	(0.2 mi)	0.5 km	(0.3 mi)
9264	3,5-Dichloro-2,4,6- trifluoropyridine	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	30 m	(100 ft)	0.3 km	(0.2 mi)	0.5 km	(0.3 mi)
9269	Trimethoxysilane	30 m	(100 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	2.1 km	(1.3 mi)	4.2 km	(2.6 mi)

See Next Page for Table of Water-Reactive Materials Which Produce Toxic Gases

TABLE OF WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH) Gas(es) When Spilled in Water

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1162	155	Dimethyldichlorosilane	HCl
1242	139	Methyldichlorosilane	HCl
1250	155	Methyltrichlorosilane	HCl
1295	139	Trichlorosilane	HCl
1298	155	Trimethylchlorosilane	HCl
1340	139	Phosphorus pentasulfide, free from yellow and white Phosphorus	H ₂ S
1340	139	Phosphorus pentasulphide, free from yellow and white Phosphorus	H ₂ S
1360	139	Calcium phosphide	PH ₃
1384	135	Sodium dithionite	H ₂ S SO ₂
1384	135	Sodium hydrosulfite	H ₂ S SO ₂
1384	135	Sodium hydrosulphite	H ₂ S SO ₂
1397	139	Aluminum phosphide	PH ₃
1412	139	Lithium amide	NH ₃
1419	139	Magnesium aluminum phosphide	PH ₃
1432	139	Sodium phosphide	PH ₃
1433	139	Stannic phosphides	PH ₃
1541	155	Acetone cyanohydrin, stabilized	HCN
1680	157	Potassium cyanide	HCN
1689	157	Sodium cyanide	HCN
1714	139	Zinc phosphide	PH ₃
1716	156	Acetyl bromide	HBr
1717	132	Acetyl chloride	HCl
1724	155	Allyl trichlorosilane, stabilized	HCl
1725	137	Aluminum bromide, anhydrous	HBr

Chemical Symbols for TIH Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	PH ₃	Phosphine
Cl ₂	Chlorine	HI	Hydrogen iodide	SO ₂	Sulfur dioxide
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulphur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₃	Sulfur trioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia	SO ₃	Sulphur trioxide

TABLE OF WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH) Gas(es) When Spilled in Water

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1726	137	Aluminum chloride, anhydrous	HCl
1728	155	Amyltrichlorosilane	HCl
1732	157	Antimony pentafluoride	HF
1736	137	Benzoyl chloride	HCl
1745	144	Bromine pentafluoride	HF HBr Br ₂
1746	144	Bromine trifluoride	HF HBr Br ₂
1747	155	Butyltrichlorosilane	HCl
1752	156	Chloroacetyl chloride	HCl
1754	137	Chlorosulfonic acid	HCl
1754	137	Chlorosulfonic acid and Sulfur trioxide mixture	HCl
1754	137	Chlorosulphonic acid	HCl
1754	137	Chlorosulphonic acid and Sulphur trioxide mixture	HCl
1754	137	Sulfur trioxide and Chlorosulfonic acid	HCl
1754	137	Sulphur trioxide and Chlorosulphonic acid	HCl
1758	137	Chromium oxychloride	HCl
1777	137	Fluorosulfonic acid	HF
1777	137	Fluorosulphonic acid	HF
1801	156	Octyltrichlorosilane	HCl
1806	137	Phosphorus pentachloride	HCl
1809	137	Phosphorus trichloride	HCl
1810	137	Phosphorus oxychloride	HCl
1818	157	Silicon tetrachloride	HCl
1828	137	Sulfur chlorides	HCl SO ₂ H ₂ S
1828	137	Sulphur chlorides	HCl SO ₂ H ₂ S

Chemical Symbols for TIH Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	PH ₃	Phosphine
Cl ₂	Chlorine	HI	Hydrogen iodide	SO ₂	Sulfur dioxide
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulphur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₃	Sulfur trioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia	SO ₃	Sulphur trioxide

Use this list only when material is spilled in water.

TABLE OF WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH) Gas(es) When Spilled in Water

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1834	137	Sulfuryl chloride	HCl SO ₃
1834	137	Sulphuryl chloride	HCl SO ₃
1836	137	Thionyl chloride	HCl SO ₂
1838	137	Titanium tetrachloride	HCl
1898	156	Acetyl iodide	HI
1923	135	Calcium dithionite	H ₂ S SO ₂
1923	135	Calcium hydrosulfite	H ₂ S SO ₂
1923	135	Calcium hydrosulphite	H ₂ S SO ₂
1939	137	Phosphorus oxybromide	HBr
1939	137	Phosphorus oxybromide, solid	HBr
2004	135	Magnesium diamide	NH ₃
2011	139	Magnesium phosphide	PH ₃
2012	139	Potassium phosphide	PH ₃
2013	139	Strontium phosphide	PH ₃
2442	156	Trichloroacetyl chloride	HCl
2495	144	Iodine pentafluoride	HF
2576	137	Phosphorus oxybromide, molten	HBr
2691	137	Phosphorus pentabromide	HBr
2692	157	Boron tribromide	HBr
2806	138	Lithium nitride	NH ₃
2977	166	Radioactive material, Uranium hexafluoride, fissile	HF
2977	166	Uranium hexafluoride, fissile containing more than 1% Uranium-235	HF
2978	166	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted	HF

Chemical Symbols for TIH Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	PH ₃	Phosphine
Cl ₂	Chlorine	HI	Hydrogen iodide	SO ₂	Sulfur dioxide
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulphur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₃	Sulfur trioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia	SO ₃	Sulphur trioxide

TABLE OF WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES

Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH) Gas(es) When Spilled in Water

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
2978	166	Uranium hexafluoride, fissile excepted	HF
2978	166	Uranium hexafluoride, low specific activity	HF
2978	166	Uranium hexafluoride, non-fissile	HF
2985	155	Chlorosilanes, flammable, corrosive, n.o.s.	HCl
2985	155	Chlorosilanes, n.o.s.	HCl
2986	155	Chlorosilanes, corrosive, flammable, n.o.s.	HCl
2986	155	Chlorosilanes, n.o.s.	HCl
2987	156	Chlorosilanes, corrosive, n.o.s.	HCl
2987	156	Chlorosilanes, n.o.s.	HCl
2988	139	Chlorosilanes, n.o.s.	HCl
2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	HCl
3048	157	Aluminum phosphide pesticide	PH ₃
3049	138	Metal alkyl halides, n.o.s.	HCl
3049	138	Metal alkyl halides, water-reactive, n.o.s.	HCl
3049	138	Metal aryl halides, n.o.s.	HCl
3049	138	Metal aryl halides, water-reactive, n.o.s.	HCl
3052	135	Aluminum alkyl halides	HCl
9191	143	Chlorine dioxide, hydrate, frozen	Cl ₂

Chemical Symbols for TIH Gases:

Br ₂	Bromine	HF	Hydrogen fluoride	PH ₃	Phosphine
Cl ₂	Chlorine	HI	Hydrogen iodide	SO ₂	Sulfur dioxide
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulphur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₃	Sulfur trioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia	SO ₃	Sulphur trioxide

Use this list only when material is spilled in water.

PROTECTIVE CLOTHING

Street Clothing and Work Uniforms. These garments, such as uniforms worn by police and emergency medical services personnel, provide almost no protection from the harmful effects of dangerous goods.

Structural Fire Fighters' Protective Clothing (SFPC). This category of clothing, often called turnout or bunker gear, means the protective clothing normally worn by fire fighters during structural fire fighting operations. It includes a helmet, coat, pants, boots, gloves and a hood to cover parts of the head not protected by the helmet and facepiece. This clothing must be used with full-facepiece positive pressure self-contained breathing apparatus (SCBA). This protective clothing should, at a minimum, meet the OSHA Fire Brigades Standard (29 CFR 1910.156). Structural fire fighters' protective clothing provides limited protection from heat and cold, but may not provide adequate protection from the harmful vapors or liquids that are encountered during dangerous goods incidents. Each guide includes a statement about the use of SFPC in incidents involving those materials referenced by that guide. Some guides state that SFPC provides limited protection. In those cases, the responder wearing SFPC and SCBA may be able to perform an expedient, that is quick "in-and-out", operation. However, this type of operation can place the responder at risk of exposure, injury or death. The incident commander makes the decision to perform this operation only if an overriding benefit can be gained (i.e., perform an immediate rescue, turn off a valve to control a leak, etc.). The cover-all-type protective clothing customarily worn to fight fires in forests or wildlands is **not** SFPC and is not recommended nor referred to elsewhere in this guidebook.

Positive Pressure Self-Contained Breathing Apparatus (SCBA). This apparatus provides a constant, positive pressure flow of air within the facepiece, even if one inhales deeply while doing heavy work. Use apparatus certified by NIOSH and the Department of Labor/Mine Safety and Health Administration in accordance with 42 CFR Part 84. Use it in accordance with the requirements for respiratory protection specified in OSHA 29 CFR 1910.134 (Respiratory Protection) and/or 29 CFR 1910.156 (f) (Fire Brigades Standard.) Chemical-cartridge respirators or other filtering masks are not acceptable substitutes for positive pressure self-contained breathing apparatus. Demand-type SCBA does not meet the OSHA 29 CFR 1910.156 (f)(1)(i) Fire Brigade Standard.

Chemical Protective Clothing and Equipment. Safe use of this type of protective clothing and equipment requires specific skills developed through training and experience. It is generally not available to, or used by, first responders. This type of special clothing may protect against one chemical, yet be readily permeated by chemicals for which it was not designed. Therefore, protective clothing should not be used unless it is compatible with the released material. This type of special clothing offers little or no protection against heat and/or cold. Examples of this type of equipment have been described as (1) Vapor Protective Suits (NFPA 1991), also known as Totally-Encapsulating Chemical Protective (TECP) Suits or Level A* protection (OSHA 29 CFR 1910.120, Appendix A & B), and (2) Liquid-Splash Protective Suits (NFPA 1992 & 1993), also known as Level B* or C* protection (OSHA 29

CFR 1910.120, Appendix A & B). No single protective clothing material will protect you from all dangerous goods. Do not assume any protective clothing is resistant to cold and/or heat or flame exposure unless it is so certified by the manufacturer. (NFPA 1991 5-3 Flammability Resistance Test and 5-6 Cold Temperature Performance Test.)

* Consult glossary for additional protection levels under the heading "Protective Clothing".

FIRE AND SPILL CONTROL

FIRE CONTROL

Water is the most common and generally most available fire extinguishing agent. Exercise caution in selecting a fire extinguishing method since there are many factors to be considered in an incident. Water may be ineffective in fighting fires involving some materials; its effectiveness depends greatly on the method of application.

Spill fires involving flammable liquids are generally controlled by applying a fire fighting foam to the surface of the burning material. Fighting flammable liquid fires requires foam concentrate which is chemically compatible with the burning material, correct mixing of the foam concentrate with water and air, and careful application and maintenance of the foam blanket. There are two general types of fire fighting foam: regular and alcohol-resistant. Examples of regular foam are protein-base, fluoroprotein, and aqueous film forming foam (AFFF). Some flammable liquids, including many petroleum products, can be controlled by applying regular foam. Other flammable liquids, including polar solvents (flammable liquids which are water soluble) such as alcohols and ketones, have different chemical properties. A fire involving these materials cannot be easily controlled with regular foam and requires application of alcohol-resistant foam. Polar-solvent fires may be difficult to control and require a higher foam application rate than other flammable liquid fires (see NFPA/ANSI Standards 11 and 11A for further information). Refer to the appropriate guide to determine which type of foam is recommended. Although it is impossible to make specific recommendations for flammable liquids which have subsidiary corrosive or toxic hazards, alcohol-resistant foam may be effective for many of these materials. The emergency response telephone number on the shipping document, or the appropriate emergency response agency, should be contacted as soon as possible for guidance on the proper fire extinguishing agent to use. The final selection of the agent and method depends on many factors such as incident location, exposure hazards, size of the fire, environmental concerns, as well as the availability of extinguishing agents and equipment at the scene.

WATER REACTIVE MATERIALS

Water is sometimes used to flush spills and to reduce or direct vapors in spill situations. Some of the materials covered by the guidebook can react violently or even explosively with water. In these cases, consider letting the fire burn or leaving the spill alone (except to prevent its spreading by diking) until additional technical advice can be obtained. The applicable guides clearly warn you of these potentially dangerous reactions. These materials require technical advice since

- (1) water getting inside a ruptured or leaking container may cause an explosion;
- (2) water may be needed to cool adjoining containers to prevent their rupturing (exploding) or further spread of the fires;
- (3) water may be effective in mitigating an incident involving a water-reactive material only if it can be applied at a sufficient flooding rate for an extended period; and

- (4) the products from the reaction with water may be more toxic, corrosive, or otherwise more undesirable than the product of the fire without water applied.

When responding to an incident involving water-reactive chemicals, take into account the existing conditions such as wind, precipitation, location and accessibility to the incident, as well as the availability of the agents to control the fire or spill. Because there are variables to consider, the decision to use water on fires or spills involving water-reactive materials should be based on information from an authoritative source; for example, a producer of the material, who can be contacted through the emergency response telephone number or the appropriate emergency response agency.

VAPOR CONTROL

Limiting the amount of vapor released from a pool of flammable or corrosive liquids is an operational concern. It requires the use of proper protective clothing, specialized equipment, appropriate chemical agents, and skilled personnel. Before engaging in vapor control, get advice from an authoritative source as to the proper tactics.

There are several ways to minimize the amount of vapors escaping from pools of spilled liquids, such as special foams, adsorbing agents, absorbing agents, and neutralizing agents. To be effective, these vapor control methods must be selected for the specific material involved and performed in a manner that will mitigate, not worsen, the incident.

Where specific materials are known, such as at manufacturing or storage facilities, it is desirable for the dangerous goods response team to prearrange with the facility operators to select and stockpile these control agents in advance of a spill. In the field, first responders may not have the most effective vapor control agent for the material available. They are likely to have only water and only one type of fire fighting foam on their vehicles. If the available foam is inappropriate for use, they are likely to use water spray. Because the water is being used to form a vapor seal, care must be taken not to churn or further spread the spill during application. Vapors that do not react with water may be directed away from the site using the air currents surrounding the water spray. Before using water spray or other methods to safely control vapor emission or to suppress ignition, obtain technical advice, based on specific chemical name identification.

CRIMINAL/TERRORIST USE OF CHEMICAL/BIOLOGICAL AGENTS

The following is intended to supply information to first responders for use in making a preliminary assessment of a situation that they suspect involves criminal/terrorist use of chemical and/or biological (CB) agents. To aid in the assessment, a list of observable indicators of the use and/or presence of a CB agent is provided in the following paragraphs.

DIFFERENCES BETWEEN A CHEMICAL AND A BIOLOGICAL AGENT

Chemical and biological agents can be dispersed in the air we breathe, the water we drink, or on surfaces we physically contact. Dispersion methods may be as simple as opening a container, using conventional (garden) spray devices, or as elaborate as detonating an improvised explosive device.

Chemical Incidents are characterized by the rapid onset of medical symptoms (minutes to hours) and easily observed signatures (colored residue, dead foliage, pungent odor, dead insects and animals).

Biological Incidents are characterized by the onset of symptoms in hours to days. Typically, there will be no characteristic signatures because biological agents are usually odorless and colorless. Because of the delayed onset of symptoms in a biological incident, the area affected may be greater due to the movement of infected individuals.

INDICATORS OF A POSSIBLE CHEMICAL INCIDENT

Dead animals/birds/fish	Not just an occasional road kill, but numerous animals (wild and domestic, small and large), birds, and fish in the same area.
Lack of insect life	If normal insect activity (ground, air, and/or water) is missing, check the ground/water surface/shore line for dead insects. If near water, check for dead fish/aquatic birds.
Unexplained odors	Smells may range from fruity to flowery to sharp/pungent to garlic/ horseradish-like to bitter almonds/peach kernels to new mown hay. It is important to note that the particular odor is completely out of character with its surroundings.
Unusual numbers of dying or sick people (mass casualties)	Health problems including nausea, disorientation, difficulty in breathing, convulsions, localized sweating, conjunctivitis (reddening of eyes/nerve agent symptoms), erythema (reddening of skin/vesicant symptoms) and death.
Pattern of casualties	Casualties will likely be distributed downwind, or if indoors, by the air ventilation system.

INDICATORS OF A POSSIBLE CHEMICAL INCIDENT (Continued)

Blisters/rashes	Numerous individuals experiencing unexplained water-like blisters, weals (like bee stings), and/or rashes.
Illness in confined area	Different casualty rates for people working indoors versus outdoors dependent on where the agent was released.
Unusual liquid droplets	Numerous surfaces exhibit oily droplets/film; numerous water surfaces have an oily film. (No recent rain.)
Different looking areas	Not just a patch of dead weeds, but trees, shrubs, bushes, food crops, and/or lawns that are dead, discolored, or withered. (No current drought.)
Low-lying clouds	Low-lying cloud/fog-like condition that is not consistent with its surroundings.
Unusual metal debris	Unexplained bomb/munitions-like material, especially if it contains a liquid.

INDICATORS OF A POSSIBLE BIOLOGICAL INCIDENT

Unusual numbers of sick or dying people or animals	Any number of symptoms may occur. Casualties may occur hours to days after an incident has occurred. The time required before symptoms are observed is dependent on the agent used.
Unscheduled and unusual spray being disseminated	Especially if outdoors during periods of darkness.
Abandoned spray devices	Devices may not have distinct odors.

PERSONAL SAFETY CONSIDERATIONS

When approaching a scene that may involve CB agents, the most critical consideration is the safety of oneself and other responders. Protective clothing and respiratory protection of appropriate level of safety must be used. Be aware that the presence and identification of CB agents may not be verifiable, especially in the case of biological agents. The following actions/measures to be considered are applicable to either a chemical or biological incident. The guidance is general in nature, not all encompassing, and its applicability should be evaluated on a case-by-case basis.

Approach and response strategies. Protect yourself and use a safe approach (minimize any exposure time, maximize the distance between you and the item that is likely to harm you, use cover as protection and wear appropriate personal protective equipment and

respiratory protection). Identify and estimate the hazard by using indicators as provided above. Isolate the area and secure the scene; potentially contaminated people should be isolated and decontaminated as soon as possible. In the event of a chemical incident, the fading of chemical odors is not necessarily an indication of reduced vapor concentrations. Some chemicals deaden the senses giving the false perception that the chemical is no longer present.

Decontamination measures. Emergency responders should follow standard decontamination procedures (flush-strip-flush). Mass casualty decontamination should begin as soon as possible by stripping (all clothing) and flushing (soap and water). If biological agents are involved or suspected, careful washing and use of a brush are more effective. If chemical agents are suspected, the most important and effective decontamination will be that done within the first one or two minutes. If possible, further decontamination should be performed using a 0.5% hypochlorite solution (1 part household bleach mixed with 9 parts water). If biological agents are suspected, a contact time of 10 to 15 minutes should be allowed before rinsing. The solution can be used on soft tissue wounds, but must not be used in eyes or open wounds of the abdomen, chest, brain, or spine. For further information contact the agencies listed in this guidebook.

NOTE: The above information was developed by the Department of National Defence (Canada) and the U.S. Department of the Army, Edgewood Arsenal.

Glossary

Alcohol resistant foam	A foam that is resistant to "polar" chemicals such as ketones and esters which may break down other types of foam.
Biological agents	Living organisms that cause disease, sickness and mortality in humans. Anthrax and Ebola are examples of biological agents. Refer to Guide 158.
Blister agents (vesicants)	Substances that cause blistering of the skin. Exposure is through liquid or vapor contact with any exposed tissue (eyes, skin, lungs). Mustard (H), Distilled Mustard (HD), Nitrogen Mustard (HN) and Lewisite (L) are blister agents. Symptoms: Red eyes, skin irritation, burning of skin, blisters, upper respiratory damage, cough, hoarseness.
Blood agents	Substances that injure a person by interfering with cell respiration (the exchange of oxygen and carbon dioxide between blood and tissues). Hydrogen cyanide (AC) and Cyanogen chloride (CK) are blood agents. Symptoms: Respiratory distress, headache, unresponsiveness, seizures, coma.
Burn	Refers to either a chemical or thermal burn, the former may be caused by corrosive substances and the latter by liquefied cryogenic gases, hot molten substances, or flames.
Choking agents	Substances that cause physical injury to the lungs. Exposure is through inhalation. In extreme cases, membranes swell and lungs become filled with liquid (pulmonary edema). Death results from lack of oxygen; hence, the victim is "choked". Phosgene (CG) is a choking agent. Symptoms: irritation to eyes/nose/throat, respiratory distress, nausea and vomiting, burning of exposed skin.
CO ₂	Carbon dioxide gas.
Cold zone	Area where the command post and support functions that are necessary to control the incident are located. This is also referred to as the clean zone, green zone or support zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)

Glossary

Combustible liquid	Liquids which have a flash point greater than 60.5°C (141°F) and below 93°C (200°F). U.S. regulations permit a flammable liquid with a flash point between 38°C (100°F) and 60.5°C (141°F) to be reclassified as a combustible liquid.
Compatibility Group	<p>Letters identify explosives that are deemed to be compatible. Class 1 materials are considered to be “compatible” if they can be transported together without significantly increasing either the probability of an incident or, for a given quantity, the magnitude of the effects of such an incident.</p> <ul style="list-style-type: none">A Substances which are expected to mass detonate very soon after fire reaches them.B Articles which are expected to mass detonate very soon after fire reaches them.C Substances or articles which may be readily ignited and burn violently without necessarily exploding.D Substances or articles which may mass detonate (with blast and/or fragment hazard) when exposed to fire. <p>E&F Articles which may mass detonate in a fire.</p> <ul style="list-style-type: none">G Substances and articles which may mass explode and give off smoke or toxic gases.H Articles which in a fire may eject hazardous projectiles and dense white smoke.J Articles which may mass explode.K Articles which in a fire may eject hazardous projectiles and toxic gases.L Substances and articles which present a special risk and could be activated by exposure to air or water.N Articles which contain only extremely insensitive detonating substances and demonstrate a negligible probability of accidental ignition or propagation.S Packaged substances or articles which, if accidentally initiated, produce effects that are usually confined to the immediate vicinity.

Glossary

Control zones	Designated areas at dangerous goods incidents, based on safety and the degree of hazard. Many terms are used to describe control zones; however, in this guidebook, these zones are defined as the hot/exclusion/restricted zone, warm/contamination reduction/limited access zone, and cold/support/clean zone. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)
Cryogenic liquid	A refrigerated, liquefied gas that has a boiling point colder than -90°C (-130°F) at atmospheric pressure.
Dangerous Water Reactive Material	Produces significant toxic gas when it comes in contact with water.
Decomposition products	Products of a chemical or thermal break-down of a substance.
Decontamination	The removal of dangerous goods from personnel and equipment to the extent necessary to prevent potential adverse health effects. Always avoid direct or indirect contact with dangerous goods; however, if contact occurs, personnel should be decontaminated as soon as possible. Since the methods used to decontaminate personnel and equipment differ from one chemical to another, contact the chemical manufacturer, through the agencies listed on the inside back cover, to determine the appropriate procedure. Contaminated clothing and equipment should be removed after use and stored in a controlled area (warm/contamination reduction/limited access zone) until cleanup procedures can be initiated. In some cases, protective clothing and equipment cannot be decontaminated and must be disposed of in a proper manner.
Dry chemical	A preparation designed for fighting fires involving flammable liquids, pyrophoric substances and electrical equipment. Common types contain sodium bicarbonate or potassium bicarbonate.
Edema	The accumulation of an excessive amount of watery fluid in cells and tissues. Pulmonary edema is an excessive buildup of water in the lungs, for instance, after inhalation of a gas that is corrosive to lung tissue.
Flammable liquid	A liquid that has a flash point of 60.5 °C (141°F) or lower.
Flash point	Lowest temperature at which a liquid or solid gives off vapor in such a concentration that, when the vapor combines with air near the surface of the liquid or solid, a flammable mixture is formed. Hence, the lower the flash point, the more flammable the material.

Glossary

Hazard zones (Inhalation Hazard Zones)	HAZARD ZONE A: LC50 of less than or equal to 200 ppm, HAZARD ZONE B: LC50 greater than 200 ppm and less than or equal to 1000 ppm, HAZARD ZONE C: LC50 greater than 1000 ppm and less than or equal to 3000 ppm, HAZARD ZONE D: LC50 greater than 3000 ppm and less than or equal to 5000 ppm.
Hot zone	Area immediately surrounding a dangerous goods incident which extends far enough to prevent adverse effects from released dangerous goods to personnel outside the zone. This zone is also referred to as exclusion zone, red zone or restricted zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)
Immiscible	In this guidebook, means that a material does not mix readily with water.
Mass explosion	Explosion which affects almost the entire load virtually instantaneously.
Miscible	In this guidebook, means that a material mixes readily with water.
Nerve agents	Substances that interfere with the central nervous system. Exposure is primarily through contact with the liquid (via skin and eyes) and secondarily through inhalation of the vapor. Tabun (GA), Sarin (GB), Soman (GD) and VX are nerve agents. Symptoms: Pinpoint pupils, extreme headache, severe tightness in the chest, dyspnea, runny nose, coughing, salivation, unresponsiveness, seizures.
Non-polar	See "Immiscible".
n.o.s.	These letters refer to not otherwise specified. The entries which use this description are generic names such as "Corrosive liquid, n.o.s." This means that the actual chemical name for that corrosive liquid is not listed in the regulations; therefore, a generic name must be used to describe it on shipping papers.
Noxious	In this guidebook, means that a material may be harmful or injurious to health or physical well-being.
Oxidizer	A chemical which supplies its own oxygen and which helps other combustible material burn more readily.

Glossary

P	The letter "P" following a guide number in the yellow-bordered and blue-bordered pages identifies a material which may polymerize violently under high temperature conditions or contamination with other products. This polymerization will produce heat and high pressure buildup in containers which may explode or rupture. (See polymerization below.)
pH	pH is a value that represents the acidity or alkalinity of a water solution. Pure water has a pH of 7. A pH value below 7 indicates an acid solution (a pH of 1 is extremely acidic). A pH above 7 indicates an alkaline solution (a pH of 14 is extremely alkaline). Acids and alkalis (bases) are commonly referred to as corrosive materials.
PIH	Poison Inhalation Hazard. Term used to describe gases and volatile liquids that are toxic when inhaled. (Same as TIH)
Polar	See "Miscible".
Polymerization	This term describes a chemical reaction which is generally associated with the production of plastic substances. Basically, the individual molecules of the chemical (liquid or gas) react with each other to produce what can be described as a long chain. These chains can be formed in many useful applications. A well known example is the styrofoam (polystyrene) coffee cup which is formed when liquid molecules of styrene react with each other or polymerize forming a solid, therefore changing the name from styrene to polystyrene (poly means many).
Protective clothing	Includes both respiratory and physical protection. One cannot assign a level of protection to clothing or respiratory devices separately. These levels were accepted and defined by response organizations such as U.S. Coast Guard, NIOSH, and U.S. EPA. Level A: SCBA plus totally encapsulating chemical resistant clothing (permeation resistant). Level B: SCBA plus hooded chemical resistant clothing (splash suit). Level C: Full or half-face respirator plus hooded chemical resistant clothing (splash suit). Level D: Coverall with no respiratory protection.
Pyrophoric	A material which ignites spontaneously upon exposure to air (or oxygen).
Radioactivity	The property of some substances to emit invisible and potentially harmful radiation.

Glossary

Radiation Authority	As referred to in Guides 161 through 166 for radioactive materials, the Radiation Authority is either a Federal, state/provincial agency or state/province designated official. The responsibilities of this authority include evaluating radiological hazard conditions during normal operations and during emergencies. If the identity and telephone number of the authority are not known by emergency responders, or included in the local response plan, the information can be obtained from the agencies listed on the inside back cover. They maintain a periodically updated list of radiation authorities.
Refrigerated liquid	See "Cryogenic liquid".
Straight (solid) stream	Method used to apply or distribute water from the end of a hose. The water is delivered under pressure for penetration. In an efficient straight (solid) stream, approximately 90% of the water passes through an imaginary circle 38 cm (15 inches) in diameter at the breaking point. Hose (solid or straight) streams are frequently used to cool tanks and other equipment exposed to flammable liquid fires, or for washing burning spills away from danger points. However, straight streams will cause a spill fire to spread if improperly used or when directed into open containers of flammable and combustible liquids.
TIH	Toxic Inhalation Hazard. Term used to describe gases and volatile liquids that are toxic when inhaled. (Same as PIH)
Vapor density	Weight of a volume of pure vapor or gas (with no air present) compared to the weight of an equal volume of dry air at the same temperature and pressure. A vapor density less than 1 (one) indicates that the vapor is lighter than air and will tend to rise. A vapor density greater than 1 (one) indicates that the vapor is heavier than air and may travel along the ground.
Vapor pressure	Pressure at which a liquid and its vapor are in equilibrium at a given temperature. Liquids with high vapor pressures evaporate rapidly.
Viscosity	Measure of a liquid's internal resistance to flow. This property is important because it indicates how fast a material will leak out through holes in containers or tanks.

Glossary

Warm zone	Area between Hot and Cold zones where personnel and equipment decontamination and hot zone support take place. It includes control points for the access corridor and thus assists in reducing the spread of contamination. Also referred to as the contamination reduction corridor (CRC), contamination reduction zone (CRZ), yellow zone or limited access zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)
Water-sensitive	Substances which may produce flammable and/or toxic decomposition products upon contact with water.
Water spray (fog)	<p>Method or way to apply or distribute water. The water is finely divided to provide for high heat absorption. Water spray patterns can range from about 10 to 90 degrees. Water spray streams can be used to extinguish or control the burning of a fire or to provide exposure protection for personnel, equipment, buildings, etc. (This method can be used to absorb vapors, knock-down vapors or disperse vapors. Direct a water spray (fog), rather than a straight (solid) stream, into the vapor cloud to accomplish any of the above).</p> <p>Water spray is particularly effective on fires of flammable liquids and volatile solids having flash points above 37.8°C (100°F).</p> <p>Regardless of the above, water spray can be used successfully on flammable liquids with low flash points. The effectiveness depends particularly on the method of application. With proper nozzles, even gasoline spill fires of some types have been extinguished when coordinated hose lines were used to sweep the flames off the surface of the liquid. Furthermore, water spray carefully applied has frequently been used with success in extinguishing fires involving flammable liquids with high flash points (or any viscous liquids) by causing frothing to occur only on the surface, and this foaming action blankets and extinguishes the fire.</p>

PUBLICATION DATA

The 2000 Emergency Response Guidebook (ERG2000) was prepared by the staff of Transport Canada, the U.S. Department of Transportation, and the Secretariat of Communications and Transport of Mexico with the assistance of many interested parties from government and industry.

ERG2000 is based on earlier Transport Canada, U.S. DOT, and Secretariat of Communications and Transport emergency response guidebooks. The Emergency Response Guidebook has been translated and printed in many languages, including French, Spanish, Chinese, German, Hebrew, Japanese, Portuguese, and Thai.

We encourage countries that wish to participate in future editions of the Guidebook to provide their emergency response center information for inclusion. Please contact any of the websites or telephone numbers in the paragraph below.

DISTRIBUTION OF THIS GUIDEBOOK

The primary objective is to place one copy of the ERG2000 in each emergency service vehicle through distribution to Federal, state, provincial and local public safety authorities. The distribution of this guidebook is being accomplished through the voluntary cooperation of a network of key agencies. Emergency service organizations that have not yet received copies of ERG2000 should contact the respective distribution center in their country, state or province. In the U.S., information about the distribution center for your location may be obtained from the Hazardous Material Safety web site at <http://hazmat.dot.gov> or call 202-366-4900. In Canada, contact CANUTEC at 613-992-4624 or via the web site at <http://www.canutec.gc.ca> for information. In Mexico, call SCT at 52-5-684-1275 or 684-0188.

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Constructive comments concerning ERG2000 are solicited; in particular, comments concerning its use in handling incidents involving dangerous goods. Comments should be addressed to:

In Canada:

Chief, CANUTEC
Transport Dangerous Goods
Transport Canada
Ottawa, Ontario
Canada K1A 0N5

Phone: 613-992-4624 (information)
FAX: 613-954-5101
Internet: canutec@tc.gc.ca

In the U.S.:

U. S. Department of Transportation
Research and Special Programs Administration
Office of Hazardous Materials Initiatives and Training (DHM-50)
Washington, DC 20590-0001

Phone: 202-366-4900
FAX: 202-366-7342
Internet: welisten@rspa.dot.gov

In Mexico:

Secretariat for Communications and Transport
Land Transport Directorate
Hazardous Materials and Wastes Directorate
Calz. de las Bombas No. 411-9 piso
Col. San Bartolo Coapa
Coyoacan 04800, D.F.
Mexico

Phone and FAX: 52-5-684-1275 and 684-0188

EMERGENCY RESPONSE TELEPHONE NUMBERS

CANADA

1. CANUTEC

613-996-6666

(Collect calls are accepted)
*666 cellular (in Canada only)

UNITED STATES

1. CHEMTREC®

1-800-424-9300

(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)

703-527-3887 For calls originating elsewhere

(Collect calls are accepted)

2. CHEM-TEL, INC.

1-800-255-3924

(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)

813-248-0585 For calls originating elsewhere

(Collect calls are accepted)

3. INFOTRAC

1-800-535-5053

(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)

352-323-3500 For calls originating elsewhere

(Collect calls are accepted)

4. 3E COMPANY

1-800-451-8346

(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)

760-602-8703 For calls originating elsewhere

(Collect calls are accepted)

5. MILITARY SHIPMENTS

703-697-0218 - Explosives/ammunition incidents

(Collect calls are accepted)

1-800-851-8061 - All other dangerous goods incidents

EMERGENCY RESPONSE TELEPHONE NUMBERS

MEXICO

1. SETIQ

01-800-00-214-00 in the Mexican Republic
For calls originating in Mexico City and the Metropolitan Area
5559-1588
For calls originating elsewhere, call
0-11-52-5-559-1588

2. CECOM

01-800-00-413-00 in the Mexican Republic
For calls originating in Mexico City and the Metropolitan Area
5550-1496, 5550-1552, 5550-1485 or 5550-4885
For calls originating elsewhere, call
0-11-52-5-550-1496, or 0-11-52-5-550-1552
0-11-52-5-550-1485, or 0-11-52-5-550-4885

BRAZIL

1. PRÓ -QUÍMICA

0-800-118270
(Toll-free in Brazil)
55-11-232-1144 For calls originating elsewhere
(Collect calls are accepted)

For additional details see the section entitled **"WHO TO CALL FOR ASSISTANCE."**

The Emergency Response Guidebook is normally revised and reissued every three or four years. However, in the event of a significant mistake, omission or change in the state of knowledge, special instructions to change the guidebook (in pen-and-ink, with paste-over stickers, or with a supplement) may be issued. Users of this guidebook should check periodically (about every 6 months) to make sure their version is current. Changes should be annotated below. Contact:

DOT/RSPA
<http://hazmat.dot.gov/guidebook.htm>

TRANSPORT CANADA
<http://www.tc.gc.ca/canutec/en/guide/guide-e.htm>

This guidebook incorporates changes dated:
