

## § 172.1

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## Subpart A—General

### § 172.1 Purpose and scope.

This part lists and classifies those materials which the Department has designated as hazardous materials for purposes of transportation and prescribes the requirements for shipping papers, package marking, labeling, and transport vehicle placarding applicable to the shipment and transportation of those hazardous materials.

[Amdt. 172–29, 41 FR 15997, Apr. 15, 1976, as amended by 66 FR 45379, Aug. 28, 2001]

### § 172.3 Applicability.

(a) This part applies to—

(1) Each person who offers a hazardous material for transportation, and  
(2) Each carrier by air, highway, rail, or water who transports a hazardous material.

(b) When a person, other than one of those provided for in paragraph (a) of this section, performs a packaging labeling or marking function required by

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this part, that person shall perform the function in accordance with this part.

[Amdt. 172–29, 41 FR 15996, Apr. 15, 1976, as amended by Amdt. 172–32, 41 FR 38179, Sept. 9, 1976]

## Subpart B—Table of Hazardous Materials and Special Provisions

### § 172.101 Purpose and use of hazardous materials table.

(a) The Hazardous Materials Table (Table) in this section designates the materials listed therein as hazardous materials for the purpose of transportation of those materials. For each listed material, the Table identifies the hazard class or specifies that the material is forbidden in transportation, and gives the proper shipping name or directs the user to the preferred proper shipping name. In addition, the Table specifies or references requirements in this subchapter pertaining to labeling, packaging, quantity limits aboard aircraft and stowage of hazardous materials aboard vessels.

(b) *Column 1: Symbols.* Column 1 of the Table contains six symbols (“+”, “A”, “D”, “G”, “I” and “W”) as follows:

(1) The plus (+) sign fixes the proper shipping name, hazard class and packing group for that entry without regard to whether the material meets the definition of that class, packing group or any other hazard class definition. When the plus sign is assigned to a proper shipping name in Column (1) of the § 172.101 Table, it means that the material is known to pose a risk to humans. When a plus sign is assigned to mixtures or solutions containing a material where the hazard to humans is significantly different from that of the pure material or where no hazard to humans is posed, the material may be described using an alternative shipping name that represents the hazards posed by the material. An appropriate alternate proper shipping name and hazard class may be authorized by the Associate Administrator.

(2) The letter “A” denotes a material that is subject to the requirements of this subchapter only when offered or intended for transportation by aircraft, unless the material is a hazardous substance or a hazardous waste. A shipping description entry preceded by an

“A” may be used to describe a material for other modes of transportation provided all applicable requirements for the entry are met.

(3) The letter “D” identifies proper shipping names which are appropriate for describing materials for domestic transportation but may be inappropriate for international transportation under the provisions of international regulations (e.g., IMO, ICAO). An alternate proper shipping name may be selected when either domestic or international transportation is involved.

(4) The letter “G” identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description. (See §172.203(k).)

(5) The letter “I” identifies proper shipping names which are appropriate for describing materials in international transportation. An alternate proper shipping name may be selected when only domestic transportation is involved.

(6) The letter “W” denotes a material that is subject to the requirements of this subchapter only when offered or intended for transportation by vessel, unless the material is a hazardous substance or a hazardous waste. A shipping description entry preceded by a “W” may be used to describe a material for other modes of transportation provided all applicable requirements for the entry are met.

(c) *Column 2: Hazardous materials descriptions and proper shipping names.* Column 2 lists the hazardous materials descriptions and proper shipping names of materials designated as hazardous materials. Modification of a proper shipping name may otherwise be required or authorized by this section. Proper shipping names are limited to those shown in Roman type (not italics).

(1) Proper shipping names may be used in the singular or plural and in either capital or lower case letters. Words may be alternatively spelled in the same manner as they appear in the ICAO Technical Instructions or the IMDG Code. For example “aluminum” may be spelled “aluminium” and “sulphur” may be spelled “sulfur”. However, the word “inflammable” may not

be used in place of the word “flammable”.

(2) Punctuation marks and words in italics are not part of the proper shipping name, but may be used in addition to the proper shipping name. The word “or” in italics indicates that there is a choice of terms in the sequence that may alternately be used as the proper shipping name or as part of the proper shipping name, as appropriate. For example, for the hazardous materials description “Carbon dioxide, solid or Dry ice” either “Carbon dioxide, solid” or “Dry ice” may be used as the proper shipping name; and for the hazardous materials description “Articles, pressurized pneumatic or hydraulic,” either “Articles, pressurized pneumatic” or “Articles, pressurized hydraulic” may be used as the proper shipping name.

(3) The word “poison” or “poisonous” may be used interchangeably with the word “toxic” when only domestic transportation is involved. The abbreviation “n.o.i.” or “n.o.i.b.n.” may be used interchangeably with “n.o.s.”.

(4) Except for hazardous wastes, when qualifying words are used as part of the proper shipping name, their sequence in the package markings and shipping paper description is optional. However, the entry in the Table reflects the preferred sequence.

(5) When one entry references another entry by use of the word “see”, if both names are in Roman type, either name may be used as the proper shipping name (e.g., Ethyl alcohol, *see* Ethanol).

(6) When a proper shipping name includes a concentration range as part of the shipping description, the actual concentration, if it is within the range stated, may be used in place of the concentration range. For example, an aqueous solution of hydrogen peroxide containing 30 percent peroxide may be described as “Hydrogen peroxide, aqueous solution *with not less than 20 percent but not more than 40 percent hydrogen peroxide*” or “Hydrogen peroxide, aqueous solution *with 30 percent hydrogen peroxide*”.

(7) Use of the prefix “mono” is optional in any shipping name, when appropriate. Thus, Iodine monochloride

may be used interchangeably with Iodine chloride. In “Glycerol alpha-monochlorohydrin” the term “mono” is considered a prefix to the term “chlorohydrin” and may be deleted.

(8) Use of the word “liquid” or “solid”. The word “liquid” or “solid” may be added to a proper shipping name when a hazardous material specifically listed by name may, due to differing physical states, be a liquid or solid. When the packaging specified in Column 8 is inappropriate for the physical state of the material, the table provided in paragraph (i)(4) of this section should be used to determine the appropriate packaging section.

(9) *Hazardous wastes*. If the word “waste” is not included in the hazardous material description in Column 2 of the Table, the proper shipping name for a hazardous waste (as defined in §171.8 of this subchapter), shall include the word “Waste” preceding the proper shipping name of the material. For example: Waste acetone.

(10) *Mixtures and solutions*. (i) A mixture or solution not identified specifically by name, comprised of a single predominant hazardous material identified in the Table by technical name and one or more hazardous and/or non-hazardous material, must be described using the proper shipping name of the hazardous material and the qualifying word “mixture” or “solution”, as appropriate, unless—

(A) Except as provided in §172.101(i)(4) the packaging specified in Column 8 is inappropriate to the physical state of the material;

(B) The shipping description indicates that the proper shipping name applies only to the pure or technically pure hazardous material;

(C) The hazard class, packing group, or subsidiary hazard of the mixture or solution is different from that specified for the entry;

(D) There is a significant change in the measures to be taken in emergencies;

(E) The material is identified by special provision in Column 7 of the §172.101 Table as a material poisonous by inhalation; however, it no longer meets the definition of poisonous by inhalation or it falls within a different

hazard zone than that specified in the special provision; or

(F) The material can be appropriately described by a shipping name that describes its intended application, such as “Coating solution”, “Extracts, flavoring” or “Compound, cleaning liquid.”.

(ii) If one or more of the conditions specified in paragraph (c)(10)(i) of this section is satisfied, then a proper shipping name shall be selected as prescribed in paragraph (c)(12)(ii) of this section.

(iii) A mixture or solution not identified in the Table specifically by name, comprised of two or more hazardous materials in the same hazard class, shall be described using an appropriate shipping description (e.g., “Flammable liquid, n.o.s.”). The name that most appropriately describes the material shall be used; e.g., an alcohol not listed by its technical name in the Table shall be described as “Alcohol, n.o.s.” rather than “Flammable liquid, n.o.s.”. Some mixtures may be more appropriately described according to their application, such as “Coating solution” or “Extracts, flavoring liquid” rather than by an n.o.s. entry. Under the provisions of subparts C and D of this part, the technical names of at least two components most predominately contributing to the hazards of the mixture or solution may be required in association with the proper shipping name.

(11) Except for a material subject to or prohibited by §173.21, 173.54, 173.56(d), 173.56(e), 173.224(c) or 173.225(b) of this subchapter, a material that is considered to be a hazardous waste or a sample of a material for which the hazard class is uncertain and must be determined by testing may be assigned a tentative proper shipping name, hazard class, identification number and packing group, if applicable, based on the shipper’s tentative determination according to:

(i) Defining criteria in this subchapter;

(ii) The hazard precedence prescribed in §173.2a of this subchapter;

(iii) The shipper’s knowledge of the material;

(iv) In addition to paragraphs (c)(11)(i) through (iii) of this section,

for a sample of a material other than a waste, the following must be met:

(A) Except when the word "Sample" already appears in the proper shipping name, the word "Sample" must appear as part of the proper shipping name or in association with the basic description on the shipping paper.

(B) When the proper shipping description for a sample is assigned a "G" in Column (1) of the §172.101 Table, and the primary constituent(s) for which the tentative classification is based are not known, the provisions requiring a technical name for the constituent(s) do not apply; and

(C) A sample must be transported in a combination packaging that conforms to the requirements of this subchapter that are applicable to the tentative packing group assigned, and may not exceed a net mass of 2.5 kg (5.5 pounds) per package.

NOTE TO PARAGRAPH (c)(11): For the transportation of samples of self-reactive materials, organic peroxides, explosives or lighters, see §§173.224(c)(3), 173.225(c)(2), 173.56(d) or 173.308(b)(2) of this subchapter, respectively.

(12) Except when the proper shipping name in the Table is preceded by a plus (+)—

(i) If it is specifically determined that a material meets the definition of a hazard class, packing group or hazard zone, other than the class, packing group or hazard zone shown in association with the proper shipping name, or does not meet the defining criteria for a subsidiary hazard shown in Column 6 of the Table, the material shall be described by an appropriate proper shipping name listed in association with the correct hazard class, packing group, hazard zone, or subsidiary hazard for the material.

(ii) *Generic or n.o.s. descriptions.* If an appropriate technical name is not shown in the Table, selection of a proper shipping name shall be made from the generic or n.o.s. descriptions corresponding to the specific hazard class, packing group, hazard zone, or subsidiary hazard, if any, for the material. The name that most appropriately describes the material shall be used; e.g., an alcohol not listed by its technical name in the Table shall be described as "Alcohol, n.o.s." rather than "Flam-

mable liquid, n.o.s.". Some mixtures may be more appropriately described according to their application, such as "Coating solution" or "Extracts, flavoring, liquid", rather than by an n.o.s. entry, such as "Flammable liquid, n.o.s." It should be noted, however, that an n.o.s. description as a proper shipping name may not provide sufficient information for shipping papers and package markings. Under the provisions of subparts C and D of this part, the technical name of one or more constituents which makes the product a hazardous material may be required in association with the proper shipping name.

(iii) *Multiple hazard materials.* If a material meets the definition of more than one hazard class, and is not identified in the Table specifically by name (e.g., acetyl chloride), the hazard class of the material shall be determined by using the precedence specified in §173.2a of this subchapter, and an appropriate shipping description (e.g., "Flammable liquid, corrosive n.o.s.") shall be selected as described in paragraph (c)(12)(ii) of this section.

(iv) If it is specifically determined that a material is not a forbidden material and does not meet the definition of any hazard class, the material is not a hazardous material.

(13) *Self-reactive materials and organic peroxides.* A generic proper shipping name for a self-reactive material or an organic peroxide, as listed in Column 2 of the Table, must be selected based on the material's technical name and concentration, in accordance with the provisions of §§173.224 or 173.225 of this subchapter, respectively.

(14) A proper shipping name that describes all isomers of a material may be used to identify any isomer of that material if the isomer meets criteria for the same hazard class or division, subsidiary risk(s) and packing group, unless the isomer is specifically identified in the Table.

(15) Unless a hydrate is specifically listed in the Table, a proper shipping name for the equivalent anhydrous substance may be used, if the hydrate meets the same hazard class or division, subsidiary risk(s) and packing group.

(16) Unless it is already included in the proper shipping name in the §172.101 Table, the qualifying words “liquid” or “solid” may be added in association with the proper shipping name when a hazardous material specifically listed by name in the §172.101 Table may, due to the differing physical states of the various isomers of the material, be either a liquid or a solid (for example “Dinitrotoluenes, liquid” and “Dinitrotoluenes, solid”). Use of the words “liquid” or “solid” is subject to the limitations specified for the use of the words “mixture” or “solution” in paragraph (c)(10) of this section. The qualifying word “molten” may be added in association with the proper shipping name when a hazardous material, which is a solid in accordance with the definition in §171.8 of this subchapter, is offered for transportation in the molten state (for example, “Alkylphenols, solid, n.o.s., molten”).

(d) *Column 3: Hazard class or Division.* Column 3 contains a designation of the hazard class or division corresponding to each proper shipping name, or the word “Forbidden”.

(1) A material for which the entry in this column is “Forbidden” may not be offered for transportation or transported. This prohibition does not apply if the material is diluted, stabilized or incorporated in a device and it is classed in accordance with the definitions of hazardous materials contained in part 173 of this subchapter.

(2) When a reevaluation of test data or new data indicates a need to modify the “Forbidden” designation or the hazard class or packing group specified for a material specifically identified in the Table, this data should be submitted to the Associate Administrator.

(3) A basic description of each hazard class and the section reference for class definitions appear in §173.2 of this subchapter.

(4) Each reference to a Class 3 material is modified to read “Combustible liquid” when that material is reclassified in accordance with §173.150(e) or (f) of this subchapter or has a flash point above 60 °C (140 °F) but below 93 °C (200 °F).

(e) *Column 4: Identification number.* Column 4 lists the identification number assigned to each proper shipping

name. Those preceded by the letters “UN” are associated with proper shipping names considered appropriate for international transportation as well as domestic transportation. Those preceded by the letters “NA” are associated with proper shipping names not recognized for international transportation, except to and from Canada. Identification numbers in the “NA9000” series are associated with proper shipping names not appropriately covered by international hazardous materials (dangerous goods) transportation standards, or not appropriately addressed by international transportation standards for emergency response information purposes, except for transportation between the United States and Canada. Those preceded by the letters “ID” are associated with proper shipping names recognized by the ICAO Technical Instructions (IBR, see §171.7 of this subchapter).

(f) *Column 5: Packing group.* Column 5 specifies one or more packing groups assigned to a material corresponding to the proper shipping name and hazard class for that material. Class 2, Class 7, Division 6.2 (other than regulated medical wastes), and ORM-D materials, do not have packing groups. Packing Groups I, II and III indicate the degree of danger presented by the material is either great, medium or minor, respectively. If more than one packing group is indicated for an entry, the packing group for the hazardous material is determined using the criteria for assignment of packing groups specified in subpart D of part 173. When a reevaluation of test data or new data indicates a need to modify the specified packing group(s), the data should be submitted to the Associate Administrator. Each reference in this column to a material which is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter “A” or “W”, is modified to read “III” on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to requirements of this subchapter.

(g) *Column 6: Labels.* Column 6 specifies codes which represent the hazard warning labels required for a package

filled with a material conforming to the associated hazard class and proper shipping name, unless the package is otherwise excepted from labeling by a provision in subpart E of this part, or part 173 of this subchapter. The first code is indicative of the primary hazard of the material. Additional label codes are indicative of subsidiary hazards. Provisions in §172.402 may require that a label other than that specified in Column 6 be affixed to the package in addition to that specified in Column 6. No label is required for a material classed as a combustible liquid or for a Class 3 material that is reclassified as a combustible liquid. For “Empty” label requirements, see §173.428 of this subchapter. The codes contained in Column 6 are defined according to the following table:

**LABEL SUBSTITUTION TABLE**

Label code	Label name
1	Explosive
1.1 <sup>1</sup>	Explosive 1.1 <sup>1</sup>
1.2 <sup>1</sup>	Explosive 1.2 <sup>1</sup>
1.3 <sup>1</sup>	Explosive 1.3 <sup>1</sup>
1.4 <sup>1</sup>	Explosive 1.4 <sup>1</sup>
1.5 <sup>1</sup>	Explosive 1.5 <sup>1</sup>
1.6 <sup>1</sup>	Explosive 1.6 <sup>1</sup>
2.1	Flammable Gas
2.2	Non-Flammable Gas
2.3	Poison Gas
3	Flammable Liquid
4.1	Flammable Solid
4.2	Spontaneously Combustible
4.3	Dangerously When Wet
5.1	Oxidizer
5.2	Organic Peroxide
6.1 (inhalation hazard, Zone A or B).	Poison Inhalation Hazard
6.1 (other than inhalation hazard, Zone A or B) <sup>2</sup> .	Poison
6.2	Infectious substance
7	Radioactive
8	Corrosive
9	Class 9

<sup>1</sup> Refers to the appropriate compatibility group letter.  
<sup>2</sup> The packing group for a material is indicated in column 5 of the table.

(h) *Column 7: Special provisions.* Column 7 specifies codes for special provisions applicable to hazardous materials. When Column 7 refers to a special provision for a hazardous material, the meaning and requirements of that special provision are as set forth in §172.102 of this subpart.

(i) *Column 8: Packaging authorizations.* Columns 8A, 8B and 8C specify the applicable sections for exceptions, non-bulk packaging requirements and bulk packaging requirements, respectively,

in part 173 of this subchapter. Columns 8A, 8B and 8C are completed in a manner which indicates that “§173.” precedes the designated numerical entry. For example, the entry “202” in Column 8B associated with the proper shipping name “Gasoline” indicates that for this material conformance to non-bulk packaging requirements prescribed in §173.202 of this subchapter is required. When packaging requirements are specified, they are in addition to the standard requirements for all packagings prescribed in §173.24 of this subchapter and any other applicable requirements in subparts A and B of part 173 of this subchapter.

(1) *Exceptions.* Column 8A contains exceptions from some of the requirements of this subchapter. The referenced exceptions are in addition to those specified in subpart A of part 173 and elsewhere in this subchapter. A “None” in this column means no packaging exceptions are authorized, except as may be provided by special provisions in Column 7.

(2) *Non-bulk packaging.* Column 8B references the section in part 173 of this subchapter which prescribes packaging requirements for non-bulk packagings. A “None” in this column means non-bulk packagings are not authorized, except as may be provided by special provisions in Column 7. Each reference in this column to a material which is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter “A” or “W”, is modified to include “§173.203” or “§173.213”, as appropriate for liquids and solids, respectively, on those occasions when the material is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter.

(3) *Bulk packaging.* Column (8C) specifies the section in part 173 of this subchapter that prescribes packaging requirements for bulk packagings, subject to the limitations, requirements, and additional authorizations of Columns (7) and (8B). A “None” in Column (8C) means bulk packagings are not authorized, except as may be provided by special provisions in Column (7) and in packaging authorizations Column (8B).

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Additional authorizations and limitations for use of UN portable tanks are set forth in Column 7. For each reference in this column to a material that is a hazardous waste or a hazardous substance, and whose proper shipping name is preceded in Column 1 of the Table by the letter “A” or “W” and that is offered for transportation or transported by a mode in which its transportation is not otherwise subject to the requirements of this subchapter:

(4) For a hazardous material which is specifically named in the Table and whose packaging sections specify packagings not applicable to the form of the material (e.g., packaging specified is for solid material and the material is being offered for transportation in a liquid form) the following table should be used to determine the appropriate packaging section:

Packaging section reference for solid materials	Corresponding packaging section for liquid materials
§ 173.187 .....	§ 173.181
§ 173.211 .....	§ 173.201
§ 173.212 .....	§ 173.202
§ 173.213 .....	§ 173.203
§ 173.240 .....	§ 173.241
§ 173.242 .....	§ 173.243

(5) *Cylinders.* For cylinders, both non-bulk and bulk packaging authorizations are set forth in Column (8B). Notwithstanding a designation of “None” in Column (8C), a bulk cylinder may be used when specified through the section reference in Column (8B).

(j) *Column 9: Quantity limitations.* Columns 9A and 9B specify the maximum quantities that may be offered for transportation in one package by passenger-carrying aircraft or passenger-carrying rail car (Column 9A) or by cargo aircraft only (Column 9B), subject to the following:

(1) “Forbidden” means the material may not be offered for transportation or transported in the applicable mode of transport.

(2) The quantity limitation is “net” except where otherwise specified, such as for “Consumer commodity” which specifies “30 kg gross.”

(3) When articles or devices are specifically listed by name, the net quantity limitation applies to the entire article or device (less packaging and

packaging materials) rather than only to its hazardous components.

(4) A package offered or intended for transportation by aircraft and which is filled with a material forbidden on passenger-carrying aircraft but permitted on cargo aircraft only, or which exceeds the maximum net quantity authorized on passenger-carrying aircraft, shall be labelled with the CARGO AIRCRAFT ONLY label specified in § 172.448 of this part.

(5) The total net quantity of hazardous material for an outer non-bulk packaging that contains more than one hazardous material may not exceed the lowest permitted maximum net quantity per package as shown in Column 9A or 9B, as appropriate. If one material is a liquid and one is a solid, the maximum net quantity must be calculated in kilograms. See § 173.24a(c)(1)(iv).

(k) *Column 10: Vessel stowage requirements.* Column 10A [Vessel stowage] specifies the authorized stowage locations on board cargo and passenger vessels. Column 10B [Other provisions] specifies codes for stowage requirements for specific hazardous materials. The meaning of each code in Column 10B is set forth in § 176.84 of this subchapter. Section 176.63 of this subchapter sets forth the physical requirements for each of the authorized locations listed in Column 10A. (For bulk transportation by vessel, see 46 CFR parts 30 to 40, 70, 98, 148, 151, 153 and 154.) The authorized stowage locations specified in Column 10A are defined as follows:

(1) Stowage category “A” means the material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

(2) Stowage category “B” means—  
 (i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and

(ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

(3) Stowage category “C” means the material must be stowed “on deck

only” on a cargo vessel and on a passenger vessel.

(4) Stowage category “D” means the material must be stowed “on deck only” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

(5) Stowage category “E” means the material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length, but is prohibited from carriage on passenger vessels in which the limiting number of passengers is exceeded.

(6) Stowage category “01” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) and on a passenger vessel.

(7) Stowage category “02” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a passenger vessel.

(8) Stowage category “03” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” in closed cargo transport units on a passenger vessel.

(9) Stowage category “04” means the material may be stowed “on deck” or “under deck” on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(10) Stowage category “05” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) and on a passenger vessel.

(11) Stowage category “06” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a passenger vessel.

(12) Stowage category “07” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(13) Stowage category “08” means the material may be stowed “on deck” in closed cargo transport units or “under deck” on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(14) Stowage category “09” means the material may be stowed “on deck only” in closed cargo transport units or “under deck” in closed cargo transport units on a cargo vessel (up to 12 passengers) and on a passenger vessel.

(15) Stowage category “10” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(16) Stowage category “11” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in magazine stowage type “c” on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(17) Stowage category “12” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in magazine stowage type “c” on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(18) Stowage category “13” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in magazine stowage type “A” on a cargo vessel (up to 12 passengers) and “on deck” only in closed cargo transport units on a passenger vessel.

(19) Stowage category “14” means the material may be stowed “on deck” in closed cargo transport units on a cargo vessel (up to 12 passengers) but the material is prohibited on a passenger vessel.

(20) Stowage category “15” means the material may be stowed “on deck” in closed cargo transport units or “under deck” in closed cargo transport units on a cargo vessel (up to 12 passengers)



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but the material is prohibited on a passenger vessel.

(1) *Changes to the Table.* (1) Unless specifically stated otherwise in a rule document published in the FEDERAL REGISTER amending the Table—

(i) Such a change does not apply to the shipment of any package filled prior to the effective date of the amendment; and

(ii) Stocks of preprinted shipping papers and package markings may be continued in use, in the manner previously authorized, until depleted or for a one-year period, subsequent to the effective date of the amendment, whichever is less.

(2) Except as otherwise provided in this section, any alteration of a shipping description or associated entry which is listed in the §172.101 Table must receive prior written approval from the Associate Administrator.

(3) The proper shipping name of a hazardous material changed in the May 6, 1997 final rule, in effect on October 1, 1997, only by the addition or omission of the word “compressed,” “inhibited,” “liquefied” or “solution” may continue to be used to comply with package marking requirements, until January 1, 2003.

§ 172.101 HAZARDOUS MATERIALS TABLE

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage			
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)		
A	Accelerene, see Nitrosodimethylaniline Accumulators, electric, see Batteries, wet etc Accumulators, pressurized, pneumatic or hydraulic (containing non-flammable gas) see Articles pressurized, pneumatic or hydraulic (containing non-flammable gas) Acetal Acetaldehyde Acetaldehyde ammonia Acetaldehyde oxime Acetic acid, glacial or Acetic acid solution, with more than 80 percent acid, by mass Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass Acetic acid solution, with more than 10 percent and less than 50 percent acid, by mass Acetic anhydride Acetone Acetone cyanohydrin, stabilized Acetone oils Acetonitrile Acetyl acetone peroxide with more than 9 percent by mass active oxygen Acetyl benzoyl peroxide, solid, or with more than 40 percent in solution Acetyl bromide Acetyl chloride	3	UN1088	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	E			
		3	UN1089	I	3	A3, B16, T11, TP2, TP7	None	201	243	243	Forbidden	30 L	E		
		9	UN1841	III	9	IB8, IP3, IP7, T1, TP33	155	204	240	240	200 kg	200 kg	A	34	
		3	UN2332	III	3	B1, IB3, T4, TP1	150	203	242	242	60 L	220 L	A		
		8	UN2789	II	8, 3	A3, A6, A7, A10, B2, IB2, T7, TP2	154	202	243	243	1 L	30 L	A		
		8	UN2790	II	8	A3, A6, A7, A10, B2, IB2, T7, TP2	154	202	242	242	1 L	30 L	A		
		8	UN2790	III	8	IB3, T4, TP1	154	203	242	242	5 L	60 L	A		
		8	UN1715	II	8, 3	A3, A6, A7, A10, B2, IB2, T7, TP2	154	202	243	243	1 L	30 L	A	40	
		3	UN1090	II	3	IB2, T4, TP1	150	202	242	242	5 L	60 L	B		
		6.1	UN1541	I	6.1	2, B9, B14, B32, B76, B77, N34, T20, TP2, TP13, TP38, TP45	None	227	244	244	Forbidden	Forbidden	D	25, 40, 52, 53	
		3	UN1091	II	3	IB2, T4, TP1, TP8	150	202	242	242	5 L	60 L	B		
		3	UN1648	II	3	IB2, T7, TP2	150	202	242	242	5 L	60 L	B	40	
		Forbidden	Forbidden	Forbidden	UN1716	II	8	B2, IB2, T8, TP2	154	202	242	1 L	30 L	C	40
		3	UN1717	II	3, 8	A3, A6, A7, IB1, N34, T8, TP2	150	202	243	243	1 L	5 L	B	40	

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	Acetyl cyclohexanesulfonyl peroxide, with more than 82 percent wetted with less than 12 percent water	Forbidden											
	Acetyl iodide	8	UN1898	II	8	B2, IB2, T7, TP2, TP13	154	202	242	1 L	30 L	C	40
	Acetyl methyl carbinol	3	UN2621	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Acetyl peroxide, solid, or with more than 25 percent in solution	Forbidden											
	Acetylene, dissolved	2.1	UN1001		2.1	N86, N88	None	303	None	Forbidden	15 kg	D	25, 40, 57
	Acetylene (liquefied)	Forbidden											
	Acetylene silver nitrate	Forbidden											
	Acetylene, solvent free	Forbidden											
	Acetylene tetrabromide, see Tetrabromoethane	Forbidden											
	Acid butyl phosphate, see Butyl acid phosphate												
	Acid, sludge, see Sludge acid												
	Acridine	6.1	UN2713	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
	Acroline dimer, stabilized	3	UN2607	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
	Acroline, stabilized	6.1	UN1092	I	6.1, 3	1, B9, B14, B30, B42, B77, T22, TP2, TP7, TP13, TP36, TP44	None	226	244	Forbidden	Forbidden	D	40
	Acrylamide, solid	6.1	UN2074	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	12
	Acrylamide solution	6.1	UN3426	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	12
	Acrylic acid, stabilized	8	UN2218	II	8, 3	B2, IB2, T7, TP2	154	202	243	1 L	30 L	C	25, 40
	Acrylonitrile, stabilized	3	UN1093	I	3, 6.1	B9, T14, TP2, TP13	None	201	243	Forbidden	30 L	E	40
	Actuating cartridge, explosive, see Cartridges, power device												
	Adhesives, containing a flammable liquid	3	UN1133	I	3	T11, TP1, TP8, TP27	150	201	243	1 L	30 L	B	
				II	3	149, B52, IB2, T4, TP1, TP8	150	173	242	5 L	60 L	B	
	Adiponitrile	6.1	UN2205	III	3	B1, B52, IB3, T2, TP1	150	173	242	60 L	220 L	A	48, 87, 126
	Aerosols, poison, Packing Group III (each not exceeding 1 L capacity)	2.2	UN1950	III	6.1	IB3, T3, TP1	306	None	None	Forbidden	Forbidden	A	48, 87, 126
	Aerosols, flammable, (each not exceeding 1 L capacity)	2.1	UN1950		2.1	N82	306	None	None	75 kg	150 kg	A	48, 87, 126

I	Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)	2.1	UN1950	2.1	N82	304	None	Forbidden	150 kg	A	48, 87, 126
	Aerosols, non-flammable (each not exceeding 1 L capacity)	2.2	UN1950	2.2		None	None	75 kg	150 kg	A	48, 87, 126
	Aerosols, poison, (each not exceeding 1 L capacity)	2.2, 6.1	UN1950	2.2, 6.1		None	None	Forbidden	Forbidden	A	48, 87, 126
	Air bag inflators, or Air bag modules, or Seat-belt pretensioners.	1.4G	UN0503	II	161	62	None	Forbidden	75 kg	02	
	Air bag inflators, or Air bag modules, or Seat-belt pretensioners.	9	UN3268	III	160	166	166	25 kg	100 kg	A	
	Air, compressed	2.2	UN1002	2.2	78	306, 307	302	75 kg	150 kg	A	
	Air, refrigerated liquid, (cryogenic liquid)	2.2	UN1003	2.2, 5.1	T75, TP5, TP22	316	318, 319	Forbidden	Forbidden	D	51
	Air, refrigerated liquid, (cryogenic liquid) non-pressurized	2.2, 5.1	UN1003	2.2, 5.1	T75, TP5, TP22	316	318, 319	Forbidden	Forbidden	D	51
	Aircraft engines (including turbines), see Engines, internal combustion										
	Aircraft evacuation slides, see Life saving appliances etc										
	Aircraft hydraulic power unit fuel tank (containing a mixture of anhydrous hydrazine and monomethyl hydrazine) (M86 fuel)										
	Aircraft survival kits, see Life saving appliances etc										
	Alcoholic solution, n.o.s., in alcohol	3	UN3165	I		172	None	Forbidden	42 L	E	
	Alcoholic beverages	3	UN3274	II	IB2	202	243	1 L	5 L	B	
		3	UN3065	II	24, 149, B1, IB2, T4, TP1	202	242	5 L	60 L	A	
		3	UN1987	III	24, B1, IB3, N11, T2, TP1	203	242	60 L	220 L	A	
		3		I	172, T11, TP1, TP8, 4b	201	243	1 L	30 L	E	
		3		II	172, IB2, T7, TP1, TP6, TP27	202	242	5 L	60 L	B	
		3		III	172, B1, IB3, T4, TP1, TP28	203	242	60 L	220 L	A	
		3	UN1986	I	T14, TP2, TP13, TP27	201	243	Forbidden	30 L	E	40
		3	UN1989	II	IB2, T11, TP2, TP27	202	243	1 L	60 L	B	40
		3		III	B1, IB3, T7, TP1, TP28	203	242	60 L	220 L	A	
		3		I	T11, TP1, TP27	201	243	1 L	30 L	E	
		3		II	IB2, T7, TP1, TP8, TP28	202	242	5 L	60 L	B	
		3		III	B1, IB3, T4, TP1, TP29	203	242	60 L	220 L	A	
		3	UN1988	I	T14, TP2, TP13, TP27	201	243	Forbidden	30 L	E	40
		3		II	IB2, T11, TP2, TP27	202	243	1 L	60 L	B	40
		3		III	B1, IB3, T7, TP1, TP28	203	242	60 L	220 L	A	
		6.1	UN2839	6.1	IB2, T7, TP2	202	243	1 L	60 L	A	12
		4.2	UN3206	4.2, 8	64, A7, IB5, IP2, T3, TP33	212	242	15 kg	50 kg	B	

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Alkali metal alloys, liquid, n.o.s.	4.3	UN1421	III	4.2, 8	64, A7, IB8, IP3, T1, TP33	None	213	242	25 kg	100 kg	B	
	Alkali metal amalgam, liquid	4.3	UN1389	I	4.3	A2, A3, A7, B48, N34	None	201	244	Forbidden	1 L	D	52
	Alkali metal amalgam, solid	4.3	UN3401	I	4.3	A2, A3, A7, N34	None	201	244	Forbidden	1 L	D	40, 52
	Alkali metal amides	4.3	UN1390	II	4.3	IB4, IP1, N40, T9, TP7, TP33	None	211	242	Forbidden	15 kg	D	52
	Alkali metal dispersions, flammable or flammable	4.3	UN1391	I	4.3	A6, A7, A8, A19, A20, IB7, IP2, T3, TP33	None	212	241	15 kg	50 kg	E	40, 52
	Alkaline earth metal dispersions, flammable	4.3	UN3482	I	4.3, 3	A2, A3, A7	None	201	244	Forbidden	1 L	D	52
	Alkali metal dispersions, earth metal dispersions	4.3	UN1391	I	4.3	A2, A3, A7	None	201	244	Forbidden	1 L	D	52
	Alkaline earth metal alcohols, n.o.s.	4.2	UN3205	II	4.2	65, A7, IB6, IP2, T3, TP33	None	212	241	15 kg	50 kg	B	
	Alkaline earth metal alcohols, n.o.s.	4.2	UN3205	III	4.2	65, A7, IB8, IP3, T1, TP33	None	213	241	25 kg	100 kg	B	
	Alkaline earth metal alloys, n.o.s.	4.3	UN1393	II	4.3	A19, IB7, IP2, T3, TP33	None	212	241	15 kg	50 kg	E	52
	Alkaline earth metal amalgams, liquid	4.3	UN1392	I	4.3	A19, N34, N40	None	201	244	Forbidden	1 L	E	40, 52
	Alkaline earth metal amalgams, solid	4.3	UN3402	I	4.3	A19, N34, N40, T9, TP7, TP33	None	211	242	Forbidden	15 kg	D	52
	Alkaloids, liquid, n.o.s., or Alkaloid salts, liquid, n.o.s.	6.1	UN3140	I	6.1	A4, T14, TP2, TP27	None	201	243	1 L	30 L	A	
	Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s. poisonous	6.1	UN1544	III	6.1	IB2, T11, TP2, TP27	None	202	243	5 L	60 L	A	
	Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with more than 5 percent free sulfonic acid	8	UN2584	II	8	IB3, T7, TP1, TP28	None	203	241	60 L	220 L	A	
	Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfonic acid	8	UN2584	II	8	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	
	Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfonic acid	8	UN2586	III	8	IB8, IP2, IP4, T3, TP33	None	212	242	25 kg	100 kg	A	
	Alkyl sulfonic acids, liquid or Aryl sulfonic acids, liquid with not more than 5 percent free sulfonic acid	8	UN2586	III	8	IB8, IP3, T1, TP33	None	213	240	100 kg	200 kg	A	
	Alkyl sulfonic acids, liquid with not more than 5 percent free sulfonic acid	8	UN2586	III	8	B2, IB2, T8, TP2, TP13	None	202	242	1 L	30 L	B	
	Alkyl sulfonic acids, liquid with not more than 5 percent free sulfonic acid	8	UN2586	III	8	IB3, T4, TP1	None	203	241	5 L	60 L	B	

Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid, with more than 5 percent free sulfuric acid	8	UN2583	II	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	A	40
Alkyl sulfonic acids, solid or Aryl sulfonic acids, solid with not more than 5 percent free sulfuric acid	8	UN2585	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	40
Alkylphenols, liquid, n.o.s. (including C2-C12 homologues)	8	UN3145	I	8	A6, T14, TP2	None	201	243	0.5 L	2.5 L	B	40
Alkylphenols, solid, n.o.s. (including C2-C12 homologues)	8	UN2430	II	8	IB2, T11, TP2, TP27	154	202	242	1 L	30 L	B	40
Alkylsulfuric acids	8	UN2571	III	8	IB3, T7, TP1, TP28	154	203	241	5 L	60 L	A	40
Allethrin, see Pesticides, liquid, toxic, n.o.s.	3	UN2333	I	8	IB7, IP1, T6, TP33	None	211	242	1 kg	25 kg	B	40
Allyl acetate	6.1	UN1098	I	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	B	40
Allyl alcohol	3	UN1099	II	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	40
Allyl chloride	3	UN1100	I	8	B2, IB2, T8, TP2, TP13, TP28	154	202	242	1 L	30 L	C	40
Allyl chloroacetate, see Allyl chloroformate	6.1	UN1722	I	8	IB2, T7, TP1, TP13	150	202	243	1 L	60 L	E	40
Allyl chloroformate	6.1	UN1722	I	8	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
Allyl ethyl ether	3	UN2335	II	8	T14, TP2, TP13	150	202	243	1 L	60 L	E	40
Allyl formate	3	UN2336	I	8	IB2, T7, TP1, TP13	None	201	243	Forbidden	30 L	E	40
Allyl glycidyl ether	3	UN2219	III	3	T14, TP2, TP13	150	203	242	60 L	220 L	A	40
Allyl iodide	3	UN1723	II	8	B1, IB3, T2, TP1	150	202	243	1 L	5 L	B	40
Allyl isothiocyanate, stabilized	6.1	UN1545	II	8	A3, A6, IB1, N34, T7, TP2, TP13	None	202	243	Forbidden	60 L	D	40
Allylamine	6.1	UN2334	I	8	A3, A7, IB2, T7, TP2	None	202	244	Forbidden	Forbidden	D	40
Allyltrichlorosilane, stabilized	8	UN1724	II	8	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	206	243	Forbidden	30 L	C	40
Aluminum borohydride or Aluminum borohydride in devices	4.2	UN2870	I	4.2, 4.3	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	181	244	Forbidden	Forbidden	D	40
Aluminum bromide, anhydrous	8	UN1725	II	8	B11, T21, TP7, TP33	None	212	240	15 kg	50 kg	A	40
Aluminum bromide, solution	8	UN2580	III	8	IB8, IP2, IP4, T3, TP33	154	203	241	5 L	60 L	A	52
Aluminum carbide	4.3	UN1394	II	4.3	IB3, T4, TP1	151	212	242	15 kg	50 kg	A	40
Aluminum chloride, anhydrous	8	UN1726	II	8	A20, IB7, IP2, N41, T3, TP33	154	212	240	15 kg	50 kg	A	40
Aluminum chloride, solution	8	UN2581	III	8	IB8, IP2, IP4, T3, TP33	154	203	241	5 L	60 L	A	40
Aluminum dross, wet or hot	Forbidden				IB3, T4, TP1	154						

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Aluminum ferrosilicon powder	4.3	UN1395	II	4.3, 6.1	A19, IB5, IP2, T3, TP33	151	212	242	15 kg	50 kg	A	38, 40, 52, 53, 85, 103
				III	4.3, 6.1	A19, A20, IB4	151	213	241	25 kg	100 kg	A	39, 40, 52, 53, 85, 103
D	Aluminum hydride	4.3	UN2463	I	4.3	A19, N40	None	211	242	Forbidden	15 kg	E	40, 52, 85
	Aluminum, molten	9	NA9260	III	9	IB3, T1, TP3	None	None	247	Forbidden	Forbidden	D	40, 85
	Aluminum nitrate	5.1	UN1438	III	5.1	A1, A29, IB8, IP3, T1, TP33	152	213	240	Forbidden 25 kg	Forbidden 100 kg	A	13, 39, 52, 53, 74, 101
	<i>Aluminum phosphate solution, see Corrosive liquids, etc</i>												
	Aluminum phosphide	4.3	UN1397	I	4.3, 6.1	A8, A19, N40	None	211	242	Forbidden	15 kg	E	40, 52, 85
	Aluminum phosphide pesticides	6.1	UN3048	I	6.1	A8, IB7, IP1, T6, TP33	None	211	242	Forbidden	15 kg	E	40, 85
	Aluminum powder, coated	4.1	UN1309	II	4.1	IB8, IP2, IP4, T3, TP33	151	212	240	Forbidden 15 kg	50 kg	A	13, 39, 52, 53, 74, 101
				III	4.1	IB8, IP3, T1, TP33	151	213	240	25 kg	100 kg	A	13, 39, 52, 53, 74, 101
	Aluminum powder, uncoated	4.3	UN1396	II	4.3	A19, A20, IB7, IP2, T3, TP33	151	212	242	15 kg	50 kg	A	38, 52, 53
				III	4.3	A19, A20, IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	A	39, 52, 53
	Aluminum resinates	4.1	UN2715	III	4.1	IB6, T1, TP33	151	213	240	25 kg	100 kg	A	38, 40, 52, 53, 85, 103
	Aluminum silicon powder, uncoated	4.3	UN1398	III	4.3	A1, A19, IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	A	38, 40, 52, 53, 85, 103
	Aluminum smelting by-products or Aluminum remelting by-products	4.3	UN3170	II	4.3	128, B115, IB7, IP2, T3, TP33	None	212	242	15 kg	50 kg	B	85, 103
				III	4.3	128, B115, IB8, IP4, T1, TP33	None	213	241	25 kg	100 kg	B	85, 103
G	Amazols, see Explosives, blasting, type B Amine, flammable, corrosive, n.o.s., or Polyamines, flammable, corrosive, n.o.s.	3	UN2733	I	3, 8	T14, TP1, TP27	None	201	243	0.5 L	2.5 L	D	40, 52

G	Amine, liquid, corrosive, flammable, n.o.s. or Polyamines, liquid, corrosive, flammable, n.o.s.	8	UN2734	II	3, 8 3, 8 8, 3	IB2, T11, TP1, TP27 B1, IB3, T7, TP1, TP28 A3, A6, N34, T14, TP2, TP27	150 150 None	202 203 201	243 242 243	1 L 5 L 0.5 L	5 L 60 L 2.5 L	B A A	40, 52 40, 52 52
G	Amines, liquid, corrosive, n.o.s., or Polyamines, liquid, corrosive, n.o.s.	8	UN2735	II	8, 3 8	IB2, T11, TP2, TP27 A3, A6, B10, N34, T14, TP2, TP27	None None	202 201	243 243	1 L 0.5 L	30 L 2.5 L	A A	52 52
G	Amines, solid, corrosive, n.o.s., or Polyamines, solid, corrosive n.o.s.	8	UN3259	II III I	8 8 8	B2, IB2, T11, TP1, TP27 IB3, T7, TP1, TP28 IB7, IP1, T6, TP33	154 154 None	202 203 211	242 241 242	1 L 5 L 1 kg	30 L 60 L 25 kg	A A A	52 52 52
	2-Amino-4-chlorophenol	6.1	UN2673	III	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	A	52
	2-Amino-5-diethylaminopentane	6.1	UN2946	III	6.1	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	52
	2-Amino-4,6-Dinitrophenol, wetted with not less than 20 percent water by mass	4.1	UN3317	III	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	52
	2-(2-Aminoethoxy) ethanol	8	UN3055	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	12
	N-Aminoethylpiperazine	8	UN2815	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	12
	Aminophenols (o-; m-; p-) <i>Aminopropylmethanamine, see Amines, etc</i> <i>n-Aminopropylmorpholine, see Amines, etc</i>	6.1	UN2512	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	12
	Aminopyridines (o-; m-; p-)	6.1	UN2671	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	12, 40, 52,
I	Ammonia, anhydrous	2.3	UN1005	2.3, 8	2.3, 8	4, N87, T50	None	304	314, 315	Forbidden	Forbidden	D	40, 52, 57
D	Ammonia, anhydrous	2.2	UN1005	2.2	2.2	13, T50	None	304	314, 315	Forbidden	Forbidden	D	40, 52, 57
I	Ammonia solution, relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia	2.3	UN3318	2.3, 8	2.3, 8	4, N87, T50	None	304	314, 315	Forbidden	Forbidden	D	40, 52, 57
D	Ammonia solution, relative density less than 0.880 at 15 degrees C in water, with more than 50 percent ammonia	2.2	UN3318	2.2	2.2	13, T50	None	304	314, 315	Forbidden	Forbidden	D	40, 52, 57
D	Ammonia solutions, relative density less than 0.880 at 15 degrees C in water, with more than 35 percent but not more than 50 percent ammonia	2.2	UN2073	2.2	2.2	N87	306	304	314, 315	Forbidden	150 kg	E	40, 52, 57
	Ammonia solution, relative density between 0.880 and 0.957 at 15 degrees C in water, with more than 10 percent but not more than 35 percent ammonia	8	UN2672	III	8	IB3, IP8, T7, TP1	154	203	241	5 L	60 L	A	40, 52, 85



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage		
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
D	Ammonium arsenate <i>Ammonium azide</i> <i>Ammonium bifluoride, solid, see Ammonium hydrogen difluoride, solid</i> <i>Ammonium bifluoride solution, see Ammonium hydrogen difluoride, solution</i> <i>Ammonium bromate</i> <i>Ammonium chlorate</i> <i>Ammonium dichromate</i> <i>Ammonium dinitro-o-cresolate, solid</i> <i>Ammonium dinitro-o-cresolate solution</i>  Ammonium fluoride Ammonium fluorosilicate <i>Ammonium fulminate</i> Ammonium hydrogen sulfate Ammonium hydrogendifluoride, solid  Ammonium hydrogendifluoride, solution <i>Ammonium hydrosulfide, solution, see Ammonium sulfide solution</i> Ammonium sulfide solution Ammonium hydroxide, <i>see Ammonia solutions, etc</i> Ammonium metavanadate	6.1	UN1546	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	53	
		Forbidden												
		Forbidden												
		5.1	UN1439	II	5.1	IB8, IP2, IP4, T3, TP33	152	212	242	242	5 kg	25 kg	A	52
		6.1	UN1843	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	242	25 kg	100 kg	B	36, 65, 66, 77
		6.1	UN3424	II	6.1	IB2, T7, TP2	153	202	243	243	5 L	60 L	B	36, 66, 78, 91
		6.1		III	6.1	IB2, T7, TP2	153	203	241	241	60 L	220 L	A	36, 66, 78, 91
		6.1	UN2505	III	6.1	IB8, IP3, T1, TP33	153	213	240	240	100 kg	200 kg	A	52
		6.1	UN2854	III	6.1	IB8, IP3, T1, TP33	153	213	240	240	100 kg	200 kg	A	52
		8	UN2506	II	8	IB8, IP2, IP4, T3, TP33	154	212	240	240	15 kg	50 kg	A	40
		8	UN1727	II	8	IB8, IP2, IP4, N34, T3, TP33	154	212	240	240	15 kg	50 kg	A	25, 40, 52
		8	UN2817	II	8, 6.1	IB2, N34, T8, TP2, TP13	154	202	243	243	1 L	30 L	B	40
		A W	Ammonium nitrate based fertilizer	9	UN2071	III	9	132, IB8, IP3	155	213	240	200 kg	200 kg	A
6.1	UN2859			II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	48, 59, 60, 66, 117	
5.1	UN2067			III	5.1	52, 150, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	B		

Ammonium nitrate emulsion or Ammonium nitrate suspension or Ammonium nitrate gel, intermediate for blasting explosives	5.1	UN3375	II	5.1	147, 163	None	214	214	Forbidden	Forbidden	D	48, 59, 60, 66, 124
Ammonium nitrate-fuel oil mixture containing only prilled ammonium nitrate and fuel oil	1.5D	NA0331	II	1.5D		None	62	None	Forbidden	Forbidden	10	19E
Ammonium nitrate, liquid (hot concentrated solution)	5.1	UN2426		5.1	B5, T7	None	None	243	Forbidden	Forbidden	D	59, 60
Ammonium nitrate, with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	1.1D	UN0222	II	1.1D		None	62	None	Forbidden	Forbidden	10	19E
Ammonium nitrate, with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance	5.1	UN1942	III	5.1	A1, A29, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	A	48, 59, 60, 116
Ammonium nitrite	Forbidden											
Ammonium perchlorate	1.1D	UN0402	II	1.1D	107	None	62	None	Forbidden	Forbidden	10	19E
Ammonium perchlorate	5.1	UN1442	II	5.1	107, A9, IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	E	58, 69
Ammonium permanganate	Forbidden											
Ammonium persulfate	5.1	UN1444	III	5.1	A1, A29, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	A	
Ammonium picrate, dry or wetted with less than 10 percent water, by mass	1.1D	UN0004	II	1.1D		None	62	None	Forbidden	Forbidden	10	5E, 19E
Ammonium picrate, wetted with not less than 10 percent water, by mass	4.1	UN1310	I	4.1	23, A2, N41	None	211	None	0.5 kg	0.5 kg	D	28, 36
Ammonium polysulfide, solution	8	UN2818	II	8, 6.1	IB2, T7, TP2, TP13	154	202	243	1 L	30 L	B	12, 40, 52
			III	8, 6.1	IB3, T4, TP1, TP13	154	203	241	5 L	60 L	B	12, 40, 52
Ammonium polyvanadate	6.1	UN2861	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	44, 89, 100, 141
Ammonium silicofluoride, see Ammonium fluorosilicate												
Ammonium sulfide solution	8	UN2683	II	8, 6.1, 3	IB1, T7, TP2, TP13	154	202	243	1 L	30 L	B	12, 22, 52, 100
Ammunition, blank, see Cartridges for weapons, blank												
Ammunition, illuminating with or without burster, expelling charge or propelling charge	1.2G	UN0171	II	1.2G			62	62	Forbidden	Forbidden	03	
Ammunition, illuminating with or without burster, expelling charge or propelling charge	1.3G	UN0254	II	1.3G			62	62	Forbidden	Forbidden	03	

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B) (8B)	Bulk (8C) (8C)	Passenger aircraft/rail (9A) (9A)	Cargo air-craft only (9B) (9B)	Loca-tion (10A) (10A)	Other (10B) (10B)
	1.4G Ammunition, illuminating with or without burster, expelling charge or propelling charge	1.4G	UN0297	II	1.4G		62	62	62	Forbidden	75 kg	02	
	1.3J Ammunition, incendiary liquid or gel, with burster, expelling charge or propelling charge	1.3J	UN0247	II	1.3J		62	None	Forbidden	Forbidden	Forbidden	04	23E
	1.2H Ammunition, incendiary (water-activated contrivances) with burster, expelling charge or propelling charge, see Containances, water-activated, etc.	1.2H	UN0243	II	1.2H		62	62	Forbidden	Forbidden	Forbidden	08	8E, 14E, 15E, 17E
	1.3H Ammunition, incendiary, white phosphorus, with burster, expelling charge or propelling charge	1.3H	UN0244	II	1.3H		62	62	Forbidden	Forbidden	Forbidden	08	8E, 14E, 15E, 17E
	1.2G Ammunition, incendiary with or without burster, expelling charge, or propelling charge	1.2G	UN0009	II	1.2G		62	62	Forbidden	Forbidden	Forbidden	03	
	1.3G Ammunition, incendiary with or without burster, expelling charge, or propelling charge	1.3G	UN0010	II	1.3G		62	62	Forbidden	Forbidden	Forbidden	03	
	1.4G Ammunition, incendiary with or without burster, expelling charge or propelling charge	1.4G	UN0300	II	1.4G		62	62	Forbidden	Forbidden	75 kg	02	
	1.4G Ammunition, practice	1.4G	UN0362	II	1.4G		62	62	Forbidden	Forbidden	75 kg	02	
	1.3G Ammunition, practice	1.3G	UN0488	II	1.3G		62	62	Forbidden	Forbidden	Forbidden	03	
	1.4G Ammunition, proof	1.4G	UN0363	II	1.4G		62	62	Forbidden	Forbidden	75 kg	02	
	Ammunition, rocket, see Warheads, rocket etc												
	Ammunition, SA (small arms), see Cartridges for weapons, etc												

Ammunition, smoke (water-activated contrivances), white phosphorus, with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc. (UN 0248)	1.2H	UN0245	II	1.2H	62	62	Forbiddn	Forbiddn	08	8E, 14E, 15E, 17E
Ammunition, smoke (water-activated contrivances), without white phosphorus or phosphides, with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc. (UN 0249)	1.3H	UN0246	II	1.3H	62	62	Forbiddn	Forbiddn	08	8E, 14E, 15E, 17E
Ammunition, smoke, white phosphorus with burster,expelling charge, or propelling charge	1.2G	UN0015	II	1.2G	62	62	Forbiddn	Forbiddn		8E, 17E, 20E
Ammunition, smoke with or without burster, expelling charge or propelling charge	1.3G	UN0016	II	1.3G	62	62	Forbiddn	Forbiddn		8E, 17E, 20E
Ammunition, smoke with or without burster, expelling charge or propelling charge	1.4G	UN0303	II	1.4G	62	62	Forbiddn	75 kg		7E, 8E, 14E, 15E, 17E
Ammunition, sporting, see Cartridges for weapons, etc. (UN 0012; UN 0328; UN 0339)	6.1	UN2017	II	6.1, 8	212	None	Forbiddn	50 kg	E	13, 40
Ammunition, tear-producing, non-explosive, without burster or expelling charge, non-fuzed	1.2G	UN0018	II	1.2G, 8, 6.1	62	62	Forbiddn	Forbiddn		8E, 17E, 20E
Ammunition, tear-producing with burster, expelling charge or propelling charge	1.3G	UN0019	II	1.3G, 8, 6.1	62	62	Forbiddn	Forbiddn		8E, 17E, 20E
Ammunition, tear-producing with burster, expelling charge or propelling charge	1.4G	UN0301	II	1.4G, 8, 6.1	62	62	Forbiddn	75 kg		7E, 8E, 14E, 15E, 17E
Ammunition, toxic, non-explosive, without burster or expelling charge, non-fuzed	6.1	UN2016	II	6.1	212	None	Forbiddn	100 kg	E	13, 40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
G	<i>Ammunition, toxic (water-activated contrivances), with burster, expelling charge or propelling charge, see Contrivances, water-activated, etc</i> <i>Ammunition, toxic with burster, expelling charge, or propelling charge</i>	1.2K	UN0020	II	1.2K, 6.1			62	None	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E
G	<i>Ammunition, toxic with burster, expelling charge, or propelling charge</i>	1.3K	UN0021	II	1.3K, 6.1			62	None	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E
	<i>Amyl acetates</i>	3	UN1104	III	3	B1, IB3, T2, TP1	150	203	242	220 L	60 L	220 L	A	
	<i>Amyl acid phosphate</i>	8	UN2819	III	8	B1, IB3, T4, TP1	154	203	241	5 L	5 L	220 L	A	
	<i>Amyl butyrates</i>	3	UN2820	III	3	B1, IB3, T2, TP1	150	203	242	60 L	60 L	220 L	A	
	<i>Amyl chlorides</i>	3	UN1107	II	3	IB2, T4, TP1	150	202	242	5 L	5 L	60 L	B	
	<i>Amyl formates</i>	3	UN1109	III	3	B1, IB3, T2, TP1	150	203	242	220 L	220 L	220 L	A	
	<i>Amyl mercaptans</i>	3	UN1111	II	3	A3, A6, IB2, T4, TP1	None	203	242	5 L	5 L	60 L	B	95, 102
	<i>n-Amyl methyl ketone</i>	3	UN1110	III	3	B1, IB3, T2, TP1	150	203	242	220 L	220 L	220 L	A	
	<i>Amyl nitrate</i>	3	UN1112	III	3	B1, IB3, T2, TP1	150	203	242	220 L	220 L	220 L	A	40
	<i>Amyl nitrites</i>	3	UN1113	II	3	IB2, T4, TP1	150	202	242	5 L	5 L	60 L	E	40
	<i>Amylamines</i>	3	UN1106	II	3, 8	IB2, T7, TP1	150	202	243	1 L	1 L	5 L	B	
	<i>Amyltrichlorosilane</i>	8	UN1728	III	3, 8	B1, IB3, T4, TP1	150	203	242	5 L	5 L	60 L	A	40
	<i>Anhydrous ammonia, see Ammonia, anhydrous</i>			II	8	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	242	Forbidden	Forbidden	30 L	C	
	<i>Anhydrous ammonia, see Ammonia, anhydrous</i>			II	8									
	<i>Anhydrous hydrofluoric acid, see Hydrogen fluoride, anhydrous</i>			II	6.1									
	<i>Aniline</i>	6.1	UN1547	III	6.1	IB2, T7, TP2	153	202	243	5 L	5 L	60 L	A	40, 52
	<i>Aniline hydrochloride</i>	6.1	UN1548	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	100 kg	200 kg	A	
	<i>Aniline oil, see Aniline</i>													
	<i>Anisidines</i>	6.1	UN2431	III	6.1	IB3, T4, TP1	153	203	241	60 L	60 L	220 L	A	
	<i>Anisole</i>	3	UN2222	III	3	B1, IB3, T2, TP1	150	203	242	60 L	60 L	220 L	A	
	<i>Anisoyl chloride</i>	8	UN1729	II	8	B2, B4, IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	15 kg	50 kg	A	
	<i>Anti-freeze, liquid, see Flammable liquids, n.o.s.</i>													



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Arsenic sulfide and a chlorate, mix-tures of	Forbidden											
	Arsenic trichloride	6.1	UN1560	I	6.1	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	B	40
	Arsenic trioxide	6.1	UN1561	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	Arsenic, white, solid, see Arsenic tri-oxide												
	Arsenical dust	6.1	UN1562	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	Arsenical pesticides, liquid, flammable, toxic, flash point less than 23 de-grees C	3	UN2760	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	B	40
	Arsenical pesticides, liquid, toxic	6.1	UN2994	I	6.1	IB2, T11, TP2, TP13, TP27	150	202	243	1 L	60 L	B	40
				II	6.1	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
				II	6.1	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
	Arsenical pesticides, liquid, toxic, flam-mable, flash point not less than 23 degrees C	6.1	UN2993	III	6.1, 3	IB3, T7, TP2, TP28	153	203	241	60 L	220 L	A	40
				I	6.1, 3	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
				II	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
				III	6.1, 3	B1, IB3, T7, TP2, TP28	153	203	242	60 L	220 L	A	40
				I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	40
				II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
				III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
	Arsenious acid, solid, see Arsenic tri-oxide												
	Arsenious and mercuric iodide solu-tion, see Arsenic compounds, liquid, n.o.s.	2.3	UN2188		2.3,	1	None	192	245	Forbidden	Forbidden	D	40
	Arsine				2.1								
	Articles, explosive, extremely insensi-tive or Articles, EEI	1.6N	UN0486	II	1.6N		None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.4S	UN0349	II	1.4S		None	62	None	25 kg	100 kg	05	
G	Articles, explosive, n.o.s	1.4B	UN0350	II	1.4B		None	62	None	Forbidden	Forbidden	06	
G	Articles, explosive, n.o.s	1.4C	UN0351	II	1.4C		None	62	None	Forbidden	Forbidden	06	

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G	Articles, explosive, n.o.s	1.4D	UN0352	II	1.4D	None	62	None	Forbidden	75 kg	06	
G	Articles, explosive, n.o.s	1.4G	UN0353	II	1.4G	None	62	None	Forbidden	75 kg	06	8E, 14E, 15E, 17E.
G	Articles, explosive, n.o.s	1.1L	UN0354	II	1.1L	None	62	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E.
G	Articles, explosive, n.o.s	1.2L	UN0355	II	1.2L	None	62	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E.
G	Articles, explosive, n.o.s	1.3L	UN0356	II	1.3L	None	62	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E.
G	Articles, explosive, n.o.s	1.1C	UN0462	II	1.1C	None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.1D	UN0463	II	1.1D	None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.1E	UN0464	II	1.1E	None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.1F	UN0465	II	1.1F	None	62	None	Forbidden	Forbidden	08	
G	Articles, explosive, n.o.s	1.2C	UN0466	II	1.2C	None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.2D	UN0467	II	1.2D	None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.2E	UN0468	II	1.2E	None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.2F	UN0469	II	1.2F	None	62	None	Forbidden	Forbidden	08	
G	Articles, explosive, n.o.s	1.3C	UN0470	II	1.3C	None	62	None	Forbidden	Forbidden	07	
G	Articles, explosive, n.o.s	1.4E	UN0471	II	1.4E	None	62	None	Forbidden	75 kg	06	
G	Articles, explosive, n.o.s	1.4F	UN0472	II	1.4F	None	62	None	Forbidden	75 kg	06	
G	Articles, pressurized pneumatic or hydraulic containing non-flammable gas	2.2	UN3164	II	2.2	306	302, 304	None	No limit	No limit	A	
	Articles, pyrophoric	1.2L	UN0380	II	1.2L	None	62	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E.
	Articles, pyrotechnic for technical purposes	1.1G	UN0428	II	1.1G	None	62	None	Forbidden	Forbidden	07	
	Articles, pyrotechnic for technical purposes	1.2G	UN0429	II	1.2G	None	62	None	Forbidden	Forbidden	07	
	Articles, pyrotechnic for technical purposes	1.3G	UN0430	II	1.3G	None	62	None	Forbidden	Forbidden	07	
	Articles, pyrotechnic for technical purposes	1.4G	UN0431	II	1.4G	None	62	None	Forbidden	75 kg	06	
	Articles, pyrotechnic for technical purposes	1.4S	UN0432	II	1.4S	None	62	None	25 kg	100 kg	05	
D	Asbestos	9	NA2212	III	9	155	216	240	200 kg	200 kg	A	34, 40
D	Ascaridole (organic peroxide)	Forbidden										
D	Asphalt, at or above its flash point	3	NA1999	III	3	150	203	247	Forbidden	Forbidden	D	
	Asphalt, cut back, see Tars, liquid, etc											
	Automobile, motorcycle, tractor, other self-propelled vehicle, engine, or other mechanical apparatus, see Vehicles or Battery etc											



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage										
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Other (10B)	Loca-tion (10A)										
A G	Aviation regulated liquid, n.o.s.	9	UN3334	II	9	38, IB8, T3, TP33	151	204	No limit	No limit	No limit	A	A										
	Aviation regulated solid, n.o.s.	9	UN3335											204	No limit	No limit	No limit	A					
	<i>Azauric acid (salt of) (dry)</i>	Forbidden												204	No limit	No limit	No limit	A					
	<i>Azido guanidine picrate (dry)</i>	Forbidden																					
	<i>5-Azido-1-hydroxy tetrazole</i>	Forbidden																					
	<i>Azido hydroxy tetrazole (mercury and silver salts)</i>	Forbidden																					
	<i>3-Azido-1,2-Propylene glycol dinitrate</i>	Forbidden																					
	<i>Azidothiocarbonic acid</i>	Forbidden																					
	<i>Azidoethyl nitrate</i>	Forbidden																					
	<i>1-Aziridinylphosphine oxide-(tris), see Tris-(1-aziridinyl) phosphine oxide, solution</i>	Forbidden																					
	Azodicarbonamide	4.1	UN3242															223	Forbidden	Forbidden	Forbidden	D	2, 52, 53, 74
	<i>Azotetrazole (dry)</i>	Forbidden																					
	Barium	4.3	UN1400															212	Forbidden	Forbidden	Forbidden	D	52
	Barium alloys, pyrophoric	4.2	UN1854															181	15 kg	50 kg	50 kg	E	
	Barium azide, dry or wetted with less than 50 percent water, by mass	1.1A	UN0224															62	Forbidden	Forbidden	Forbidden	12	
Barium azide, wetted with not less than 50 percent water, by mass	4.1	UN1571					182	None	0.5 kg	0.5 kg	D	28											
Barium bromate	5.1	UN2719					152	212	5 kg	25 kg	A	56, 58											
Barium chlorate, solid	5.1	UN1445					212	212	5 kg	25 kg	A	56, 58											
Barium chlorate, solution	5.1	UN3405					202	242	5 kg	25 kg	A	56, 58											
G	Barium compounds, n.o.s.	6.1	UN1564	III	6.1	A9, IB6, IP2, N34, T3, TP33	152	203	2.5 L	30 L	30 L	A	56, 58, 133										
														6.1	212	242	25 kg	100 kg	A				
														6.1	213	240	100 kg	200 kg	A				
														6.1	213	240	100 kg	200 kg	A				
														6.1	211	242	5 kg	50 kg	A				
														6.1	None	None	None	None	None	A	40, 52		
														6.1	TP33	TP33	TP33	TP33	TP33	B	4, 52, 56, 58, 106		
														6.1	A7, A9, IB8, IP2, IP4, N34, T3, TP33	152	212	5 kg	25 kg	B			

Barium nitrate	5.1	UN1446	II	5.1,	IB8, IP2, IP4, T3, TP33	152	212	242	5 kg	25 kg	A	
Barium oxide	6.1	UN1884	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	56, 58
Barium perchlorate, solid	5.1	UN1447	II	5.1,	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	A	
Barium perchlorate, solution	5.1	UN3406	II	5.1,	IB2, T4, TP1	152	202	243	1 L	5 L	A	56, 58, 133
Barium permanganate	5.1	UN1448	III	5.1,	IB2, T4, TP1	152	203	242	2.5 L	30 L	A	56, 58, 133
Barium peroxide	5.1	UN1449	II	5.1,	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	D	56, 58, 138
Barium selenate, see Selenates or Selenites				5.1,	A9, IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	A	13, 52, 56, 75
Barium selenite, see Selenates or Selenites				6.1								
Batteries, containing sodium	4.3	UN3292	II	4.3		189	189	189	Forbidden	No limit	A	
Batteries, dry, containing potassium hydroxide solid, <i>electric, storage</i>	8	UN3028	III	8	237	None	213	None	230 kg gross	230 kg gross	A	52
Batteries, dry, sealed, n.o.s.	9	UN3496	9	9	130 340						A	48
Batteries, nickel-metal hydride see Batteries, dry, sealed, n.o.s. for nickel-metal hydride batteries transported by modes other than vessel												
Batteries, wet, filled with acid, <i>electric storage</i>	8	UN2794	III	8		159	159	159	30 kg gross	No limit	A	146
Batteries, wet, filled with alkali, <i>electric storage</i>	8	UN2795	III	8		159	159	159	30 kg gross	No limit	A	52, 146
Batteries, wet, non-spillable, <i>electric storage</i>	8	UN2800	III	8		159a	159	159	No limit	No limit	A	
Battery fluid, acid	8	UN2796	II	8	A3, A7, B2, B15, IB2, N6, N34, T8, TP2	154	202	242	1 L	30 L	B	
Battery fluid, alkali	8	UN2797	II	8	B2, IB2, N6, T7, TP2, TP28	154	202	242	1 L	30 L	A	29
Battery lithium type, see Lithium batteries etc												
Battery-powered vehicle or Battery-powered equipment	9	UN3171	9	9	134	220	220	None	No limit	No limit	A	
Battery, wet, filled with acid or alkali with vehicle or mechanical equipment containing an internal combustion engine, see Vehicle, etc. or Engines, internal combustion, etc												
Benzaldehyde	9	UN1990	III	9	IB3, T2, TP1	155	203	241	100 L	220 L	A	40
Benzene	3	UN1114	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
Benzene diazonium chloride (dry)	Forbidden											
Benzene diazonium nitrate (dry)	Forbidden											
Benzene phosphorus dichloride, see Phenyl phosphorus dichloride	Forbidden											

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	<i>Benzene phosphorus thiochloride</i> , see Phenyl phosphorus thiochloride	8	UN2225	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	40
	<i>Benzene sulfonyl chloride</i>	Forbidden											
	<i>Benzene triozonide</i>	6.1	UN1885	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	<i>Benzene thiol</i> , see Phenyl mercaptan												
	<i>Benzidine</i>	6.1	UN1885	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	40, 52
	<i>Benzol</i> , see Benzene												
	<i>Benzonitrile</i>	6.1	UN2224	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	<i>Benzoquinone</i>	6.1	UN2587	II	6.1	B2, IB2, T7, TP2	154	202	242	1 L	30 L	A	40
	<i>Benzotrifluoride</i>	8	UN2226	II	8	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
	<i>Benzoxadiazoles (dry)</i>	Forbidden	UN2338	II	3								
	<i>Benzoyl azide</i>	Forbidden											
	<i>Benzoyl chloride</i>	8	UN1736	II	8	B2, IB2, T8, TP2, TP13	154	202	242	1 L	30 L	C	40
	<i>Benzoyl bromide</i>	6.1	UN1737	II	6.1, 8	A3, A7, IB2, N33, N34, T8, TP2, TP13	None	202	243	1 L	30 L	D	13, 40.
	<i>Benzyl chloride</i>	6.1	UN1738	II	6.1, 8	A3, A7, B70, IB2, N33, N42, T8, TP2, TP13	None	202	243	1 L	30 L	D	13, 40.
	<i>Benzyl chloride unstabilized</i>	6.1	UN1738	II	6.1, 8	A3, A7, B8, B11, IB2, N33, N34, N43, T8, TP2, TP13	153	202	243	1 L	30 L	D	13, 40
	<i>Benzyl chloroformate</i>	8	UN1739	I	8	A3, A6, B4, N41, T10, TP2, TP13	None	201	243	Forbidden	2.5 L	D	40
	<i>Benzyl iodide</i>	6.1	UN2653	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	B	12, 40
	<i>Benzylidimethylamine</i>	8	UN2619	II	8, 3	B2, IB2, T7, TP2	154	202	243	1 L	30 L	A	40, 48
	<i>Benzylidene chloride</i>	6.1	UN1886	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	D	40
	<i>Beryllium compounds, n.o.s</i>	6.1	UN1566	III	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	<i>Beryllium nitrate</i>	5.1	UN2464	II	5.1, 6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
	<i>Beryllium, powder</i>	6.1	UN1567	II	6.1, 4.1	IB8, IP2, IP4, T3, TP33	153	212	242	15 kg	50 kg	A	
	<i>Bicyclo [2.2.1] hepta-2,5-diene, stabilized or 2,5-Norbornadiene, stabilized</i>	3	UN2251	II	3	IB2, T7, TP2	150	202	242	5 L	60 L	D	
	<i>Biological substance, Category B</i>	6.2	UN3373	II	6.2	A82	134	199	None	4 L or 4 kg	4 L or 4 kg	A	40
	<i>Biphenyl triozonide</i>	Forbidden											

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	3	UN2782	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	E	
Bipyridilium pesticides, liquid, flammable, toxic, flash point less than 23 degrees C			II	3, 6.1	IB2, T11, TP2, TP13, TP27	150	202	243	1 L	60 L	B	40
Bipyridilium pesticides, liquid, toxic	6.1	UN3016	I	6.1	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
			II	6.1	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
Bipyridilium pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C	6.1	UN3015	III	6.1, 3	IB3, T7, TP2, TP28	153	203	241	60 L	220 L	A	40
			I	6.1, 3	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	21, 40
			II	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	21, 40
Bipyridilium pesticides, solid, toxic	6.1	UN2781	III	6.1, 3	B1, IB3, T7, TP2, TP28	153	203	242	60 L	220 L	A	21, 40
			I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	40
			II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
			III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
<i>Bis (Aminopropyl) piperazine, see Corrosive liquid, n.o.s.</i>												
Bisulfate, aqueous solution	8	UN2837	II	8	A7, B2, IB2, N34, T7, TP2	154	202	242	1 L	30 L	A	
Bisulfites, aqueous solutions, n.o.s.			III	8	A7, IB3, N34, T4, TP1	154	203	241	5 L	60 L	A	
Black powder, compressed or Gunpowder, compressed or Black powder, in pellets or Gunpowder, in pellets	8	UN2693	III	8	IB3, T7, TP1, TP28	154	203	241	5 L	60 L	A	40, 52
	1.1D	UN0028	II	1.1D		None	62	None	Forbidden	Forbidden	10	
Black powder or Gunpowder, granular or as a meal	1.1D	UN0027	II	1.1D		None	62	None	Forbidden	Forbidden	10	
Black powder for small arms	4.1	NA0027	I	4.1	70	None	170	None	Forbidden	Forbidden	E	
Blasting agent, n.o.s., see Explosives, blasting etc												
Blasting cap assemblies, see Detonator assemblies, non-electric, for blasting												
Blasting caps, electric, see Detonators, electric for blasting												
Blasting caps, non-electric, see Detonators, non-electric, for blasting												
Bleaching powder, see Calcium hypochlorite mixtures, etc												
Blue asbestos (Crocidolite) or Brown asbestos (amosite, mysorite)	9	UN2212	II	9	156, IB8, IP2, IP4, T3, TP33	155	216	240	Forbidden	Forbidden	A	34, 40
Bombs, photo-flash	1.1F	UN0037	II	1.1F			62	None	Forbidden	Forbidden	08	
Bombs, photo-flash	1.1D	UN0038	II	1.1D			62	62	Forbidden	Forbidden	03	
Bombs, photo-flash	1.2G	UN0039	II	1.2G			62	62	Forbidden	Forbidden	03	
Bombs, photo-flash	1.3G	UN0299	II	1.3G			62	62	Forbidden	Forbidden	03	

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	Bombs, smoke, non-explosive, with corrosive liquid, without initiating device	8	UN2028	II	8		None	160	None	Forbidden	50 kg	E	40
	Bombs, with bursting charge	1.1F	UN0033	II	1.1F		None	62	None	Forbidden	Forbidden	08	
	Bombs, with bursting charge	1.1D	UN0034	II	1.1D		None	62	62	Forbidden	Forbidden	03	
	Bombs, with bursting charge	1.2D	UN0035	II	1.2D		None	62	62	Forbidden	Forbidden	03	
	Bombs, with bursting charge	1.2F	UN0291	II	1.2F		None	62	None	Forbidden	Forbidden	08	
	Bombs, with flammable liquid, with bursting charge	1.1J	UN0399	II	1.1J		None	62	None	Forbidden	Forbidden	04	23E
	Bombs with flammable liquid, with bursting charge	1.2J	UN0400	II	1.2J		None	62	None	Forbidden	Forbidden	04	23E
	Boosters with detonator	1.1B	UN0225	II	1.1B		None	62	None	Forbidden	Forbidden	11	
	Boosters with detonator	1.2B	UN0268	II	1.2B		None	62	None	Forbidden	Forbidden	07	
	Boosters, without detonator	1.1D	UN0042	II	1.1D		None	62	None	Forbidden	Forbidden	07	
	Boosters, without detonator	1.2D	UN0283	II	1.2D		None	62	None	Forbidden	Forbidden	07	
	Borate and chlorate mixtures, see Chlorate and borate mixtures												
	Borneol	4.1	UN1312	III	4.1	A1, IB8, IP3, T1, TP33	None	213	240	25 kg	100 kg	A	12
+	Boron tribromide	8	UN2692	I	8, 6.1	2, B9, B14, B32, N34, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	C	
	Boron trichloride	2.3	UN1741		2.3, 8	3, B9, B14	None	304	314	Forbidden	Forbidden	D	25, 40
	Boron trifluoride	2.3	UN1008		2.3, 8	2, B9, B14	None	302	314, 315	Forbidden	Forbidden	D	40
	Boron trifluoride acetic acid complex, liquid	8	UN1742	II	8	B2, B6, IB2, T8, TP2	154	202	242	1 L	30 L	A	
	Boron trifluoride acetic acid complex, solid	8	UN3419	II	8	B2, B6, IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	A	
	Boron trifluoride diethyl etherate	8	UN2604	I	8, 3	A3, A19, T10, TP2	None	201	243	0.5 L	2.5 L	D	40
	Boron trifluoride difhydrate	8	UN2851	II	8	IB2, T7, TP2	154	212	240	15 kg	50 kg	B	12, 40, 21, 28, 40, 49, 100
	Boron trifluoride dimethyl etherate	4.3	UN2965	I	4.3, 8, 3	A19, T10, TP2, TP7	None	201	243	Forbidden	Forbidden	D	
	Boron trifluoride propionic acid complex, liquid	8	UN1743	II	8	B2, IB2, T8, TP2	154	202	242	1 L	30 L	A	
	Boron trifluoride propionic acid complex, solid	8	UN3420	II	8	B2, IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	A	

G	Bromates, inorganic, aqueous solution, n.o.s	5.1	UN3213	II	5.1	350, IB2, T4, TP1	152	202	242	1 L	5 L	B	56, 58, 133
G	Bromates, inorganic, n.o.s	5.1	UN1450	III	5.1	350, IB2, T4, TP1	152	203	241	2.5 L	30 L	B	56, 58, 133
+	Bromine	8	UN1744	I	8, 6.1	350, IB8, IP2, IP4, T3, TP33	None	212	242	5 kg	25 kg	A	56, 58
	Bromine azide	Forbidden	UN2901		2, 3, 8, 5.1	2, B9, B14, N86	None	304	314, 315	Forbidden	Forbidden	D	12, 40, 66, 74, 89, 90
+	Bromine chloride	5.1	UN1745	I	5.1, 6.1, 8	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44	None	228	244	Forbidden	Forbidden	D	40, 89, 25, 40, 66, 90
+	Bromine solutions	8	UN1744	I	8, 6.1	1, B9, B85, N34, N43, T22, TP2, TP10, TP13	None	226	249	Forbidden	Forbidden	D	12, 40, 66, 74, 89, 90
+	Bromine solutions	8	UN1744	I	8, 6.1	2, B9, B85, N34, N43, T22, TP2, TP10, TP13	None	227	249	Forbidden	Forbidden	D	12, 40, 66, 74, 89, 90
+	Bromine trifluoride	5.1	UN1746	I	5.1, 6.1, 8	2, B9, B14, B32, T22, TP2, TP13, TP38, TP45	None	228	244	Forbidden	Forbidden	D	25, 40, 66, 90
	4-Bromo-1,2-dinitrobenzene	Forbidden											
	4-Bromo-1,2-dinitrobenzene (unstable at 59 degrees C)	Forbidden											
	1-Bromo-3-chloropropane	6.1	UN2688	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	1-Bromo-3-methylbutane	3	UN2341	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	1-Bromo-3-nitrobenzene (unstable at 56 degrees C)	Forbidden											
	2-Bromo-2-nitropropane-1,3-diol	4.1	UN3241	III	4.1	46, IB8, IP3	151	213	None	25 kg	50 kg	C	12, 25, 40
	Bromoacetic acid, solid	8	UN3425	II	8	A7, IB8, IP2, IP4, N34, T3, TP33	154	212	240	15 kg	50 kg	A	
	Bromoacetic acid solution	8	UN1938	II	8	A7, B2, IB2, T7, TP2	154	202	242	1 L	30 L	A	40
+	Bromoacetone	6.1	UN1569	III	6.1, 3	B2, IB3, T7, TP2	154	203	241	5 L	60 L	A	40
	Bromoacetyl bromide	8	UN2513	II	8	2, T20, TP2, TP13	None	193	245	Forbidden	Forbidden	D	40
	Bromobenzene	3	UN2514	III	3	B2, IB2, T8, TP2	154	202	242	1 L	30 L	C	40, 53
	Bromobenzyl cyanides, liquid	6.1	UN1694	I	6.1	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Bromobenzyl cyanides, solid	6.1	UN3449	I	6.1	T14, TP2, TP13	None	201	243	Forbidden	30 L	D	12, 40, 52
	1-Bromobutane	3	UN1126	II	3	T6, TP33	None	211	242	5 kg	50 kg	D	12, 40, 52
	2-Bromobutane	3	UN2339	III	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
	Bromochloromethane	6.1	UN1887	III	6.1	B1, IB2, T4, TP1	153	203	241	60 L	220 L	A	
	2-Bromoethyl ethyl ether	3	UN2340	III	3	IB3, T4, TP1	150	202	242	5 L	60 L	B	40
	Bromoform	6.1	UN2515	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	12, 40
	Bromomethylpropanes	3	UN2342	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	

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							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	2-Bromopentane .....	3	UN2343	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	Bromopropanes .....	3	UN2344	III	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
	3-Bromopropyne .....	3	UN2345	III	3	IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Bromosilane .....	Forbidden		II	3	IB2, T4, TP1	150	202	242	5 L	60 L	D	40
	Bromotoluene-alpha, see Benzyl bromide.												
	Bromotrifluoroethylene .....	2.1	UN2419		2.1		None	304	314, 315.	Forbidden	150 kg	B	40
	Bromotrifluoromethane or Refrigerant gas, R 13B1.	2.2	UN1009		2.2	T50	306	304	314, 315.	75 kg	150 kg	A	
	Brucine .....	6.1	UN1570	I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	
	Busters, explosive .....	1.1D	UN0043	II	1.1D		None	62	None	Forbidden	Forbidden	07	
	Butadienes, stabilized or Butadienes and Hydrocarbon mixture, stabilized containing more than 40% butadienes.	2.1	UN1010		2.1	T50	306	304	314, 315.	Forbidden	150 kg	B	40
	Butane see also Petroleum gases, liquefied.	2.1	UN1011		2.1	19, T50	306	304	314, 315.	Forbidden	150 kg	E	40
	Butane, butane mixtures and mixtures having similar properties in cartridges each not exceeding 500 grams, see Receptacles, etc.												
	Butanedione .....	3	UN2346	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	1,2,4-Butanetriol trinitrate .....	Forbidden											
	Butanols .....	3	UN1120	III	3	IB2, T4, TP1, TP29	150	202	242	5 L	60 L	B	
	tert-Butoxycarbonyl azide .....	Forbidden				B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Butyl acetates .....	3	UN1123	III	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	Butyl acid phosphate .....	III		III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Butyl acrylates, stabilized .....	3	UN1718	III	8	IB3, T4, TP1	150	203	241	5 L	60 L	A	
	Butyl alcohols, see Butanols.												
	Butyl benzenes .....	3	UN2348	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	n-Butyl bromide, see 1-Bromobutane.												
	n-Butyl chloride, see Chlorobutanes.												

n-Butyl chloroformate .....	6.1	UN2743	I	6.1, 8, 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	A	12, 13, 21, 25, 40, 100
<i>Butyl ethers, see Dibutyl ethers.</i>												
<i>Butyl ethyl ether, see Ethyl butyl ether.</i>												
n-Butyl formate .....	3	UN1128	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
<i>tert-Butyl hydroperoxide, with more than 90 percent with water.</i>	Forbidden											
tert-Butyl hypochlorite .....	4.2	UN3255	I	4.2, 8	IB2, T7, TP2	None	211	243	Forbidden	Forbidden	D	
N-n-Butyl imidazole .....	6.1	UN2690	II	6.1	1, B9, B14, B30, B72, T20, TP2, TP13, TP38, TP44	153	202	243	5 L	60 L	A	
tert-Butyl isocyanate .....	6.1	UN2484	I	6.1, 3		None	226	244	Forbidden	Forbidden	D	40
n-Butyl isocyanate .....	6.1	UN2485	I	6.1, 3	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
Butyl mercaptans .....	3	UN2347	II	3	A3, A6, IB2, T4, TP1	150	202	242	5 L	60 L	D	52, 95
n-Butyl methacrylate, stabilized .....	3	UN2227	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
Butyl methyl ether .....	3	UN2350	I	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
Butyl nitrites .....	3	UN2351	I	3	T11, TP1, TP8, TP27	150	201	243	1 L	30 L	E	40
.....			II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
.....			III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
<i>tert-Butyl peroxyacetate, with more than 76 percent in solution.</i>	Forbidden											
<i>n-Butyl peroxydicarbonate, with more than 52 percent in solution.</i>	Forbidden											
<i>tert-Butyl peroxyisobutyrate, with more than 77 percent in solution.</i>	Forbidden											
<i>Butyl phosphoric acid, see Butyl acid phosphate.</i>												
Butyl propionates .....	3	UN1914	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	12, 25, 48, 127
5-tert-Butyl-2,4,6-trinitro-m-xylene or Musk xylene.	4.1	UN2956	III	4.1	159	None	223	None	Forbidden	Forbidden	D	
Butyl vinyl ether, stabilized .....	3	UN2352	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
n-Butylamine .....	3	UN1125	II	3, 8	IB2, T7, TP1	150	202	242	1 L	5 L	B	40
N-Butylaniline .....	6.1	UN2738	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	74
tert-Butylcyclohexylchloroformate .....	6.1	UN2747	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	12, 13, 25
Butylene see also Petroleum gases, liquefied.	2.1	UN1012		2.1	19, T50	306	304	314, 315	Forbidden	150 kg	E	40
1,2-Butylene oxide, stabilized .....	3	UN3022	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	27, 49
Butyltoluenes .....	6.1	UN2667	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
Butyltrichlorosilane .....	8	UN1747	II	8, 3	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	243	Forbidden	30 L	C	40
1,4-Butyne-diol .....	6.1	UN2716	III	6.1	A1, IB8, IP3, T1, TP33	None	213	240	100 kg	200 kg	C	52, 53, 70
Butyraldehyde .....	3	UN1129	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
Butyraldoxime .....	3	UN2840	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
Butyric acid .....	8	UN2820	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	12



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
G	Butyric anhydride .....	8	UN2739	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	
	Butyronitrile .....	3	UN2411	II	3, 6.1	IB2, T7, TP1, TP13	150	202	243	1 L	60 L	E	40
	Butyl chloride .....	3	UN2353	II	3, 8	IB2, T8, TP2, TP13	150	202	243	1 L	5 L	C	40
	Cacodylic acid .....	6.1	UN1572	I	6.1	IB8, IP2, IP4, T3, TP33	153	211	242	25 kg	100 kg	E	52
Cadmium compounds .....		6.1	UN2570	I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	
		6.1		II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Caesium hydroxide .....	8	UN2682	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A		29, 52
Caesium hydroxide solution .....	8	UN2681	III	8	B2, IB2, T7, TP2	154	212	240	15 kg	50 kg	A		29, 52
Calcium .....	4.3	UN1401	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A		29, 52
Calcium arsenate .....	6.1	UN1573	II	4.3	IB7, IP2, T3, TP33	151	212	241	15 kg	50kg	E		52
Calcium arsenate and calcium arsenite, mixtures, solid. <i>Calcium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i>	6.1	UN1574	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A		
Calcium carbide .....	4.3	UN1402	I	4.3	A1, A8, B55, B59, IB4, IP1, N34, T9, TP7, TP33	None	211	242	Forbidden	15 kg	B		52
Calcium chlorate .....	5.1	UN1452	II	4.3	A1, A8, B55, B59, IB7, IP2, N34, T3, TP33	151	212	241	15 kg	50 kg	B		52
Calcium chlorate aqueous solution .....	5.1	UN2429	II	5.1	A9, IB8, IP2, IP4, N34, TP33	152	212	242	5 kg	25 kg	A		56, 58
Calcium chlorite .....	5.1	UN1453	III	5.1	A2, IB2, N41, T4, TP1	152	202	242	1 L	5 L	B		56, 58, 133
Calcium cyanamide with more than 0.1 percent of calcium carbide. <i>Calcium cyanide</i> .....	4.3	UN1403	III	5.1	A2, IB2, N41, T4, TP1	152	203	241	2.5 L	30 L	B		56, 58, 133
Calcium dithionite or Calcium hydro-sulfite. <i>Calcium hydride</i> .....	4.2	UN1923	II	4.2	A9, IB8, IP2, IP4, N34, TP33	152	212	242	5 kg	25 kg	A		56, 58
Calcium hydrosulfite, <i>see</i> Calcium dithionite. <i>Calcium hydro-sulfite, see</i> Calcium dithionite. <i>Calcium</i> .....	4.3	UN1404	I	4.3	A1, A19, IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	A		52
					IB7, IP1, N79, N80, T6, TP33	None	211	242	5 kg	50 kg	A		40, 52
					A19, A20, IB6, IP2, T3, TP33	None	212	241	15 kg	50 kg	E		13
					A19, N40	None	211	242	Forbidden	15 kg	E		52

5.1	UN3485	II	5.1, 8	165, 166, A7, A9, IB8, IP2, IP4, IP13, N34, W9	152	212	None	5 kg	25 kg	D	4, 48, 52, 56, 58, 69, 142
5.1	UN1748	II	5.1	165, 166, A7, A9, IB8, IP2, IP4, IP13, N34, W9	152	212	None	5 kg	25 kg	D	4, 25, 48, 52, 56, 58, 69, 142
5.1	UN3487	III	5.1	165, 171, A7, A9, IB8, IP4, IP13, N34, W9	152	213	240	25 kg	100 kg	D	4, 25, 48, 52, 56, 58, 69, 142
5.1	UN2880	II	5.1	165, IB8, IP2, IP4, IP13, W9	152	212	240	5 kg	25 kg	D	4, 48, 52, 56, 58, 69, 142
5.1	UN3486	III	5.1, 8	165, 171, IB8, IP4, IP13, W9	152	213	240	25 kg	100 kg	D	4, 25, 48, 52, 56, 58, 69, 142
5.1	UN2208	III	5.1	165, A1, A29, IB8, IP3, IP13, N34, W9	152	213	240	25 kg	100 kg	D	4, 25, 48, 52, 56, 58, 69, 142
4.3	UN2844	III	4.3	A1, A19, IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	A	4, 25, 48, 52, 56, 58, 69, 142
5.1	UN1454	III	5.1	34, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	A	4, 25, 48, 52, 56, 58, 69, 142
8	UN1910	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	4, 25, 48, 52, 56, 58, 69, 142
5.1	UN1455	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	A	4, 25, 48, 52, 56, 58, 69, 142
5.1	UN1456	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	D	4, 25, 48, 52, 56, 58, 69, 142
5.1	UN1457	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	A	4, 25, 48, 52, 56, 58, 69, 142

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Calcium phosphide .....	4.3	UN1360	I	4.3, 6.1.	A8, A19, N40	None ...	211 ...	242 ...	Forbidden	15 kg	E	40, 52, 85
	Calcium, pyrophoric or Calcium al- loys, pyrophoric.	4.2	UN1855	I	4.2		None ...	187 ...	None	Forbidden	Forbidden	D	
	Calcium resinates .....	4.1	UN1313	III	4.1	A1, A19, IB6, T1, TP33	None ...	213 ...	240 ...	25 kg	100 kg	A	
	Calcium resinates, fused .....	4.1	UN1314	III	4.1	A1, A19, IB4, T1, TP33	None ...	213 ...	240 ...	25 kg	100 kg	A	
	Calcium selenate, see Selenates or Selenites.												
	Calcium silicide .....	4.3	UN1405	II	4.3	A19, IB7, IP2, T3, TP33	151 ...	212 ...	241 ...	15 kg	50 kg	B	52, 85, 103
	.....						151 ...	213 ...	241 ...	25 kg	100 kg	B	52, 85, 103
	Camphor oil .....	3	UN1130	III	3	A1, A19, IB8, IP4, T1, TP33	150 ...	203 ...	242 ...	60 L	220 L	A	
	Camphor, synthetic .....	4.1	UN2717	III	4.1	B1, IB3, T2, TP1	None ...	213 ...	240 ...	25 kg	100 kg	A	
	Carbonyl primers, see Primers, tubular.												
	Caproic acid .....	8	UN2829	III	8	IB3, T4, TP1	154 ...	203 ...	241 ...	5 L	60 L	A	
	Caps, blasting, see Detonators, etc.												
	Carbamate pesticides, liquid, flam- mable, toxic, flash point less than 23 degrees C.	3	UN2758	I	3, 6.1	T14, TP2, TP13, TP27	None ...	201 ...	243 ...	Forbidden	30 L	B	40
	.....												
	Carbamate pesticides, liquid, toxic .....	6.1	UN2992	II	3, 6.1	IB2, T11, TP2, TP13, TP27	150 ...	202 ...	243 ...	1 L	60 L	B	40
	.....												
	Carbamate pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	6.1	UN2991	III	6.1, 3	T14, TP2, TP13, TP27	153 ...	203 ...	241 ...	60 L	220 L	A	40
	.....						None ...	201 ...	243 ...	1 L	30 L	B	40
	.....						153 ...	202 ...	243 ...	5 L	60 L	B	40
	Carbamate pesticides, solid, toxic .....	6.1	UN2757	III	6.1, 3	IB1, IB3, T7, TP2, TP28	153 ...	203 ...	242 ...	60 L	220 L	A	40
	.....						None ...	211 ...	242 ...	5 kg	50 kg	A	40
	.....						153 ...	212 ...	242 ...	25 kg	100 kg	A	40
	.....						153 ...	213 ...	240 ...	100 kg	200 kg	A	40
	Carbolic acid, see Phenol, solid or Phenol, molten.												

I	Carbolic acid solutions, see Phenol solutions.	4.2 UN1362	III	4.2	IB8, IP3, T1, TP33	None	213	241	0.5 kg	A	12
		4.2 UN1361	III	4.2	IB6, T3, TP33	None	212	242	Forbiddn	A	12
A W	Carbon, animal or vegetable origin	2.2 UN1013	II	2.2	IB8, IP3, T1, TP33	306	302, 304	302, 314, 315	150 kg	A	
		2.2 UN2187	II	2.2	T75, TP5	306	304	314, 315	50 kg	D	
A W	Carbon dioxide, refrigerated liquid	9 UN1845	I	None	B16, T14, TP2, TP7, TP13	217	217	240	200 kg	C	40
		3 UN1131	I	3, 6.1		None	201	243	Forbiddn	D	40, 78, 115
D	Carbon dioxide, compressed	2.3 UN1016	II	2.3, 2.1		None	302	314, 315	25 kg	D	40
		2.3 NA9202	II	2.3, 2.1	4, T75, TP5	None	316	318	Forbiddn	D	
D	Carbon monoxide, refrigerated liquid (cryogenic liquid).	6.1 UN2516	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	A	25
		6.1 UN1846	II	6.1	IB2, N36, T7, TP2	153	202	243	60 L	A	40
D	Carbonyl chloride, see Phosgene.	2.3 UN2417	II	2.3, 8	2	None	302	None	Forbiddn	D	40
		2.3 UN2204	II	2.3, 2.1	3, B14	None	304	314, 315	Forbiddn	D	40
D	Cartridge cases, empty primed, see Cases, cartridge, empty, with primer.	1.1G UN0049	II	1.1G		None	62	None	Forbiddn	07	
		1.3G UN0050	II	1.3G		None	62	None	75 kg	07	
D	Cartridges, actuating, for aircraft ejector seat catapult, fire extinguisher, canopy removal or apparatus, see Cartridges, power device.	1.1C UN0326	II	1.1C		None	62	None	Forbiddn	07	
		1.2C UN0413	II	1.2C		None	62	None	Forbiddn	07	
D	Cartridges, explosive, see Charges, demolition.	1.4S UN0014	II	None		63	62	None	100 kg	05	
		1.3C UN0327	II	1.3C		None	62	None	Forbiddn	07	
D	Cartridges, sporting, see Cartridges for weapons, inert projectile, or Cartridges, small arms.	1.4C UN0338	II	1.4C		None	62	None	75 kg	06	
		1.2C UN0328	II	1.2C		None	62	62	Forbiddn	03	

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(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Cartridges for weapons, inert projectile or Cartridges, small arms.	1.4S	UN0012	II	None		63 .....	62 .....	None	25 kg	100 kg	05	
	Cartridges for weapons, inert projectile or Cartridges, small arms.	1.4C	UN0339	II	1.4C ..		None ..	62 .....	None	Forbidden	75 kg	06	
	Cartridges for weapons, inert projectile or Cartridges, small arms.	1.3C	UN0417	II	1.3C ..		None ..	62 .....	None	Forbidden	Forbidden	06	
	Cartridges for weapons, with bursting charge.	1.1F	UN0005	II	1.1F ..		None ..	62 .....	None	Forbidden	Forbidden	08	
	Cartridges for weapons, with bursting charge.	1.1E	UN0006	II	1.1E ..		None ..	62 .....	62 .....	Forbidden	Forbidden	03	
	Cartridges for weapons, with bursting charge.	1.2F	UN0007	II	1.2F ..		None ..	62 .....	None	Forbidden	Forbidden	08	
	Cartridges for weapons, with bursting charge.	1.2E	UN0321	II	1.2E ..		None ..	62 .....	62 .....	Forbidden	Forbidden	03	
	Cartridges for weapons, with bursting charge.	1.4F	UN0348	II	1.4F ..		None ..	62 .....	None	Forbidden	Forbidden	08	
	Cartridges for weapons, with bursting charge.	1.4E	UN0412	II	1.4E ..		None ..	62 .....	62 .....	Forbidden	75 kg	02	
	Cartridges, oil well .....	1.3C	UN0277	II	1.3C ..		None ..	62 .....	62 .....	Forbidden	Forbidden	07	
	Cartridges, oil well .....	1.4C	UN0278	II	1.4C ..		None ..	62 .....	62 .....	Forbidden	75 kg	06	
	Cartridges, power device .....	1.3C	UN0275	II	1.3C ..	110	None ..	62 .....	62 .....	Forbidden	75 kg	07	
	Cartridges, power device .....	1.4C	UN0276	II	1.4C ..	110, 347	None ..	62 .....	62 .....	Forbidden	75 kg	06	
	Cartridges, power device .....	1.4S	UN0323	II	1.4S ..		63 .....	62 .....	62 .....	25 kg	100kg	05	
	Cartridges, safety, blank, see Cartridges for weapons, blank (UN 0014).	1.2C	UN0381	II	1.2C ..		None ..	62 .....	62 .....	Forbidden	Forbidden	07	
	Cartridges, safety, see Cartridges for weapons, inert projectile, or Cartridges, small arms or Cartridges, power device (UN 0323).						.....	.....	.....				
	Cartridges, signal .....	1.3G	UN0054	II	1.3G ..		None ..	62 .....	None	Forbidden	75 kg	07	
	Cartridges, signal .....	1.4G	UN0312	II	1.4G ..		None ..	62 .....	None	Forbidden	75 kg	06	
	Cartridges, signal .....	1.4S	UN0405	II	1.4S ..		63 .....	None	None	25 kg	100 kg	05	
D	Cartridges, small arms .....	ORM-D			None					30 kg gross	30 kg gross	A	
D	Cartridges power device (used to project fastening devices).....	ORM-D	None		None	347	63 .....	None	None	30 kg gross	30 kg gross	A	

UN number	Proper shipping name	Class	Subclass	Division	Section	Subsection	Quantity	Special provisions	Other
UN0055	Cartridges, starter, jet engine, see Cartridges, power device	1.4S	..	II	1.4S	..	50	50	100 kg
UN0379	Cases, cartridge, empty with primer	1.4C	..	II	1.4C	..	50	50	75 kg
UN0446	Cases, cartridges, empty with primer	1.4C	..	II	1.4C	..	None	None	75 kg
UN0447	Cases, combustible, empty, without primer	1.3C	..	II	1.3C	..	None	None	Forbidden
UN0447	Cases, combustible, empty, without primer	1.3C	..	II	1.3C	..	None	None	Forbidden
UN2969	Casing/head gasoline see Gasoline, Castor beans or Castor meat or Castor pomace or Castor flake	9	None	II	None	..	IB8, IP2, IP4, T3, TP33	IB8, IP2, IP4, T3, TP33	No limit
UN1719	Cautic alkali liquids, n.o.s.	8	8	III	8	..	B2, IB2, T11, TP2, TP27, IB3, T7, TP1, TP28	B2, IB2, T11, TP2, TP27, IB3, T7, TP1, TP28	1 L 60 L
UN3292	Cautic potash, see Potassium hydroxide etc	4.3	4.3	II	4.3	..	189	189	No limit
UN2000	Cells, containing sodium	4.1	4.1	III	4.1	..	None	213	100 kg
UN2002	Celluloid, in block, rods, rolls, sheets, tubes, etc, except scrap	4.2	4.2	III	4.2	..	None	213	Forbidden
UN1333	Celluloid, scrap	4.2	4.2	III	4.2	..	IB8, IP3	IB8, IP3	Forbidden
UN3078	Cerium, see Adhesives containing flammable liquid	4.1	4.1	II	4.1	..	None	212	50 kg
UN1407	Cerium, slabs, ingots, or rods	4.3	4.3	I	4.3	..	151	151	50 kg
UN1451	Cesium or Caesium	4.3	4.3	I	4.3	..	None	211	15 kg 15 kg 15 kg
UN1451	Cesium nitrate or Caesium nitrate	5.1	5.1	III	5.1	..	A1, A29, IB8, IP3, T1, TP33	A1, A29, IB8, IP3, T1, TP33	100 kg
NA1361	Charcoal briquettes, shell, screenings, wood, etc.	4.2	4.2	III	4.2	..	151	151	100 kg
UN0457	Charges, bursting, plastics bonded	1.1D	1.1D	II	1.1D	..	None	62	Forbidden
UN0458	Charges, bursting, plastics bonded	1.2D	1.2D	II	1.2D	..	None	62	Forbidden
UN0459	Charges, bursting, plastics bonded	1.4D	1.4D	II	1.4D	..	None	62	75 kg
UN0460	Charges, bursting, plastics bonded	1.4S	1.4S	II	1.4S	..	347	347	100 kg
UN0048	Charges, demolition	1.1D	1.1D	II	1.1D	..	None	62	Forbidden
UN0056	Charges, depth	1.1D	1.1D	II	1.1D	..	None	62	Forbidden
UN0442	Charges, expelling, explosive, for fire extinguishers, see Cartridges, power device	1.1D	1.1D	II	1.1D	..	None	62	Forbidden
UN0443	Charges, explosive, commercial without detonator	1.2D	1.2D	II	1.2D	..	None	62	Forbidden
UN0444	Charges, explosive, commercial without detonator	1.4D	1.4D	II	1.4D	..	None	62	75 kg
UN0445	Charges, explosive, commercial without detonator	1.4S	1.4S	II	1.4S	..	None	62	100 kg
UN0271	Charges, propelling	1.1C	1.1C	II	1.1C	..	None	62	Forbidden

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage		
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
D	Charges, propelling .....	1.3C	UN0272	II	1.3C ..	347	None ..	62 .....	None	Forbidden	Forbidden	07		
	Charges, propelling .....	1.2C	UN0415	II	1.2C ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	07	
	Charges, propelling .....	1.4C	UN0491	II	1.4C ..		None ..	62 .....	None	Forbidden	Forbidden	75 kg	06	
	Charges, propelling, for cannon .....	1.3C	UN0242	II	1.3C ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	10	
	Charges, propelling, for cannon .....	1.1C	UN0279	II	1.1C ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	10	
	Charges, propelling, for cannon .....	1.2C	UN0414	II	1.2C ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	10	
	Charges, shaped, flexible, linear .....	1.4D	UN0237	II	1.4D ..		None ..	62 .....	None	Forbidden	Forbidden	75 kg	06	
	Charges, shaped, flexible, linear .....	1.1D	UN0288	II	1.1D ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	07	
	Charges, shaped, without detonator .....	1.1D	UN0059	II	1.1D ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	07	
	Charges, shaped, without detonator .....	1.2D	UN0439	II	1.2D ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	07	
	Charges, shaped, without detonator .....	1.4D	UN0440	II	1.4D ..		None ..	62 .....	None	Forbidden	Forbidden	75 kg	06	
	Charges, shaped, without detonator .....	1.4S	UN0441	II	1.4S ..		None ..	62 .....	None	Forbidden	Forbidden	100 kg	05	
	Charges, supplementary explosive .....	1.1D	UN0060	II	1.1D ..		None ..	62 .....	None	Forbidden	Forbidden	Forbidden	10	
	Chemical kit .....	8	NA1760	II	8 .....		154 ..	161 .....	None	1 L	1 L	30 L	B	40
	Chemical kits .....	9	UN3316	II	9 .....		161 ..	161 .....	None	10 kg	10 kg	10 kg	A	40
	Chloral, anhydrous, stabilized .....	6.1	UN2075	II	6.1 ..		153 ..	202 .....	None	5 L	5 L	60 L	D	40
	Chlorate and borate mixtures .....	5.1	UN1458	II	5.1 ..		152 ..	212 .....	None	240	5 kg	25 kg	A	56, 58
	Chlorate and magnesium chloride mixture solid.	5.1	UN1459	III	5.1 ..		152 ..	213 .....	None	240	25 kg	100 kg	A	56, 58
	Chlorate and magnesium chloride mixture solution.	5.1	UN3407	III	5.1 ..		152 ..	213 .....	None	240	5 kg	25 kg	A	56, 58
	Chlorate of potassium, see Potassium chlorate.													
Chlorate of soda, see Sodium chlorate.														
Chlorates, inorganic, aqueous solution, n.o.s.	5.1	UN3210	III	5.1 ..	152 ..	202 .....	None	202	1 L	1 L	5 L	A	56, 58, 133	
Chlorates, inorganic, n.o.s.	5.1	UN1461	III	5.1 ..	152 ..	212 .....	None	203	2.5 L	2.5 L	30 L	A	56, 58, 133	

	5.1	UN2626	II	5.1	IB2, T4, TP1	None	229	None	Forbidden	Forbidden	D	56, 58
Chloric acid aqueous solution, with not more than 10 percent chloric acid.												
Chloride of phosphorus, see Phosphorus trichloride.												
Chloride of sulfur, see Sulfur chloride.												
Chlorinated lime, see Calcium hypochlorite mixtures, etc.												
Chlorine	2.3	UN1017	II	5.1, 5.1, 8.	2, B9, B14, N86, T50, TP19	None	304	314, 315.	Forbidden	Forbidden	D	40, 51, 55, 62, 68, 89, 90
Chlorine azide	Forbidden											
Chlorine dioxide, hydrate, frozen	5.1	NA9191	II	5.1, 6.1.		None	229	None	Forbidden	Forbidden	E	
Chlorine dioxide (not hydrate)	Forbidden											
Chlorine pentafluoride	2.3	UN2548	2.3, 5.1, 8.	2.3, 5.1, 8.	1, B7, B9, B14, N86	None	304	314	Forbidden	Forbidden	D	40, 89, 90
Chlorine trifluoride	2.3	UN1749	2.3, 5.1, 8.	2.3, 5.1, 8.	2, B7, B9, B14, N86	None	304	314	Forbidden	Forbidden	D	40, 89, 90
Chlorite solution	8	UN1908	II	8	A3, A6, A7, B2, IB2, N34, T7, TP2, TP24	154	202	242	1 L	30 L	B	26, 44, 89, 100, 141
			III	8	A3, A6, A7, B2, IB3, N34, T4, TP2, TP24	154	203	241	5 L	60 L	B	26, 44, 89, 100, 141
			II	5.1	352, A7, IB6, IP2, N34, T3, TP33	152	212	242	5 kg	25 kg	A	56, 58
Chlorites, inorganic, n.o.s.	5.1	UN1462	II	5.1		306	304	314, 315.	Forbidden	150 kg	B	40
1-Chloro-1,1-difluoroethane or Refrigerant gas R 142b.	2.1	UN2517	2.1									
3-Chloro-4-methylphenyl isocyanate, liquid.	6.1	UN2236	II	6.1	IB2	153	202	243	5 L	60 L	B	40
3-Chloro-4-methylphenyl isocyanate, solid.	6.1	UN3428	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	40
1-Chloro-1,2,2-tetrafluoroethane or Refrigerant gas R 124.	2.2	UN1021	2.2		T50	306	304	314, 315.	75 kg	150 kg	A	
4-Chloro- <i>o</i> -toluidine hydrochloride, solid.	6.1	UN1579	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
4-Chloro- <i>o</i> -toluidine hydrochloride, solution.	6.1	UN3410	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
1-Chloro-2,2,2-trifluoroethane or Refrigerant gas R 133a.	2.2	UN1983	2.2		T50	306	304	314, 315.	75 kg	150 kg	A	
Chloroacetic acid, molten	6.1	UN3250	II	6.1, 8	IB1, T7, TP3, TP28	None	202	243	Forbidden	Forbidden	C	40
Chloroacetic acid, solid	6.1	UN1751	II	6.1, 8	A3, A7, IB8, IP2, IP4, N34, T3, TP33	153	212	242	15 kg	50 kg	C	40
Chloroacetic acid, solution	6.1	UN1750	II	6.1, 8	A7, IB2, N34, T7, TP2	153	202	243	1 L	30 L	C	40



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	Chloroacetone, stabilized .....	6.1	UN1695	I	6.1, 3, 8.	2, B9, B14, B32, N12, N32, N34, T20, TP2, TP13, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	21, 40, 100
+	<i>Chloroacetone (unstabilized)</i> .....	Forbidden											
	Chloroacetone, liquid, (CN) .....	6.1	UN2668	I	6.1, 3	2, B9, B14, B32, IB9, T20, TP2, TP13, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	A	12, 40, 52
	Chloroacetophenone, liquid, (CN) .....	6.1	UN3416	II	6.1	A3, IB2, N12, N32, N33, T7, TP2, TP13	None ...	202 ...	243 ...	Forbidden	60 L	D	12, 40
	Chloroacetophenone, solid, (CN) .....	6.1	UN1697	II	6.1	A3, IB8, IP2, IP4, N12, N32, N33, N34, T3, TP2, TP13, TP33	None ...	212 ...	None	Forbidden	100 kg	D	12, 40
	Chloroacetyl chloride .....	6.1	UN1752	I	6.1, 8	2, B3, B8, B9, B14, B32, B77, N34, N43, T20, TP2, TP13, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40
	Chloroanilines, liquid .....	6.1	UN2019	II	6.1	IB8, IP2, IP4, T3, TP33	153	202	243	5 L	60 L	A	52
	Chloroanilines, solid .....	6.1	UN2018	II	6.1	IB8, IP3, T1, TP33	153	212	242	25 kg	100 kg	A	
	Chloroanisidines .....	6.1	UN2233	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
	Chlorobenzene .....	3	UN1134	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	<i>Chlorobenzol, see Chlorobenzene.</i> .....												
	Chlorobenzotrifluorides .....	3	UN2234	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
	Chlorobenzyl chlorides, liquid .....	6.1	UN2235	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	Chlorobenzyl chlorides, solid .....	6.1	UN3427	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
	Chlorobutanes .....	3	UN1127	III	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	Chlorocresols solution .....	6.1	UN2669	III	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	12
	Chlorocresols, solid .....	6.1	UN3437	III	6.1	IB3, T7, TP2	153	203	241	60 L	220 L	A	12
	Chlorodifluorobromomethane or Refrigerant gas R 12B1. .....	2.2	UN1974	II	2.2	IB8, IP2, IP4, T3, TP33	306	304	314, 315.	25 kg	100 kg	A	
	Chlorodifluoromethane and chloropentafluoroethane mixture or Refrigerant gas R 502 with fixed boiling point, with approximately 49 percent chlorodifluoromethane. .....	2.2	UN1973	II	2.2	T50	306	304	314, 315.	75 kg	150 kg	A	
	Chlorodifluoromethane or Refrigerant gas R 22. .....	2.2	UN1018	II	2.2	T50	306	304	314, 315.	75 kg	150 kg	A	
+	Chlorodinitrobenzenes, liquid, .....	6.1	UN1577	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	B	91
+	Chlorodinitrobenzenes, solid .....	6.1	UN3441	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	

2-Chloroethanal	6.1	UN2232	I	6.1	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
Chloroform	6.1	UN1888	III	6.1	IB3, N36, T7, TP2	153	203	241	60 L	220 L	A	40
Chloroformates, toxic, corrosive, flammable, n.o.s.	6.1	UN2742	II	6.1, 8, 3	5, IB1, T7, TP2	153	202	243	1 L	30 L	A	12, 13, 21, 25, 40, 100
Chloroformates, toxic, corrosive, n.o.s.	6.1	UN3277	II	6.1, 8	IB2, T8, TP2, TP13, TP28	153	202	243	1 L	30 L	A	12, 13, 25, 40
Chloromethyl chloroformate	6.1	UN2745	II	6.1, 8	IB2, T7, TP2, TP13	153	202	243	1 L	30 L	A	12, 13, 21, 25, 40, 100
Chloromethyl ethyl ether	3	UN2354	II	3, 6.1	IB2, T7, TP1, TP13	150	202	243	1 L	60 L	E	40
Chloronitroanilines	6.1	UN2337	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
Chloronitrobenzenes, liquid	6.1	UN3409	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	40
Chloronitrobenzenes, solid	6.1	UN1578	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
Chloronitrotoluenes, liquid	6.1	UN2433	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	44, 89, 100, 141
Chloronitrotoluenes, solid	6.1	UN3457	III	6.1	IB8, IP3, T1, TP33	153	213	240	25 kg	200 kg	A	40
Chloropentafluoroethane or Refrigerant gas R 115	2.2	UN1020		2.2	T50	306	304	314, 315	75 kg	150 kg	A	40
Chlorophenolates, liquid or Phenolates, liquid	8	UN2904	III	8	IB3	154	203	241	5 L	60 L	A	40
Chlorophenolates, solid or Phenolates, solid	8	UN2905	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	40
Chlorophenols, liquid	6.1	UN2021	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	40
Chlorophenols, solid	6.1	UN2020	III	6.1	IB8, IP3, T1, TP1, TP33	153	213	240	100 kg	200 kg	A	40
Chlorophenyldichlorosilane	8	UN1753	II	8	A7, B2, B6, N34, T10, TP2, TP7	None	206	242	Forbidden	30 L	C	40
Chloropicrin	6.1	UN1580	I	6.1	2, B7, B9, B14, B32, B46, T22, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
Chloropicrin and methyl bromide mixtures	2.3	UN1581	2.3	2.3	2, B9, B14, N86, T50	None	193	314, 315	Forbidden	Forbidden	D	25, 40
Chloropicrin and methyl chloride mixtures	2.3	UN1582	2.3	2.3	2, N86, T50	None	193	245	Forbidden	Forbidden	D	25, 40
Chloropicrin mixture, flammable (pressure not exceeding 14.7 psia at 115 degrees F flash point below 100 degrees F) see Toxic liquids, flammable, etc.	6.1	UN1583	I	6.1	5	None	201	243	Forbidden	Forbidden	C	40
Chloropicrin mixtures, n.o.s.	6.1	UN1583	II	6.1	IB2	153	202	243	Forbidden	Forbidden	C	40
Chloropivaloyl chloride	6.1	NA9263	I	6.1, 8	IB3	153	203	241	Forbidden	Forbidden	C	40
Chloroplatinic acid, solid	8	UN2507	III	8	2, B9, B14, B32, T20, TP4, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	B	40
Chloroprene, stabilized	3	UN1991	I	3, 6.1	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	40
Chloroprene, uninhibited	3	UN1991	I	3, 6.1	B57, T14, TP2, TP13	None	201	243	Forbidden	30 L	D	40
1-Chloropropane	3	UN1278	II	3	IB2, IP8, N34, T7, TP2	None	202	242	Forbidden	60 L	E	40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
G	2-Chloropropane	3	UN2356	I	3	N36, T11, TP2, TP13	150	201	243	1 L	30 L	E		
	3-Chloropropanol-1	6.1	UN2849	III	3	IB3, T4, TP1	150	203	241	60 L	220 L	A		
	2-Chloropropane	3	UN2456	I	3	A3, N36, T11, TP2	150	201	243	1 L	30 L	E		
	2-Chloropropionic acid	8	UN2511	III	8	IB3, T4, TP2	154	203	241	5 L	60 L	A	8	
	2-Chloropyridine	6.1	UN2822	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	40	
	Chlorosilanes, corrosive, flammable, n.o.s.	8	UN2986	II	8, 3	T14, TP2, TP7, TP13, TP27	None	206	243	Forbidden	30 L	C	40	
	Chlorosilanes, corrosive, n.o.s.	8	UN2987	II	8	B2, T14, TP2, TP7, TP13, TP27	None	206	242	Forbidden	30 L	C	40	
	Chlorosilanes, flammable, corrosive, n.o.s.	3	UN2985	II	3, 8	T14, TP2, TP7, TP13, TP27	None	206	243	1 L	5 L	B	40	
	Chlorosilanes, toxic, corrosive, flammable, n.o.s.	6.1	UN3362	II	6.1, 3, 8	T14, TP2, TP7, TP13, TP27	None	206	243	1 L	30 L	C	40, 125	
	Chlorosilanes, toxic, corrosive, n.o.s.	6.1	UN3361	II	6.1, 8	T14, TP2, TP7, TP13, TP27	None	206	243	1 L	30 L	C	40	
+	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	4.3	UN2988	I	4.3, 3, 8	A2, T14, TP2, TP7, TP13	None	201	244	Forbidden	1 L	D	21, 28, 40, 49, 100	
	Chlorosulfonic acid (with or without sulfur trioxide)	8	UN1754	I	8, 6.1	2, B9, B10, B14, B32, T20, TP2, TP38, TP45	None	227	244	Forbidden	Forbidden	C	40	
G	Chlorotoluenes	3	UN2238	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Chlorotoluidines, liquid	6.1	UN3429	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A		
	Chlorotoluidines, solid	6.1	UN2239	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A		
	Chlorotrifluoromethane and trifluoromethane azeotropic mixture or Refrigerant gas R 503 with approximately 60 percent chlorotrifluoromethane.	2.2	UN2599		2.2		306	304	314, 315	75 kg	150 kg	A		
	Chlorotrifluoromethane or Refrigerant gas R 13.	2.2	UN1022		2.2		306	304	314, 315	75 kg	150 kg	A	40, 44, 89, 100, 141	
G	Chromic acid solution	8	UN1755	II	8	B2, IB2, T8, TP2	154	202	242	1 L	30 L	C	40, 44, 89, 100, 141	
				III	8	IB3, T4, TP1	154	203	241	5 L	60 L	C	40, 44, 89, 100, 141	

Chromic anhydride, see Chromium trioxide, anhydrous.										52	
Chromic fluoride, solid	8	UN1756	II	8		154	212	240	15 kg	50 kg	A
Chromic fluoride, solution	8	UN1757	II	8		154	202	242	1 L	30 L	A
Chromium nitrate	5.1	UN2720	III	5.1		154	203	241	5 L	60 L	A
						152	213	240	25 kg	100 kg	A
Chromium oxychloride	8	UN1758	I	8		None	201	243	0.5 L	2.5 L	C
											40, 66, 74, 89, 90
Chromium trioxide, anhydrous	5.1	UN1463	II	5.1, 6.1, 8		None	212	242	5 kg	25 kg	A
Chromosulfuric acid	8	UN2240	I	8		None	201	243	0.5L	2.5L	B
											40, 66, 74, 89, 90
Chromyl chloride, see Chromium oxychloride.											
Cigar and cigarette lighters, charged with fuel, see Lighters or Lighter refills containing flammable gas.											
Coal briquettes, hot											
Coal gas, compressed	Forbidden	UN1023	2.3,	2.3,	3	None	302	314, 315	Forbidden	Forbidden	D
											40
Coal tar distillates, flammable	3	UN1136	II	3		150	202	242	5 L	60 L	B
											A
Coal tar dye, corrosive, liquid, n.o.s., see Dyes, liquid or solid, n.o.s. or											
Dye intermediates, liquid or solid, corrosive, n.o.s.											
Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining).	3	UN1139	I	3		150	201	243	1 L	30 L	E
Cobalt naphthenates, powder	4.1	UN2001	III	4.1	149, IB2, T4, TP1, TP8	150	202	242	5 L	60 L	B
Cobalt resinates, precipitated	4.1	UN1318	III	4.1	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A
						151	213	240	25 kg	100 kg	A
						151	213	240	25 kg	100 kg	A
Colloidon, see Nitrocellulose etc.											
Combustible liquid, n.o.s.	Comb liq	NA1993	III	None	IB3, T1, T4, TP1	150	203	241	60 L	220 L	A
Components, explosive train, n.o.s.	1.2B	UN0382	II	1.2B	None	None	62	None	Forbidden	Forbidden	11
Components, explosive train, n.o.s.	1.4B	UN0383	II	1.4B	None	None	62	None	Forbidden	75 kg	06
Components, explosive train, n.o.s.	1.4S	UN0384	II	1.4S	None	None	62	None	Forbidden	100 kg	05
Components, explosive train, n.o.s.	1.1B	UN0461	II	1.1B	None	None	62	None	Forbidden	Forbidden	11
Composition B, see Hexolite, etc.											
Compounds, cleaning liquid	8	NA1760	I	8	A7, B10, T14, TP2, TP27	None	201	243	0.5 L	2.5 L	B

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	.....												
D G	Compounds, cleaning liquid	3	NA1993			B2, IB2, N37, T11, TP2, TP27	154	202	242	1 L	30 L	B	40
	.....					IB3, N37, T7, TP1, TP28	154	203	241	5 L	60 L	A	40
	.....					IB2, T7, TP1, TP8, TP28	150	201	243	1 L	30 L	E	
	.....					B1, B52, IB3, T4, TP1, TP29	150	202	242	5 L	60 L	B	
	.....					A7, B10, T14, TP2, TP27	None	201	243	0.5 L	2.5 L	B	40
D G	Compounds, tree killing, liquid or Compounds, weed killing, liquid.	8	NA1760			B2, IB2, N37, T11, TP2, TP27	154	202	242	1 L	30 L	B	40
	.....					IB3, N37, T7, TP1, TP28	154	203	241	5 L	60 L	A	40
	.....					IB2, T7, TP1, TP8, TP28	150	201	243	1 L	30 L	E	
	.....					B1, B52, IB3, T4, TP1, TP29	150	202	242	5 L	60 L	B	
	.....					T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
D G	Compounds, tree killing, liquid or Compounds, weed killing, liquid.	6.1	NA2810			IB2, T11, TP2, TP27	153	202	243	5 L	60 L	B	40
	.....					IB3, T7, TP1, TP28	153	203	241	60 L	220 L	A	40
	.....						306	302	314	Forbidden	150 kg	D	40
G	Compressed gas, flammable, n.o.s. ..	2.1	UN1954				306	305	315	75 kg	150 kg	A	
	.....						307	305	315	75 kg	150 kg	D	
G	Compressed gas, n.o.s. ....	2.2	UN1956			A14	306	302	314	75 kg	150 kg	D	
	.....						306	302	314	75 kg	150 kg	D	
G	Compressed gas, oxidizing, n.o.s. ....	2.2	UN3156				None	192	245	Forbidden	Forbidden	D	40
G I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A.	2.3	UN3304			1	None	192	245	Forbidden	Forbidden	D	40
	.....					2, B9, B14	None	302	314	Forbidden	Forbidden	D	40
G I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone B.	2.3	UN3304			3, B14	None	302	314	Forbidden	Forbidden	D	40
	.....						None	305	315	Forbidden	Forbidden	D	40
G I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone C.	2.3	UN3304				None	302	314	Forbidden	Forbidden	D	40
	.....						None	305	315	Forbidden	Forbidden	D	40
G I	Compressed gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone D.	2.3	UN3304				None	302	314	Forbidden	Forbidden	D	40
	.....						None	305	315	Forbidden	Forbidden	D	40
G I	Compressed gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone A.	2.3	UN3305				None	192	245	Forbidden	Forbidden	D	17, 40
	.....						None	192	245	Forbidden	Forbidden	D	17, 40

G I	Compressed gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3305	2.3, 2.1, 8.	2, B9, B14	None ...	302, 305.	314, 315.	Forbidden	D	17, 40
G I	Compressed gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3305	2.3, 2.1, 8.	3, B14	None ...	302, 305.	314, 315.	Forbidden	D	17, 40
G I	Compressed gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3305	2.3, 2.1, 8.	4	None ...	302, 305.	314, 315.	Forbidden	D	17, 40
G	Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN1953	2.3, 2.1.	1	None ...	192 ...	245 ...	Forbidden	D	40
G	Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN1953	2.3, 2.1.	2, B9, B14	None ...	302, 305.	314, 315.	Forbidden	D	40
G	Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN1953	2.3, 2.1.	3, B14	None ...	302, 305.	314, 315.	Forbidden	D	40
G	Compressed gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN1953	2.3, 2.1.	4	None ...	302, 305.	314, 315.	Forbidden	D	40
G	Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN1955	2.3 .....	1	None ...	192 ...	245 ...	Forbidden	D	40
G	Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN1955	2.3 .....	2, B9, B14	None ...	302, 305.	314, 315.	Forbidden	D	40
G	Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN1955	2.3 .....	3, B14	None ...	302, 305.	314, 315.	Forbidden	D	40
G	Compressed gas, toxic, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN1955	2.3 .....	4	None ...	302, 305.	314, 315.	Forbidden	D	40
G I	Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN3306	2.3, 5.1, 8.	1	None ...	192 ...	244 ...	Forbidden	D	40, 89, 90
G I	Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3306	2.3, 5.1, 8.	2, B9, B14	None ...	302, 305.	314, 315.	Forbidden	D	40, 89, 90
G I	Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3306	2.3, 5.1, 8.	3, B14	None ...	302, 305.	314, 315.	Forbidden	D	40, 89, 90
G I	Compressed gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3306	2.3, 5.1, 8.	4	None ...	302, 305.	314, 315.	Forbidden	D	40, 89, 90
G	Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN3303	2.3, 5.1.	1	None ...	192 ...	245 ...	Forbidden	D	40
G	Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3303	2.3, 5.1.	2, B9, B14	None ...	302, 305.	314, 315.	Forbidden	D	40
G	Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3303	2.3, 5.1.	3, B14	None ...	302, 305.	314, 315.	Forbidden	D	40
G	Compressed gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3303	2.3, 5.1.	4	None ...	302, 305.	314, 315.	Forbidden	D	40
D	Consumer commodity .....	ORM-D		None		156, 306.	156, 306.	None	30 kg gross	A	30 kg gross
	Consumer commodity .....	9	ID6000	9 .....		167 .....	167 ...	None	30 kg gross		30 kg gross

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
G	Contrivances, water-activated, with burster, expelling charge or propelling charge.	1.2L	UN0248	II	1.2L ...		None ...	62 ...	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E
G	Contrivances, water-activated, with burster, expelling charge or propelling charge.	1.3L	UN0249	II	1.3L ...		None ...	62 ...	None	Forbidden	Forbidden	08	8E, 14E, 15E, 17E
	Copper acetarsenite	6.1	UN1585	II	6.1 ...	IB8, IP2, IP4, T3, TP33	153 ...	212 ...	242 ...	25 kg	100 kg	A	
	Copper acetylde	Forbidden											
	Copper amine azide	Forbidden											
	Copper arsenite	6.1	UN1586	II	6.1 ...	IB8, IP2, IP4, T3, TP33	153 ...	212 ...	242 ...	25 kg	100 kg	A	
	Copper based pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	6.1	UN2776	I	3, 6.1	T14, TP2, TP13, TP27	None ...	201 ...	243 ...	Forbidden	30 L	B	40
	Copper based pesticides, liquid, toxic	6.1	UN3010	II	3, 6.1	IB2, T11, TP2, TP13, TP27	150 ...	202 ...	243 ...	1 L	60 L	B	40
	Copper based pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	6.1	UN3009	I	6.1, 3	T14, TP2, TP13, TP27	None ...	201 ...	243 ...	60 L	220 L	A	40
	Copper based pesticides, solid, toxic	6.1	UN2775	III	6.1, 3	IB2, T11, TP2, TP13, TP27	153 ...	202 ...	243 ...	5 L	60 L	B	40
	Copper chlorate	5.1	UN2721	III	6.1, 3	B1, IB3, T7, TP2, TP28	153 ...	203 ...	242 ...	60 L	220 L	A	40
	Copper chloride	8	UN2802	III	8 ...	IB8, IP2, IP4, T3, TP33	154 ...	213 ...	240 ...	25 kg	100 kg	A	
	Copper cyanide	6.1	UN1587	II	6.1 ...		153 ...	204 ...	242 ...	25 kg	100 kg	A	
	Copper selenate, see Selenates or Selenites.												
	Copper selenite, see Selenates or Selenites.												

A W	Copper tetramine nitrate .....	Forbiddn	UN1363	III	4.2 .....	IB8, IP3, IP7	None ...	213 ...	241 ...	Forbiddn	Forbiddn	A	13, 19, 48, 119
	Copra .....	4.2	UN1363	III	4.2 .....		None ...	213 ...	241 ...	Forbiddn	Forbiddn	A	
	Cord, detonating, flexible .....	1.1D	UN0065	II	1.1D ..	102	63(a) ...	62 .....	None	Forbiddn	Forbiddn	07	
	Cord, detonating, flexible .....	1.4D	UN0289	II	1.4D ..		None	62 .....	None	Forbiddn	Forbiddn	06	
	Cord detonating or Fuse detonating metal clad .....	1.2D	UN0102	II	1.2D ..		None	62 .....	None	Forbiddn	Forbiddn	07	
	Cord, detonating or Fuse, detonating metal clad .....	1.1D	UN0290	II	1.1D ..		None	62 .....	None	Forbiddn	Forbiddn	07	
	Cord, detonating, mild effect or Fuse, detonating, mild effect metal clad .....	1.4D	UN0104	II	1.4D ..		None	62 .....	None	Forbiddn	75 kg	06	
	Cord, igniter .....	1.4G	UN0066	II	1.4G ..		None	62 .....	None	Forbiddn	75 kg	06	
	Cordeau detonant fuse, see Cord, detonating, etc; Cord, detonating, flexible .....												
	Corflite, see Powder, smokeless .....												
G	Corrosive liquid, acidic, inorganic, n.o.s. ....	8	UN3264	I	8 .....	A6, B10, T14, TP2, TP27	None ...	201 ...	243 ...	0.5 L	2.5 L	B	40
G	Corrosive liquid, acidic, organic, n.o.s. ....	8	UN3265	III	8 .....	B2, IB2, T11, TP2, TP27	154 .....	202 ...	242 ...	1 L	30 L	B	40
	.....			III	8 .....	IB3, T7, TP1, TP28	154 .....	203 ...	241 ...	5 L	60 L	A	40
	.....			I	8 .....	A6, B10, T14, TP2, TP27	None	201 ...	243 ...	0.5 L	2.5 L	B	40
G	Corrosive liquid, basic, inorganic, n.o.s. ....	8	UN3266	III	8 .....	B2, IB2, T11, TP2, TP27	154 .....	202 ...	242 ...	1 L	30 L	B	40
	.....			III	8 .....	IB3, T7, TP1, TP28	154 .....	203 ...	241 ...	5 L	60 L	A	40
	.....			I	8 .....	A6, T14, TP2, TP27	None	201 ...	243 ...	0.5 L	2.5 L	B	40, 52
G	Corrosive liquid, basic, organic, n.o.s. ....	8	UN3267	III	8 .....	B2, IB2, T11, TP2, TP27	154 .....	202 ...	242 ...	1 L	30 L	B	40, 52
	.....			III	8 .....	IB3, T7, TP1, TP28	154 .....	203 ...	241 ...	5 L	60 L	A	40, 52
	.....			I	8 .....	A6, B10, T14, TP2, TP27	None	201 ...	243 ...	0.5 L	2.9 L	B	40, 52
G	Corrosive liquid, self-heating, n.o.s. ....	8	UN3301	III	8 .....	B2, IB2, T11, TP2, TP27	154 .....	202 ...	242 ...	1 L	30 L	B	40, 52
	.....			I	8, 4.2	IB3, T7, TP1, TP28	154 .....	203 ...	241 ...	5 L	60 L	A	40, 52
	.....			I	8, 4.2	A6, B10	None	201 ...	243 ...	0.5 L	2.5 L	D	
G	Corrosive liquids, flammable, n.o.s. ....	8	UN2920	I	8, 3 .....	B2, IB1	154 .....	202 ...	242 ...	1 L	30 L	D	
	.....			I	8, 3 .....	A6, B10, T14, TP2, TP27	None	201 ...	243 ...	0.5 L	2.9 L	C	25, 40
G	Corrosive liquids, n.o.s. ....	8	UN1760	I	8 .....	B2, IB2, T11, TP2, TP27	None	202 ...	243 ...	1 L	30 L	C	25, 40
	.....			I	8 .....	A6, A7, B10, T14, TP2, TP27	None	201 ...	243 ...	0.5 L	2.5 L	B	40
G	Corrosive liquids, oxidizing, n.o.s. ....	8	UN3093	III	8 .....	B2, IB2, T11, TP2, TP27	154 .....	202 ...	242 ...	1 L	30 L	B	40
	.....			I	8, 5.1	IB3, T7, TP1, TP28	154 .....	203 ...	241 ...	5 L	60 L	A	40
	.....			I	8, 5.1	A6, A7	None	201 ...	243 ...	Forbiddn	2.5 L	C	89
G	Corrosive liquids, toxic, n.o.s. ....	8	UN2922	I	8, 6.1	A6, A7, IB2	None	202 ...	243 ...	1 L	30 L	C	89
	.....			I	8, 6.1	A6, A7, B10, T14, TP2, TP13, TP27	None	201 ...	243 ...	0.5 L	2.5 L	B	40
	.....			I	8, 6.1	B3, IB2, T7, TP2	154 .....	202 ...	243 ...	1 L	30 L	B	40
	.....			I	8, 6.1	IB3, T7, TP1, TP28	154 .....	203 ...	241 ...	5 L	60 L	B	40
G	Corrosive liquids, water-reactive, n.o.s. ....	8	UN3094	I	8, 4.3	A6, A7	None	201 ...	243 ...	Forbiddn	1 L	E	
	.....			II	8, 4.3	A6, A7	None	202 ...	243 ...	1 L	5 L	E	



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
G	Corrosive solid, acidic, inorganic, n.o.s.	8	UN3260	I	8	IB7, IP1, T6, TP33	None	211	242	1 kg	25 kg	B		
				II	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	B		
				III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A		
G	Corrosive solid, acidic, organic, n.o.s.	8	UN3261	I	8	IB7, IP1, T6, TP33	None	211	242	1 kg	25 kg	A		
				II	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	B		
				III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A		
G	Corrosive solid, basic, inorganic, n.o.s.	8	UN3262	I	8	IB7, IP1, T6, TP33	None	211	242	1 kg	25 kg	B	52	
				II	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	B	52	
				III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	52	
G	Corrosive solid, basic, organic, n.o.s.	8	UN3263	I	8	IB7, IP1, T6, TP33	None	211	242	1 kg	25 kg	B	52	
				II	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	B	52	
				III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	52	
G	Corrosive solids, flammable, n.o.s.	8	UN2921	I	8, 4.1	IB6, T6, TP33	None	211	242	1 kg	25 kg	B	12, 25	
				II	8, 4.1	IB8, IP2, IP4, T3, TP33	None	212	242	15 kg	50 kg	B	12, 25	
G	Corrosive solids, n.o.s.	8	UN1759	I	8	IB7, IP1, T6, TP33	None	211	242	1 kg	25 kg	B		
				II	8	128, IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	A		
				III	8	128, IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A		
G	Corrosive solids, oxidizing, n.o.s.	8	UN3084	I	8, 5.1	IB6, T6, TP33	None	211	242	1 kg	25 kg	C		
				II	8, 5.1	IB6, IP2, T3, TP33	None	212	242	15 kg	50 kg	C		
G	Corrosive solids, self-heating, n.o.s.	8	UN3095	I	8, 4.2	IB6, IP2, T6, TP33	None	211	243	1 kg	25 kg	C		
				II	8, 4.2	IB6, IP2, T3, TP33	None	212	242	15 kg	50 kg	C		
G	Corrosive solids, toxic, n.o.s.	8	UN2923	I	8, 6.1	IB7, T6, TP33	None	211	242	1 kg	25 kg	B	40	
				II	8, 6.1	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	B	40	
				III	8, 6.1	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	B	40, 95	
G	Corrosive solids, water-reactive, n.o.s.	8	UN3096	I	8, 4.3	IB4, IP1, T6, TP33	None	211	243	1 kg	25 kg	D		
				II	8, 4.3	IB6, IP2, T3, TP33	None	212	242	15 kg	50 kg	D		
D W	Cotton	9	NA1365	9		137, IB8, IP2, IP4, W41	None	None	None	No limit	No limit	A		
A W	Cotton waste, oily	4.2	UN1364	III	4.2	IB8, IP3, IP7	None	213	None	Forbidden	Forbidden	A	54	
A I	Cotton, wet	4.2	UN1365	III	4.2	IB8, IP3, IP7	None	204	241	None	Forbidden	A		
W	Carbaryl derivative pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	3	UN3024	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	B	40	



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Cyclobutane .....	2.1	UN2601		2.1 .....		306 .....	304 .....	314, 315, 243 .....	Forbidden	150 kg	B	40
	Cyclobutyl chloroformate .....	6.1	UN2744	II	6.1, 8, 3	IB1, T7, TP2, TP13	153 .....	202 .....	1 L	1 L	30 L	A	12, 13, 21, 25, 40, 100
	1,5,9-Cyclododecatriene .....	6.1	UN2518	III	6.1 .....	IB3, T4, TP1	153 .....	203 .....	241 .....	60 L	220 L	A	40
	Cycloheptane .....	3	UN2241	II	3 .....	IB2, T4, TP1	150 .....	202 .....	242 .....	5 L	60 L	B	40
	Cycloheptatriene .....	3	UN2603	II	3, 6.1	IB2, T7, TP1, TP13	150 .....	202 .....	243 .....	1 L	60 L	E	40
	Cycloheptene .....	3	UN2242	II	3	B1, IB2, T4, TP1	150 .....	202 .....	242 .....	5 L	60 L	B	40
	Cyclohexane .....	3	UN1145	II	3	IB2, T4, TP1	150 .....	202 .....	242 .....	5 L	60 L	E	40
	Cyclohexanone .....	3	UN1915	III	3	B1, IB3, T2, TP1	150 .....	203 .....	242 .....	60 L	220 L	A	40
	Cyclohexene .....	3	UN2256	II	3	IB2, T4, TP1	150 .....	202 .....	242 .....	5 L	60 L	E	40
	Cyclohexyltrichlorosilane .....	8	UN1762	II	8 .....	A7, B2, N34, T10, TP2, TP7, TP13	None .....	206 .....	242 .....	Forbidden	30 L	C	40
	Cyclohexyl acetate .....	3	UN2243	III	3 .....	B1, IB3, T2, TP1	150 .....	203 .....	242 .....	60 L	220 L	A	40
	Cyclohexyl isocyanate .....	6.1	UN2488	I	6.1, 3	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45	None .....	227 .....	244 .....	Forbidden	Forbidden	D	40
	Cyclohexyl mercaptan .....	3	UN3054	III	3 .....	B1, IB3, T2, TP1	150 .....	203 .....	242 .....	60 L	220 L	A	40, 95
	Cyclohexylamine .....	8	UN2357	II	8, 3	IB2, T7, TP2	None .....	202 .....	243 .....	1 L	30 L	A	40
	Cyclohexyltrichlorosilane .....	8	UN1763	II	8 .....	A7, B2, N34, T10, TP2, TP7, TP13	None .....	206 .....	242 .....	Forbidden	30 L	C	40
	Cyclonite and cyclotetramethylenetetramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc. Cyclonite and HMX mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc. Cyclonite and octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc. Cyclonite, see Cyclotrimethylenetetramine, etc.												

Cyclooctadiene phosphines, see 9-Phosphabicyclononanes.																			
Cyclooctadienes	3 UN2520	III	3		B1, IB3, T2, TP1	150	203	242	60 L	220 L	A								
Cyclooctatetraene	3 UN2358	II	3		IB2, T4, TP1	150	202	242	5 L	60 L	B								
Cyclopentane	3 UN1146	II	3		IB2, T7, TP1	150	202	242	5 L	60 L	E								
Cyclopentane, methyl, see Methylocyclopentane.																			
Cyclopentanol	3 UN2244	III	3		B1, IB3, T2, TP1	150	203	242	60 L	220 L	A								
Cyclopentanone	3 UN2245	III	3		B1, IB3, T2, TP1	150	203	242	60 L	220 L	A								
Cyclopentene	3 UN2246	II	3		IB2, IP8, T7, TP2	150	202	242	5 L	60 L	E								
Cyclopropane	2.1 UN1027		2.1		T50	306	304	314, 315.	Forbidden	150 kg	E								
Cyclooctatriene	Forbidden																		
Cyclooctatriene tetranitramine (dry or unphlegmatized) (HMX).	1.1D UN0484	II	1.1D			None	62	None	Forbidden	Forbidden	10								
Cyclooctatriene tetranitramine, desensitized or Octogen, desensitized or HMX, desensitized.																			
Cyclooctatriene tetranitramine, wetted or HMX, wetted or Octogen, wetted with not less than 15 percent water, by mass.	1.1D UN0226	II	1.1D			None	62	None	Forbidden	Forbidden	10								
Cyclooctatriene tetranitramine and octogen, mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized, etc.																			
Cyclotrimethylenetetranitramine and cyclotetramethylenetetranitramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.																			
Cyclotrimethylenetetranitramine and HMX mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.																			
Cyclotrimethylenetetranitramine, desensitized or Cyclonite, desensitized or Hexogen, desensitized or RDX, desensitized.	1.1D UN0483	II	1.1D			None	62	None	Forbidden	Forbidden	10								
Cyclotrimethylenetetranitramine, wetted or Cyclonite, wetted or Hexogen, wetted or RDX, wetted with not less than 15 percent water by mass.	1.1D UN0072	II	1.1D			None	62	None	Forbidden	Forbidden	10								
Cymenes	3 UN2046	III	3		B1, IB3, T2, TP1	150	203	242	60 L	220 L	A								
Dangerous Goods in Machinery or Dangerous Goods in Apparatus.	9 UN3363				136, A105	None	222	None	See A105	See A105	A.								
Decaborane	4.1 UN1868	II	4.1, 6.1.		A19, A20, IB6, IP2, TP3, TP33	None	212	None	Forbidden	50 kg	A								
Decahydronaphthalene	3 UN1147	III	3		B1, IB3, T2, TP1	150	203	242	60 L	220 L	A								
n-Decane	3 UN2247	III	3		B1, IB3, T2, TP1	150	203	242	60 L	220 L	A								

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
D	Deflagrating metal salts of aromatic nitroderivatives, n.o.s., <i>Delay electric igniter, see Igniters.</i> Denatured alcohol .....	1.3C 3	UN0132 NA1987	II III	1.3C ... 3 .....	172, T8 172, B1, T7	None ... 150 .....	62 .....	None	Forbidden	Forbidden	10	5E
G	<i>Depth charges, see Charges, depth.</i> Desensitized explosive, liquid, n.o.s. Desensitized explosive, solid, n.o.s. <i>Detonating relays, see Detonators, etc.</i>	3 4.1	UN3379 UN3380	I	3 .....	164 164	None ... None ...	201 ... 211 ...	None None	Forbidden Forbidden	Forbidden Forbidden	D D	36 28, 36
	Detonator assemblies, non-electric for blasting.	1.1B	UN0360	II	1.1B ...		None ...	62 .....	None	Forbidden	Forbidden	11	
	Detonator assemblies, non-electric, for blasting.	1.4B	UN0361	II	1.4B ...	103	63(f), 63(g),	62 .....	None	Forbidden	75 kg	06	
	Detonator assemblies, non-electric, for blasting	1.4S	UN0500	II	1.4S ...	347	63(f), 63(g),	62 .....	None	25 kg	100 kg	05	
	Detonators, electric, for blasting	1.1B	UN0030	II	1.1B ...		63(f), 63(g),	62 .....	None	Forbidden	Forbidden	11	
	Detonators, electric, for blasting	1.4B	UN0255	II	1.4B ...	103	63(f), 63(g),	62 .....	None	Forbidden	75 kg	06	
	Detonators, electric for blasting	1.4S	UN0456	II	1.4S ...	347	63(f), 63(g),	62 .....	None	25 kg	100 kg	05	
	Detonators for ammunition	1.1B	UN0073	II	1.1B ...		None ...	62 .....	None	Forbidden	Forbidden	11	
	Detonators for ammunition	1.2B	UN0364	II	1.2B ...		None ...	62 .....	None	Forbidden	Forbidden	11	
	Detonators for ammunition	1.4S	UN0365	II	1.4S ...	103	None ...	62 .....	None	Forbidden	75 kg	06	
	Detonators for ammunition	1.4S	UN0366	II	1.4S ...	347	None ...	62 .....	None	25 kg	100 kg	05	
	Detonators, non-electric, for blasting	1.1B	UN0029	II	1.1B ...		None ...	62 .....	None	Forbidden	Forbidden	11	
	Detonators, non-electric, for blasting	1.4B	UN0267	II	1.4B ...	103	63(f), 63(g),	62 .....	None	Forbidden	75 kg	06	
	Detonators, non-electric for blasting	1.4S	UN0455	II	1.4S ...	347	63(f), 63(g),	62 .....	None	25 kg	100 kg	05	
	Deuterium, compressed	2.1	UN1957		2.1 .....	N89	306 .....	302 ...	None	Forbidden	150 kg	E	40
	Devices, small, hydrocarbon gas powered or Hydrocarbon gas refills for small devices with release device.	2.1	UN3150		2.1 .....		306 .....	304 ...	None	1 kg	15 kg	B	40
	Di-n-amylnamine	3	UN2841	III	3, 6.1	B1, IB3, T4, TP1	150 .....	203 ...	242 ...	60 L	220 L	A	

Di-n-butyl peroxydicarbonate, with more than 52 percent in solution.	UN2248	II	8, 3	IB2, T7, TP2	None	202	243	1 L	30 L	A	
Di-n-butylamine											
2,2-Di-(tert-butylperoxy) butane, with more than 55 percent in solution.											
Di-(tert-butylperoxy) phthalate, with more than 55 percent in solution.											
2,2-Di-(4,4-di-tert-butylperoxy)cyclohexyl propane, with more than 42 percent with inert solid.											
Di-2,4-dichlorobenzoyl peroxide, with more than 75 percent with water.	UN2372	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
1,2-Di-(dimethylamino)ethane											
Di-2-ethylhexyl phosphoric acid, see Disooxyl acid phosphate.											
Di-(1-hydroxytetraazole) (dry)											
Di-(1-naphthoyl) peroxide											
a,a'-Di-(nitroxy) methyl ether											
Di-(beta-nitroxyethyl) ammonium nitrate											
Diacetone alcohol	UN1148	II III	3 3	IB2, T4, TP1 B1, IB3, T2, TP1	150 150	202 203	242 242	5 L 60 L	60 L 220 L	B A	
Diacetone alcohol peroxides, with more than 57 percent in solution with more than 9 percent hydrogen peroxide less than 26 percent diacetone alcohol and less than 9 percent water; total active oxygen content more than 9 percent by mass.											
Diacetyl, see Butanedione.											
Diacetyl peroxide, solid, or with more than 25 percent in solution.											
Diethylamine	UN2359	II	3, 6.1, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	21, 40, 100
Diallyl ether											
4,4'-Diaminodiphenyl methane	UN2360	II	3, 6.1	IB2, N12, T7, TP1, TP13	150	202	243	1 L	60 L	E	40
p-Diazobenzene	UN2651	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
1,2-Diazidoethane											
1,1-Diazaminonaphthalene											
Diazaminotetrazole (dry)											
Diazodinitrophenol (dry)											
Diazodinitrophenol, wetted with not less than 40 percent water or mixture of alcohol and water, by mass.											
Diazodiphenylmethane	UN0074	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	12	
Diazonium nitrates (dry)											
Diazonium perchlorates (dry)											
1,3-Diazopropane											

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	<i>Dibenzyl peroxydicarbonate, with more than 87 percent with water.</i>	8	UN2434	II	8	B2, T10, TP2, TP7, TP13	154	206	242	Forbidden	30 L	C	40
	<i>Dibenzylchlorosilane</i>	2.3	UN1911	III	2.3, 2.1	1, N89	None	302	None	Forbidden	Forbidden	D	40, 57
	<i>Diborane</i>	2.1	NA1911	III	2.1	5	None	302	245	Forbidden	Forbidden	D	40, 57
D	<i>Diborane mixtures</i>	Forbidden											
	<i>Dibromoacetylene</i>	6.1	UN2648	III	6.1	IB2	153	202	243	5 L	60 L	B	40
	<i>1,2-Dibromobutan-3-one</i>	6.1	UN2872	III	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	
	<i>Dibromochloropropane</i>	6.1		III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
A	<i>Dibromodifluoromethane, R12B2</i>	9	UN1941	III	None	T11, TP2	155	203	241	100 L	220 L	A	25
	<i>1,2-Dibromoethane, see Ethylene dibromide.</i>												
	<i>Dibromomethane</i>	6.1	UN2664	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	<i>Dibutyl ethers</i>	3	UN1149	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	<i>Dibutylaminoethanol</i>	6.1	UN2873	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	<i>N,N-Dichlorazodicarbonamide (salts of) (dry)</i>	Forbidden											
	<i>1,1-Dichloro-1-nitroethane</i>	6.1	UN2650	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	12, 40, 74
D	<i>3,5-Dichloro-2,4,6-trifluoropyridine</i>	6.1	NA9264	I	6.1	2, B9, B14, B32, T20, TP4, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	A	40
	<i>Dichloroacetic acid</i>	8	UN1764	II	8	A3, A6, A7, B2, IB2, N34, T8, TP2	154	202	242	1 L	30 L	A	
	<i>1,3-Dichloroacetone</i>	6.1	UN2649	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	12, 40
	<i>Dichloroacetyl chloride</i>	8	UN1765	II	8	A3, A6, A7, B2, B6, IB2, N34, T7, TP2	154	202	242	1 L	30 L	D	40
+	<i>Dichloroacetylene</i>	Forbidden											
	<i>Dichloroanilines, liquid</i>	6.1	UN1590	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	40
	<i>Dichloroanilines, solid</i>	6.1	UN3442	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
+	<i>o-Dichlorobenzene</i>	6.1	UN1591	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	<i>2,2'-Dichlorodiethyl ether</i>	6.1	UN1916	II	6.1, 3	IB2, N33, N34, T7, TP2	153	202	243	5 L	60 L	A	
	<i>Dichlorodifluoromethane and difluoroethane azeotropic mixture or Refrigerant gas R 500 with approximately 74 percent dichlorodifluoromethane.</i>	2.2	UN2602	II	2.2	T50	306	304	314, 315	75 kg	150 kg	A	

Description	UN Number	Hazard Class	P-Code	T-Code	306	304	314, 315, 243, 242	75 kg	150 kg	A	40
Dichlorodifluoromethane or Refrigerant gas R 12	UN1028	2.2	I	T50	None	304	314, 315, 243, 242	Forbiddén	150 kg	A	40
Dichlorodimethyl ether, symmetrical	UN2249	6.1	II	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
1,1-Dichloroethane	UN2362	3	II		150	202	242	5 L	60 L	B	40
1,2-Dichloroethane, see Ethylene dichloride											
Dichloroethyl sulfide	UN1150	Forbiddén	II	IB2, T7, TP2	150	202	242	5 L	60 L	B	13
1,2-Dichloroethylene	UN1029	2.2	II	T50	306	304	314, 315, 242	75 kg	150 kg	A	
Dichlorodifluoromethane or Refrigerant gas RZ1	UN2465	5.1	II	28, IB8, IP2, IP4, T3, TP33	152	212	240	5 kg	25 kg	A	
Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts	UN2490	6.1	II	IB2, T7, TP2	153	202	243	5 L	60 L	B	
Dichloroisopropyl ether	UN1593	6.1	III	IB3, IP8, N36, T7, TP2	153	203	241	5 L	60 L	A	
Dichloromethane	UN1152	3	III	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
Dichloropentanes	UN2250	6.1	II	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	25, 40, 48
Dichlorophenyl isocyanates											
Dichlorophenyltrichlorosilane	UN1766	8	II	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	242	Forbiddén	30 L	C	40
1,2-Dichloropropane	UN1279	3	II	IB2, N36, T4, TP1	150	202	242	5 L	60 L	B	
1,3-Dichloropropanol-2	UN2750	6.1	II	IB2, T7, TP2	153	202	243	5 L	60 L	A	12, 40
Dichloropropene and propylene dichloride mixture, see 1,2-Dichloropropene											
Dichloropropene	UN2047	3	III	IB2, T4, TP1	150	202	242	5 L	60 L	B	
Dichloropropenes	UN2189	2.3	III	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
Dichlorosilane											
1,2-Dichloro-1,1,2,2-tetrafluoroethane or Refrigerant gas R 114	UN1958	2.2	II	T50	306	304	314, 315, 242	75 kg	150 kg	A	
Dichlorovinylchloroarsine	Forbiddén	Forbiddén									
Dicycloheptadiene, see Bicyclo[2.2.1]hepta-2,5-diene, stabilized											
Dicyclohexylamine	UN2565	8	III	IB3, T4, TP1	154	203	241	5 L	60 L	A	
Dicyclohexylammonium nitrite	UN2687	4.1	III	IB8, IP3, T1, TP33	151	213	240	25 kg	100 kg	A	
Dicyclopentadiene	UN2048	3	III	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	48
Didymium nitrate	UN1465	5.1	III	A1, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	A	
Diesel fuel	NA1993	3	III	144, B1, IB3, T4, TP1, TP29	150	203	242	60 L	220 L	A	
Diesel fuel	UN1202	3	III	144, B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
Diethanol nitrosamine dinitrate (dry)	Forbiddén	Forbiddén									
Diethoxymethane	UN2373	3	II	IB2, T4, TP1	150	202	242	5 L	60 L	E	
3,3-Diethoxypropene	UN2374	3	II	IB2, T4, TP1	150	202	242	5 L	60 L	E	
Diethyl carbonate	UN2366	3	III	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
Diethyl cellosolve, see Ethylene glycol diethyl ether											
Diethyl ether or Ethyl ether	UN1155	3	I	T11, TP2	150	201	243	1 L	30 L	E	40
Diethyl ketone	UN1156	3	II	IB2, T4, TP1	150	202	242	5 L	60 L	B	



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	<i>Diethyl peroxycarbonate, with more than 27 percent in solution.</i>	Forbidden											
	Diethyl sulfate	6.1	UN1594	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	C	
	Diethyl sulfide	3	UN2375	II	3	IB2, T7, TP1, TP13	None	202	243	5 L	60 L	E	
	Diethylamine	3	UN1154	II	3, 8	A3, IB2, N34, T7, TP1	150	202	243	1 L	5 L	E	
	2-Diethylaminoethanol	8	UN2686	II	8, 3	B2, IB2, T7, TP2	None	202	243	1 L	30 L	A	
	3-Diethylaminoethanol	3	UN2684	III	3, 8	B1, IB3, T4, TP1	150	203	242	5 L	60 L	A	
	N,N-Diethylamine	6.1	UN2432	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	Diethylbenzene	3	UN2049	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Diethylchlorosilane	8	UN1767	II	8, 3	A7, B6, N34, T10, TP2, TP7, TP13	None	206	243	Forbidden	30 L	C	
	<i>Diethylene glycol dinitrate</i>	Forbidden											
	Diethyleneglycol dinitrate, desensitized with not less than .25 percent non-volatile water-insoluble pigments, by mass.	1.1D	UN0075	II	1.1D		None	62	None	Forbidden	Forbidden	13	
	Diethylenetriamine	8	UN2079	II	8	B2, IB2, T7, TP2	154	202	242	1 L	30 L	A	
	N,N-Diethylethylenediamine	8	UN2685	II	8, 3	IB2, T7, TP2	None	202	243	1 L	30 L	A	
	Diethylgold bromide	Forbidden											
	Diethylthiophosphoryl chloride	8	UN2751	II	8	B2, IB2, T7, TP2	None	212	240	15 kg	50 kg	D	
	<i>Difluorochloroethanes, see 1-Chloro-1,1-difluoroethanes.</i>												
	1,1-Difluoroethane or Refrigerant gas R 152a.	2.1	UN1030		2.1	T50	306	304	314, 315.	Forbidden	150 kg	B	
	1,1-Difluoroethylene or Refrigerant gas R 1132a.	2.1	UN1959		2.1		306	304	None	Forbidden	150 kg	E	
	Difluoromethane or Refrigerant gas R 32.	2.1	UN3252		2.1	T50	306	302	314, 315.	Forbidden	150 kg	D	
	Difluorophosphoric acid, anhydrous	8	UN1768	II	8	A6, A7, B2, IB2, N5, N34, T8, TP2	None	202	242	1 L	30 L	A	
	2,3-Dihydropyran	3	UN2376	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	<i>1,8-Dihydroxy-2,4,5,7-tetraoxanthraquinone (chrysantronic acid).</i>	Forbidden											
	Dioabacetylene	Forbidden											
	Diobacetylene	3	UN1157	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Diisobutyl ketone	3	UN2361	III	3, 8	B1, IB3, T4, TP1	150	203	242	5 L	60 L	A	
	Diisobutylamine	3	UN2050	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	Diisobutylene, isomeric compounds												

Disocetyl acid phosphate	8	UN1902	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	40
Diisopropyl ether	3	UN1159	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	E	
Diisopropylamine	3	UN1158	II	3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	
<i>Diisopropylbenzene hydroperoxide, with more than 72 percent in solution.</i>	Forbidden											
Diketene, stabilized	6.1	UN2521	I	6.1, 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	26, 27, 40
1,2-Dimethoxyethane	3	UN2252	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
1,1-Dimethoxyethane	3	UN2377	II	3	IB2, T7, TP1	150	202	242	5 L	60 L	B	
Dimethyl carbonate	3	UN1161	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
<i>Dimethyl chlorophosphate, see Dimethyl thiophosphoryl chloride.</i>												
Dimethyl thiophosphoryl chloride.	Forbidden											
<i>2,5-Dimethyl-2,5-dihydroperoxy hexane, with more than 82 percent with water.</i>												
Dimethyl disulfide	3	UN2381	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
Dimethyl ether	2.1	UN1033		2.1	T50	306	304	314	Forbidden	150 kg	B	40
Dimethyl-N-propylamine	3	UN2266	II	3, 8	IB2, T7, TP2, TP13	150	202	243	1 L	5 L	B	40
Dimethyl sulfate	6.1	UN1595	I	6.1, 8	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
Dimethyl sulfide	3	UN1164	II	3	IB2, IP8, T7, TP2	150	202	242	5 L	60 L	E	40
Dimethyl thiophosphoryl chloride	6.1	UN2267	II	6.1, 8	IB2, T7, TP2	153	202	243	1 L	30 L	B	25
Dimethylamine, anhydrous	2.1	UN1032		2.1	N87, T50	None	304	314	Forbidden	150 kg	D	40
Dimethylamine solution	3	UN1160	II	3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	52
2-Dimethylaminoacetone	3	UN2378	II	3, 6.1	IB2, T7, TP1	150	202	243	1 L	60 L	A	40, 52
2-Dimethylaminoethanol	8	UN2051	II	8, 3	B2, IB2, T7, TP2	154	202	243	1 L	30 L	A	
2-Dimethylaminoethyl acrylate	6.1	UN3302	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	D	25
2-Dimethylaminoethyl methacrylate	6.1	UN2522	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	B	40
N,N-Dimethylaniline	6.1	UN2253	II	6.1	IB1, T7, TP2	153	202	243	5 L	60 L	A	
2,3-Dimethylbutane	3	UN2457	II	3	IB2, T7, TP1	150	202	242	5 L	60 L	E	
1, 3-Dimethylbutylamine	3	UN2379	II	3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	52
Dimethylcarbamoyl chloride	8	UN2262	II	8	B2, IB2, T7, TP2	154	202	242	1 L	30 L	A	40
Dimethylcyclohexanes	3	UN2263	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
N,N-Dimethylcyclohexylamine	8	UN2264	II	8, 3	B2, IB2, T7, TP2	154	202	243	1 L	30 L	A	40
Dimethylchlorosilane	3	UN1162	II	3, 8	B77, T10, TP2, TP7, TP13	None	206	243	Forbidden	Forbidden	B	40
Dimethyldiethoxysilane	3	UN2380	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
Dimethyldioxanes	3	UN2707	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
N,N-Dimethylformamide	3	UN2265	III	3	B1, IB3, T2, TP2	150	203	242	60 L	220 L	A	
<i>Dimethylhexane dihydroperoxide (dry).</i>	Forbidden											
Dimethylhydrazine, symmetrical	6.1	UN2382	I	6.1, 3	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40, 52, 74

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Dimethylhydrazine, unsymmetrical ...	6.1	UN1163	I	6.1, 3, 8.	2, B7, B9, B14, B32, T20, TP2, TP13, TP36, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	21, 38, 40, 82, 100, 40
	2,2-Dimethylpropane	2.1	UN2044		2.1		306	304	314, 315, 242	Forbidden	150 kg	E	
	Dinitro-o-cresol	6.1	UN1598	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	1,3-Dinitro-5- <i>dimethyl hydantoin</i>	Forbidden											
	Dinitro-7,8-dimethylglycoluril (dry)	Forbidden											
	1,3-Dinitro-4,5-dinitrobenzene	Forbidden											
	1,4-Dinitro-1,1,4,4-tetramethylolbutanetetranitrate (dry)	Forbidden											
	2,4-Dinitro-1,3,5-trimethylbenzene	6.1	UN1596	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	91
	Dinitroanilines	6.1	UN1597	II	6.1	11, IB2, T7, TP2	153	202	243	5 L	60 L	A	91
	Dinitrobenzenes, liquid	6.1	UN1597	III	6.1	11, IB3, T7, TP2	153	203	241	60 L	220 L	A	91
	Dinitrobenzenes, solid	6.1	UN3443	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	91
	Dinitrochlorobenzene, <i>see</i> Chlorodinitrobenzene.	Forbidden											
	1,2-Dinitroethane	Forbidden											
	1,1-Dinitroethane (dry)	Forbidden											
	Dinitrogen tetroxide	2.3	UN1067		2.3, 5.1, 8.	1, B7, B14, B45, B46, B61, B66, B67, B77, T50, TP21	None ...	336 ...	314 ...	Forbidden	Forbidden	D	40, 89, 90
	Dinitroglucuril or Dingu	1.1D	UN0489	II	1.1D		None	62	None	Forbidden	Forbidden	10	
	Dinitromethane	1.1D	UN0076	II	1.1D		None	62	None	Forbidden	Forbidden	10	5E
	Dinitrophenol, dry or wetted with less than 15 percent water, by mass.	6.1	UN1599	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	36
	Dinitrophenol solutions	6.1	UN1599	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	36
	Dinitrophenol, wetted with not less than 15 percent water, by mass.	4.1	UN1320	I	4.1	23, A8, A19, A20, N41	None ...	211 ...	None	1 kg	15 kg	E	28, 36
	Dinitrophenolates, alkali metals, dry or wetted with less than 15 percent water, by mass.	1.3C	UN0077	II	1.3C, 6.1		None	62	None	Forbidden	Forbidden	10	5E
	Dinitrophenolates, wetted with not less than 15 percent water, by mass.	4.1	UN1321	I	4.1, 6.1	23, A8, A19, A20, N41	None ...	211 ...	None	1 kg	15 kg	E	28, 36

	UN0078	II	I	1.1D ..	None ...	62 .....	None	Forbiddn	Forbiddn	Forbiddn	10	5E
Dinitropropylene glycol .....	Forbiddn											
Dinitroresorcinol, dry or wetted with less than 15 percent water, by mass.	1.1D											
2,4-Dinitroresorcinol (heavy metal salts of) (dry).	Forbiddn											
4,6-Dinitroresorcinol (heavy metal salts of) (dry).	Forbiddn											
Dinitroresorcinol, wetted with not less than 15 percent water, by mass.	4.1	I	4.1 .....		None ...	211 ...	None	1 kg	15 kg	E		28, 36
3,5-Dinitrosalicylic acid (lead salt) (dry).	Forbiddn											
Dinitrosobenzene .....	1.3C	II	1.3C ..		None ...	62 .....	None	Forbiddn	Forbiddn	10		
Dinitrosobenzylamine and salts of (dry).	Forbiddn											
2,2-Dinitrostilbene .....	Forbiddn											
Dinitrotoluenes, liquid .....	6.1	II	6.1 .....		153	202 ...	243 ...	5 L	60 L	A		
Dinitrotoluenes, molten .....	6.1	II	6.1 .....		None	202 ...	243 ...	Forbiddn	Forbiddn	C		
Dinitrotoluenes, solid .....	6.1	II	6.1 .....		153	212 ...	242 ...	25 kg	100 kg	A		
1,9-Dinitroxy pentamethylene-2,4,6,8-tetramine (dry).	Forbiddn											
Dioxane .....	3	II	3 .....		150	202 ...	242 ...	5 L	60 L	B		
Dioxolane .....	3	II	3 .....		150	202 ...	242 ...	5 L	60 L	B		40
Dipentene .....	3	III	3 .....		150	203 ...	242 ...	60 L	220 L	A		
Diphenylamine chlorarsine .....	6.1	I	6.1 .....		None	201 ...	None	Forbiddn	Forbiddn	D		
Diphenylchlorarsine, liquid .....	6.1	I	6.1 .....		None	201 ...	243 ...	Forbiddn	30 L	D		
Diphenylchlorarsine, solid .....	6.1	I	6.1 .....		None	211 ...	242 ...	5 kg	50 kg	D		40
Diphenylchlorosilane .....	8	II	8 .....		None	206 ...	242 ...	Forbiddn	30 L	C		40
Diphenylmethyl bromide .....	8	II	8 .....		154	212 ...	240 ...	15 kg	50 kg	D		40
Dipicyl sulfide, dry or wetted with less than 10 percent water, by mass.	1.1D	II	1.1D ..		None ...	62 .....	None	Forbiddn	Forbiddn	10		
Dipicyl sulfide, wetted with not less than 10 percent water, by mass.	4.1	I	4.1 .....		None ...	211 ...	None	Forbiddn	0.5 kg	D		28
Dipicrylamine, see Hexanitrodiphenylamine.												
Diopropyl peroxide, with more than 28 percent in solution.	Forbiddn											
Din-propyl ether .....	3	II	3 .....		150	202 ...	242 ...	5 L	60 L	B		
Dipropyl ketone .....	3	III	3 .....		150	203 ...	242 ...	60 L	220 L	A		
Dipropylamine .....	3	I	3, 8 .....		150	202 ...	243 ...	1 L	5 L	B		
Disinfectant, liquid, corrosive, n.o.s. ...	8	I	8 .....		None	201 ...	243 ...	0.5 L	2.5 L	B		
Disinfectants, liquid, corrosive n.o.s. ...	8	II	8 .....		154	202 ...	242 ...	1 L	30 L	B		
Disinfectants, liquid, toxic, n.o.s. ...	6.1	III	6.1 .....		None	203 ...	241 ...	5 L	60 L	A		40
Disinfectants, liquid, toxic, n.o.s. ...	6.1	II	6.1 .....		None	201 ...	243 ...	1 L	30 L	A		40
Disinfectants, liquid, toxic, n.o.s. ...	6.1	III	6.1 .....		153	202 ...	243 ...	5 L	60 L	A		40
Disinfectants, liquid, toxic, n.o.s. ...	6.1	III	6.1 .....		153	203 ...	241 ...	60 L	220 L	A		40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage											
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)										
G	Disinfectants, solid, toxic, n.o.s. ....	6.1	UN1601	I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	40										
														II	6.1	IB8, IP2, IP4, T3, TP33	153	242	25 kg	100 kg	A	40	
														III	6.1	IB8, IP3, T1, TP33	153	240	100 kg	200 kg	A	40	
G	Disodium trioxosulfate Dispersant gases, n.o.s. see Refrig- erant gases, n.o.s. Divinyl ether, stabilized Dodecyltrichlorosilane	8	UN3253	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	52										
														I	3	A7, T11, TP2	None	201	243	1 L	30 L	E	40
														II	8	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	242	Forbidden	30 L	C	40
G	Dry ice, see Carbon dioxide, solid. Dyes, liquid, corrosive, n.o.s. or Dye intermediates, liquid, corrosive, n.o.s.	8	UN2801	I	8	11, A6, B10, T14, TP2, TP27	None	201	243	0.5 L	2.5 L	A											
														II	8	11, B2, IB2, T11, TP2, TP27	154	202	1 L	30 L	A		
G	Dyes, liquid, toxic, n.o.s. or Dye intermediates, liquid, toxic, n.o.s.	6.1	UN1602	III	8	11, IB3, T7, TP1, TP28	154	203	241	5 L	60 L	A											
														I	6.1	None	201	243	1 L	30 L	A		
G	Dyes, solid, corrosive, n.o.s. or Dye intermediates, solid, corrosive, n.o.s.	8	UN3147	III	6.1	IB2	153	202	243	5 L	60 L	A											
														II	6.1	IB3	153	203	241	60 L	220 L	A	
														I	8	IB7, IP1, T6, TP33	None	211	242	1 kg	25 kg	A	
G	Dyes, solid, toxic, n.o.s. or Dye inter- mediates, solid, toxic, n.o.s.	6.1	UN3143	III	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	A											
														II	8	IB8, IP3, T1, TP33	154	213	25 kg	100 kg	A		
														I	6.1	A5, IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	
G	Dynamite, see Explosive, blasting, type A. Electrolyte (acid or alkali) for bat- teries, see Battery fluid, acid or Battery fluid, alkali. Elevated temperature liquid, flam- mable, n.o.s., with flash point above 37.8 C, at or above its flash point.	3	UN3256	III	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A											
														III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
G				III	3	IB1, T3, TP3, TP29	None	None	247	Forbidden	Forbidden	A											

UN	Class	Subclass	Division	Section	Provisions	Quantity	Label	Other
9 UN3257	III	9	IB1, T3, TP3, TP29	None	247	Forbidden	A	85
9 UN3258	III	9	(h)(4)	247	Forbidden	Forbidden	A	85
9 UN3166	9	9	135	220	Forbidden	No limit	A	
9 UN3166	9	9	135	220	No limit	No limit	A	
9 UN3082	III	9	8, 146, 173, 335, IB3, T4, TP1, TP29	155	241	No limit	A	
9 UN3077	III	9	8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33	155	240	No limit	A	
6.1 UN2558	I	6.1, 3	T14, TP2, TP13	None	243	Forbidden	D	40
6.1 UN2023	II	6.1, 3	IB2, T7, TP2, TP13	153	243	60 L	A	40
3 UN2752	III	3	B1, IB3, T2, TP1	202	242	220 L	A	
3 UN3272	III	3	IB2, T7, TP1, TP8, TP28	150	242	60 L	B	
	III	3	B1, IB3, T4, TP1, TP29	150	242	220 L	A	
2.1 UN1035	2.1	2.1	T75, TP5	306	302	150 kg	E	40
2.1 NA1961	2.1	2.1		None	314, 315	Forbidden	D	40
2.1 UN1961	2.1	2.1	T75, TP5	None	315	Forbidden	D	40
3 UN3475	II	3	144, 177, IB2, T4, TP1	150	202	5 L	E	
3 UN1170	II	3	24, IB2, T4, TP1	4b, 150	202	5 L	A	
8 UN2491	III	3	24, B1, IB3, T2, TP1, IB3, T4, TP1	4b, 150	203	220 L	A	
	III	8		154	241	60 L	A	52
3 UN3271	II	3	IB2, T7, TP1, TP8, TP28	150	242	5 L	B	
3 UN1173	III	3	B1, IB3, T4, TP1, TP29	150	242	220 L	A	
3 UN1917	II	3	IB2, T4, TP1, TP13	150	242	5 L	B	40
3 UN2271	III	3	B1, IB3, T2, TP1	150	242	60 L	A	
6.1 UN3460	III	6.1	IB8, IP3, T1, TP33	153	240	200 kg	A	
6.1 UN2274	III	6.1	IB3, T4, TP1	153	241	220 L	A	
3 UN1176	II	3	IB2, T4, TP1	150	242	60 L	B	
6.1 UN1891	II	6.1	IB2, IP8, T7, TP2, TP13	153	243	5 L	B	40, 85

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
+	Ethyl bromoacetate .....	6.1	UN1603	II	6.1, 3	IB2, T7, TP2 B1, IB2, T4, TP1 B1, IB3, T2, TP1 B77, N86, T50 IB2, T7, TP2 2, B9, B14, B32, N34, T20, TP2, TP13, TP38, TP45 B1, IB3, T2, TP1 2, B9, B14, B32, T20, TP2, TP38, TP45 IB2, T4, TP2 IB2, T4, TP1 IB2, T4, TP1 1, B9, B14, B30, T20, TP2, TP13, TP38, TP44 B1, IB3, T2, TP1 A6, T11, TP2, TP13 IB2, T4, TP1 2, B9, B14, B32, B74, T20, TP4, TP13, TP38, TP45 2, B9, B14, B32, B74, T20, TP4, TP13, TP38, TP45 1, 6.1, 4.2	None	202	243	Forbidden	Forbidden	D	40
	Ethyl butyl ether .....	3	UN1179	III	3		150	202	242	5 L	60 L	B	
	Ethyl butyrate .....	3	UN1180	III	3		150	203	242	60 L	220 L	A	40
	Ethyl chloride .....	2.1	UN1037	I	2.1		None	322	314	Forbidden	150 kg	B	
	Ethyl chloroacetate .....	6.1	UN1181	II	6.1, 3		153	202	243	5 L	60 L	A	
	Ethyl chloroformate .....	6.1	UN1182	I	6.1, 3, 8		None	227	244	Forbidden	Forbidden	D	21, 40, 100
	Ethyl 2-chloropropionate .....	3	UN2935	III	3		150	203	242	60 L	220 L	A	
	Ethyl chloroformate .....	8	UN2826	II	8, 6.1, 3		None	227	244	Forbidden	Forbidden	A	40
	Ethyl crotonate .....	3	UN1862	II	3		150	202	242	5 L	60 L	B	
	Ethyl ether, see Diethyl ether.												
Ethyl fluoride or Refrigerant gas R161.	2.1	UN2453	I	2.1	306	304	314	Forbidden	150 kg	E	40		
Ethyl formate .....	3	UN1190	II	3	150	202	242	5 L	60 L	E			
Ethyl hydroperoxide .....	Forbidden												
Ethyl isobutyrate .....	3	UN2385	II	3	150	202	242	5 L	60 L	B			
Ethyl isocyanate .....	6.1	UN2481	I	6.1, 3	None	226	244	Forbidden	Forbidden	D	40, 52		
Ethyl lactate .....	3	UN1192	III	3	150	203	242	60 L	220 L	A			
Ethyl mercaptan .....	3	UN2363	I	3	150	201	243	Forbidden	30 L	E	95, 102		
Ethyl methacrylate, stabilized .....	3	UN2277	II	3	150	202	242	5 L	60 L	B			
Ethyl methyl ether .....	2.1	UN1039	I	2.1	None	201	314	Forbidden	150 kg	B	40		
Ethyl methyl ketone or Methyl ethyl ketone.	3	UN1193	II	3	150	202	242	5 L	60 L	B			
Ethyl nitrite solutions .....	3	UN1194	I	3, 6.1	None	201	None	Forbidden	Forbidden	E	40, 105		
Ethyl orthoformate .....	3	UN2524	III	3	150	203	242	60 L	220 L	A			
Ethyl oxalate .....	6.1	UN2525	III	6.1	153	203	241	60 L	220 L	A			
Ethyl perchlorate .....	Forbidden												
Ethyl phosphonothioic dichloride, anhydrous.	6.1	NA2927	I	6.1, 8	None	227	244	Forbidden	Forbidden	D	40		
Ethyl phosphonous dichloride, anhydrous pyrophoric liquid.	6.1	NA2845	I	6.1, 4.2	None	227	244	Forbidden	Forbidden	D	18		

D	UN number	Proper shipping name	Class	Division	Subdivision	Special provisions	Quantity	Forbidden	Forbidden	Forbidden	D	40
	6.1 NA2927	Ethyl phosphorodichloridate	I	6.1, 8	2, B9, B14, B32, B74, T20, TP4, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
	3 UN1195	Ethyl propionate	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	3 UN2615	Ethyl propyl ether	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	E	
	2.1 UN2452	Ethyl silicate, see Tetraethyl silicate.	2.1	2.1	N88	None	304	314, 315	Forbidden	150 kg	B	40
	2.1 UN1036	Ethyl acetene, stabilized	2.1	2.1	B77, N87, T50	None	321	314, 315	Forbidden	150 kg	D	40
	3 UN2270	Ethylamine	II	3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	40, 52
	6.1 UN2272	Ethylamine, aqueous solution with not less than 50 percent but not more than 70 percent ethylamine.	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	52, 74
	6.1 UN2273	N-Ethylaniline	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	52, 74
	3 UN1175	2-Ethylaniline	III	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	6.1 UN2753	Ethylbenzene	III	6.1	IB3, T7, TP1	153	203	241	60 L	220 L	A	
	3 UN2275	N-Ethylbenzyloluidines liquid	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	3 UN2275	2-Ethylbutanol	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	3 UN1177	2-Ethylbutyl acetate	III	3	B1, IB2, T4, TP1	150	202	242	60 L	220 L	A	
	3 UN1178	2-Ethylbutyl aldehyde	III	3	B1, IB2, T4, TP1	150	202	242	5 L	60 L	B	
	6.1 UN1892	Ethylchloroarsine	I	6.1	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
	4.3 UN1183	Ethylchlorosilane	I	4.3, 8, 3	A2, A3, A7, N34, T14, TP2, TP7, TP13	None	201	244	Forbidden	1 L	D	21, 28, 40, 49, 100, 40, 57
	2.1 UN3138	Ethylene, acetylene and propylene in mixture, refrigerated liquid, with at least 71.5 percent ethylene with not more than 22.5 percent acetylene and not more than 6 percent propylene.	2.1	2.1	T75, TP5	None	304	314, 315	Forbidden	Forbidden	D	
	6.1 UN1135	Ethylene chlorohydrin	I	6.1, 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
	2.1 UN1962	Ethylene	2.1	2.1		306	304	302	Forbidden	150 kg	E	40
	6.1 UN1605	Ethylene diamine difluoride	I	6.1	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
	3 UN1184	Ethylene dibromide and methyl bromide liquid mixtures, see Methyl bromide and ethylene dibromide, liquid mixtures.	III	3, 6.1	IB2, N36, T7, TP1	150	202	243	1 L	60 L	B	40
	3 UN1153	Ethylene dichloride	III	3	IB2, T4, TP1	150	202	242	5 L	60 L	A	
	Forbidden	Ethylene glycol diethyl ether	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	3 UN1171	Ethylene glycol dimethyl ether	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	3 UN1172	Ethylene glycol monoethyl ether	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	3 UN1188	Ethylene glycol monoethyl ether acetate.	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	3 UN1188	Ethylene glycol monomethyl ether	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identifi-cation Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Ethylene glycol monomethyl ether acetate.	3	UN1189	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	Ethylene oxide and carbon dioxide mixture with more than 87 percent ethylene oxide.	2.3	UN3300	2.3	2.3, 2.1	4	None	304	314, 315	Forbidden	Forbidden	D	40
	Ethylene oxide and carbon dioxide mixtures with more than 9 percent but not more than 87 percent ethylene oxide.	2.1	UN1041	2.1	2.1	T50	306	304	314, 315	Forbidden	25 kg	B	40
	Ethylene oxide and carbon dioxide mixtures with not more than 9 percent ethylene oxide.	2.2	UN1952	2.2	2.2		306	304	314, 315	75 kg	150 kg	A	
	Ethylene oxide and chlorotetrafluoroethane mixture with not more than 8.8 percent ethylene oxide.	2.2	UN3297	2.2	2.2	T50	306	304	314, 315	75 kg	150 kg	A	
	Ethylene oxide and dichlorodifluoromethane mixture, with not more than 12.5 percent ethylene oxide.	2.2	UN3070	2.2	2.2	T50	306	304	314, 315	75 kg	150 kg	A	
	Ethylene oxide and pentafluoroethane mixture with not more than 7.9 percent ethylene oxide.	2.2	UN3298	2.2	2.2	T50	306	304	314, 315	75 kg	150 kg	A	
	Ethylene oxide and propylene oxide mixtures, with not more than 30 percent ethylene oxide.	3	UN2983	I	3, 6.1	5, A11, N4, N34, T14, TP2, TP7, TP13	None	201	243	Forbidden	30 L	E	40
	Ethylene oxide and tetrafluoroethane mixture with not more than 5.6 percent ethylene oxide.	2.2	UN3299	2.2	2.2	T50	306	304	314, 315	75 kg	150 kg	A	
	Ethylene oxide or Ethylene oxide with nitrogen up to a total pressure of 1 MPa (10 bar) at 50 degrees C.	2.3	UN1040	2.3	2.3, 2.1	4, 342, T50, TP20	None	323	323	Forbidden	Forbidden	D	40
	Ethylene, refrigerated liquid (cryogenic liquid).	2.1	UN1038	2.1	2.1	T75, TP5	None	316	318, 319	Forbidden	Forbidden	D	40
	Ethylenediamine	8	UN1604	II	8, 3	IB2, T7, TP2	154	202	243	1 L	30 L	A	40, 52.

	UN1185	I	6.1, 3	1, B9, B14, B30, B77, N25, N32, T2, TP2, TP13, TP38, TP44	None	226	244	Forbidden	Forbidden	D	40
Ethyleneimine, stabilized											
Ethylhexaldehyde, see Octyl aldehydes etc.											
2-Ethylhexyl chloroformate	6.1 UN2748	II	6.1, 8	IB2, T7, TP2, TP13	153	202	243	1 L	30 L	A	12, 13, 21, 25, 40, 100, 40
2-Ethylhexylamine	3 UN2276	III	3, 8	B1, IB3, T4, TP1	150	203	242	5 L	60 L	A	
Ethylphenyldichlorosilane	8 UN2435	II	8	A7, B2, N34, T10, TP2, TP7, TP13	None	206	242	Forbidden	30 L	C	
1-Ethylpiperidine	3 UN2386	II	3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	52
N-Ethyloluidines	6.1 UN2754	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	
Ethyltrichlorosilane	3 UN1196	II	3, 8	A7, N34, T10, TP2, TP7, TP13	None	206	243	1 L	5 L	B	40
Etiologic agent, see Infectious substances, etc.											
Explosive articles, see Articles, explosive, n.o.s. etc.											
Explosive, blasting, type A	1.1D UN0081	II	1.1D		None	62	None	Forbidden	Forbidden	10	19E, 21E
Explosive, blasting, type B	1.1D UN0082	II	1.1D		None	62	None	Forbidden	Forbidden	10	19E
Explosive, blasting, type B or Agent blasting, Type B	1.5D UN0331	II	1.5D	105, 106	None	62	None	Forbidden	Forbidden	10	19E
Explosive, blasting, type C	1.1D UN0083	II	1.1D	123	None	62	None	Forbidden	Forbidden	10	22E
Explosive, blasting, type D	1.1D UN0084	II	1.1D		None	62	None	Forbidden	Forbidden	10	
Explosive, blasting, type E	1.1D UN0241	II	1.1D		None	62	None	Forbidden	Forbidden	10	19E
Explosive, blasting, type E or Agent blasting, Type E	1.5D UN0332	II	1.5D	105, 106	None	62	None	Forbidden	Forbidden	10	19E
Explosive, forbidden. See § 173.54 ... Explosive substances, see Substances, explosive, n.o.s. etc.	Forbidden										
Explosives slurry, see Explosive, blasting, type E.											
Explosives, water gels, see Explosive, blasting, type E.											
Extracts, aromatic, liquid	3 UN1169	III	3	149, IB2, T4, TP1, TP8	150	202	242	5 L	60 L	B	
Extracts, flavoring, liquid	3 UN1197	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
Fabric with animal or vegetable oil, see Fibers or fabrics, etc.											
Ferric arsenate	6.1 UN1606	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Ferric arsenite	6.1 UN1607	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Ferric chloride, anhydrous	8 UN1773	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	
Ferric chloride, solution	8 UN2582	III	8	B15, IB3, T4, TP1	154	203	241	5 L	60 L	A	
Ferric nitrate	5.1 UN1466	III	5.1	A1, A29, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	A	
Ferrocenium	4.1 UN1323	II	4.1	59, A19, IB8, IP2, IP4, T3, TP33	151	212	240	15 kg	50 kg	A	

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	Ferrosilicon with 30 percent or more but less than 90 percent silicon.	4.3	UN1408	III	4.3, 6.1	A1, A19, B6, IB8, IP4, IP7, T1, TP33	151	213	240	25 kg	100 kg	A	13, 40, 52, 53, 85, 103
D	Ferrous arsenate	6.1	UN1608	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
D	Ferrous chloride, solid	8	NA1759	II	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	A	
	Ferrous chloride, solution	8	NA1760	II	8	B3, IB2, T11, TP2, TP27	154	202	242	1 L	30 L	B	40
	Ferrous metal borings or Ferrous metal shavings or Ferrous metal turnings or Ferrous metal cuttings in a form liable to self-heating.	4.2	UN2793	III	4.2	A1, A19, IB8, IP3, IP7	None	213	241	25 kg	100 kg	A	
	Fertilizer ammoniating solution with free ammonia.	2.2	UN1043	2.2	2.2	N87	306	304	314, 315	Forbidden	150 kg	E	40
A I	Fibers, animal or Fibers, vegetable burnt, wet or damp.	4.2	UN1372	III	4.2		151	213	240	Forbidden	Forbidden	A	
IW	Fibers, vegetable, dry	4.1	UN3360	III	4.1	137	151	213	240	No Limit	No Limit	A	
A W	Fibers or Fabrics, animal or vegetable or Synthetic, n.o.s. with animal or vegetable oil.	4.2	UN1373	III	4.2	137, IB8, IP3, T1, TP33	None	213	241	Forbidden	Forbidden	A	
	Fibers or Fabrics impregnated with weakly nitrated nitrocellulose, n.o.s.	4.1	UN1353	III	4.1	A1, IB8, IP3	None	213	240	25 kg	100 kg	D	
	Films, nitrocellulose base, from which gelatine has been removed; film scrap, see Celluloid scrap.	4.1	UN1324	III	4.1		None	183	None	25 kg	100 kg	D	28
	Films, nitrocellulose base, gelatine coated (except scrap).	4.1	UN1324	III	4.1		None	183	None	25 kg	100 kg	D	28
	Fire extinguisher charges, corrosive liquid.	8	UN1774	II	8	N41	154	202	None	1 L	30 L	A	
	Fire extinguisher charges, expelling, explosive, see Cartridges, power device.	2.2	UN1044	2.2	2.2	18, 110	309	309	None	75 kg	150 kg	A	
	Fire extinguishers containing compressed or liquefied gas.	4.1	UN2623	III	4.1	A1, A19	None	213	None	25 kg	100 kg	A	52
	Firelighters, solid with flammable liquid.	1.1G	UN0333	II	1.1G	108	None	62	None	Forbidden	Forbidden	07	
	Fireworks	1.2G	UN0334	II	1.2G	108	None	62	None	Forbidden	Forbidden	07	
	Fireworks	1.3G	UN0335	II	1.3G	108	None	62	None	Forbidden	Forbidden	07	

UN Number	Proper Shipping Name	Class	Division	Subdivision	Special Provisions	Quantity	Label	Other	Exemption
1.4G UN0336	Fireworks	II	1.4G	108	None	62	None	06	
1.4S UN0337	Fireworks	II	1.4S	108	None	62	None	05	
9 UN3316	First-aid kits	III	9	15	161	161	None	10 kg A	
9 UN2216	Fish meal, stabilized or Fish scrap, stabilized.	III	None	155, IB8, IP3, T1, TP33	155	218	218	No limit B	88, 122, 128
4.2 UN1374	Fish meal, unstabilized or Fish scrap, unstabilized.	II	4.2	155, A1, A19, IB8, IP2, IP4, T3, TP33	None	212	241	50 kg B	18, 128
3 UN3286	Flammable liquid, toxic, corrosive, n.o.s.	I	3, 6.1, 8	T14, TP2, TP13, TP27	None	201	243	2.5 L E	21, 40, 100
3 UN2924	Flammable liquids, corrosive, n.o.s.	II	3, 6.1, 8	IB2, T11, TP2, TP13, TP27	150	202	243	5 L B	21, 40, 100
3 UN1993	Flammable liquids, n.o.s.	I	3, 8	T14, TP2	None	201	243	2.5 L E	40
		II	3, 8	IB2, T11, TP2, TP27	150	202	243	5 L B	40
		III	3, 8	B1, IB3, T7, TP1, TP28	150	203	242	60 L A	40
		I	3	T11, TP1, TP27	150	201	243	30 L E	40
		II	3	IB2, T7, TP1, TP8, TP28	150	202	242	60 L B	
		III	3	B1, B52, IB3, T4, TP1, TP29	150	203	242	220 L A	
3 UN1992	Flammable liquids, toxic, n.o.s.	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	30 L E	40
		II	3, 6.1	IB2, T7, TP2, TP13	150	202	243	60 L B	40
		III	3, 6.1	B1, IB3, T7, TP1, TP28	150	203	242	220 L A	
4.1 UN3180	Flammable solid, corrosive, inorganic, n.o.s.	II	4.1, 8	A1, IB6, IP2, T3, TP33	151	212	242	50 kg D	40
4.1 UN3178	Flammable solid, inorganic, n.o.s.	III	4.1, 8	A1, IB6, T1, TP33	151	213	242	100 kg D	40
		II	4.1	A1, IB8, IP2, IP4, T3, TP33	151	212	240	50 kg B	
4.1 UN3176	Flammable solid, organic, molten, n.o.s.	III	4.1	A1, IB8, IP3, T1, TP33	151	213	240	100 kg B	
		II	4.1	IB1, T3, TP3, TP26	151	212	240	Forbiddén C	
4.1 UN3097	Flammable solid, oxidizing, n.o.s.	III	4.1	IB1, T1, TP3, TP26	151	213	240	Forbiddén C	
		II	4.1	131	None	214	214	Forbiddén E	40
		III	4.1	131, T1, TP33	None	214	214	Forbiddén D	40
4.1 UN3179	Flammable solid, toxic, inorganic, n.o.s.	II	4.1	A1, IB6, IP2, T3, TP33	151	212	242	50 kg B	40
		III	4.1	A1, IB6, T1, TP33	151	213	242	100 kg B	40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
G	Flammable solids, corrosive, organic, n.o.s.	4.1	UN2925	II	4.1, 8	A1, IB6, IP2, T3, TP33	None	212	242	15 kg	50 kg	D	40
G	Flammable solids, organic, n.o.s.	4.1	UN1325	III	4.1, 8	A1, IB6, T1, TP33	151	213	242	25 kg	100 kg	D	40
G	Flammable solids, toxic, organic, n.o.s.	4.1	UN2926	III	4.1, 6.1	A1, IB8, IP2, IP4, T3, TP33	151	212	240	15 kg	50 kg	B	40
	Flares, aerial	1.3G	UN0093	III	4.1, 6.1	A1, IB6, T1, TP33	151	213	242	25 kg	100 kg	B	40
	Flares, aerial	1.4G	UN0403	II	1.3G		None	62	None	Forbidden	75 kg	07	
	Flares, aerial	1.4S	UN0404	II	1.4G		None	62	None	Forbidden	75 kg	06	
	Flares, aerial	1.1G	UN0420	II	1.1G		None	62	None	25 kg	100 kg	05	
	Flares, aerial	1.2G	UN0421	II	1.2G		None	62	None	Forbidden	Forbidden	07	
	Flares, airplane, see Flares, aerial.												
	Flares, signal, see Cartridges, signal.												
	Flares, surface	1.3G	UN0092	II	1.3G		None	62	None	Forbidden	75 kg	07	
	Flares, surface	1.1G	UN0418	II	1.1G		None	62	None	Forbidden	Forbidden	07	
	Flares, surface	1.2G	UN0419	II	1.2G		None	62	None	Forbidden	Forbidden	07	
	Flares, water-activated, see Contri-vances, water-activated, etc.												
	Flash powder	1.1G	UN0094	II	1.1G		None	62	None	Forbidden	Forbidden	15	
	Flash powder	1.3G	UN0305	II	1.3G		None	62	None	Forbidden	Forbidden	15	
	Flue dusts, poisonous, see Arsenical dust.												
	Fluoric acid, see Hydrofluoric acid, etc.												
	Fluorine, compressed	2.3	UN1045		2.3, 5.1, 8	1, N86	None	302	None	Forbidden	Forbidden	D	40, 89, 90
	Fluoroacetic acid	6.1	UN2642	I	6.1	IB7, IP1, T6, TP33	None	211	242	1 kg	15 kg	E	
	Fluoroanilines	6.1	UN2941	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	Fluorobenzene	3	UN2387	III	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	Fluoroboric acid	8	UN1775	II	8	A6, A7, B2, B15, IB2, N3, N34, T7, TP2	154	202	242	1 L	30 L	A	
	Fluorophosphoric acid anhydrous	8	UN1776	II	8	A6, A7, B2, IB2, N3, N34, T8, TP2	None	202	242	1 L	30 L	A	

UN number	Proper shipping name	Class	Division	Subdivision	Special provisions	Quantity	Label	Placard	Other
6.1 UN2856	Fluorosilicates, n.o.s.	III	6.1	.....	IB8, IP3, T1, TP33	153	213	240	200 kg
8 UN1778	Fluorosilicic acid	II	8	.....	A6, A7, B2, B15, IB2, N3, N34, T8, TP2	None	202	242	30 L
8 UN1777	Fluorosulfonic acid	I	8	.....	A3, A6, A7, A10, B6, B10, N3, N36, T10, TP2	None	201	243	2.5 L
3 UN2388	Fluorotoluenes	II	3	.....	176, B1, IB3, T4, TP1	150	202	242	60 L
Forbidden	Formaldehyde solutions, flammable	III	3, 8	.....		150	203	242	60 L
8 UN2209	Formaldehyde solutions (with not less than 10% and less than 25% formaldehyde), see Aviation regulated liquid, n.o.s. or Other regulated substances, liquid, n.o.s.	III	8	.....	IB3, T4, TP1	154	203	241	60
8 UN3412	Formaldehyde solutions, with not less than 25 percent formaldehyde. <i>Formalin</i> , see Formaldehyde, solutions.	II	8	.....	IB2, T7, TP2	154	202	242	30 L
8 UN3412	Formic acid with not less than 10% but not more than 85% acid by mass.	III	8	.....	IB3, T4, TP1	154	203	241	60 L
8 UN1779	Formic acid with not less than 5% but less than 10% acid by mass.	II	8, 3	.....	B2, B28, IB2, T7, TP2	154	202	242	30 L
1.1D UN0099	Formic acid with more than 85% acid by mass.	II	1.1D	.....		None	62	62	Forbidden
3 UN1863	Fracturing devices, explosive, without detonators for oil wells.	I	3	.....	144, T11, TP1, TP8, TP28	150	201	243	30 L
8 UN3477	Fuel, aviation, turbine engine	III	3	.....	144, IB2, T4, TP1, TP8	150	202	242	60 L
	Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment, containing flammable liquids.	III	3	.....	144, B1, IB3, T2, TP1	230	230	230	220 L
3 UN3473	Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment, containing flammable liquids.	III	3	.....		230	230	230	50 kg
2.1 UN3479	Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment, containing hydrogen in metal hydride	II	2.1	.....		230	230	230	15 kg
2.1 UN3478	Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment, containing liquefied flammable gas.	II	2.1	.....		230	230	230	15 kg

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Fuel cell cartridges or Fuel cell cartridges contained in equipment or Fuel cell cartridges packed with equipment, containing water-reactive substances.	4.3	UN3476		4.3		230	230	230	5 kg	50 kg		A
D	Fuel oil (No. 1, 2, 4, 5, or 6) ..... Fuel system components (including fuel control units (FCU), carburetors, fuel lines, fuel pumps) see Dangerous Goods in Apparatus or Dangerous Goods in Machinery. Fulminate of mercury (dry) ..... Fulminate of mercury, wet, see Mercury fulminate, etc. Fulminating gold ..... Fulminating mercury ..... Fulminating platinum ..... Fulminating silver ..... Fulminic acid ..... Fumaryl chloride ..... Fumigated lading, see §§ 172.302(g), 173.9 and 176.76(h). Fumigated transport vehicle or freight container see § 173.9.	3	NA1993	III	3	144, B1, IB3, T4, TP1, TP29	150	203	242	60 L	220 L		A
	Furaldehydes	6.1	UN1199	II	8	B2, IB2, T7, TP2	154	202	242	1 L	30 L		C
	Furan	3	UN2389	I	3								
	Furfuryl alcohol	6.1	UN2874	III	6.1	IB2, T7, TP2	153	202	243	5 L	60 L		A
	Fuse, detonating, metal clad, see Cord, detonating, metal clad.						None	201	243	1 L	30 L		E
	Fuse, detonating, mild effect, metal clad, see Cord, detonating, mild effect, metal clad.						153	203	241	60 L	220 L		A
	Fuse, igniter tubular metal clad	1.4G	UN0103	II	1.4G		None	62	None	Forbidden	75 kg		06
	Fuse, non-detonating instantaneous or quickmatch.	1.3G	UN0101	II	1.3G		None	62	None	Forbidden	Forbidden		07
	Fuse, safety	1.4S	UN0105	II	1.4S		None	62	None	25 kg	100 kg		05

D	4.1	NA1325	II 4.1 .....	IB2, T4, TP1	None ...	184 ...	None	15 kg	50 kg	B
	3	UN1201	III 3 .....	B1, IB3, T2, TP1	150 .....	202 ...	242 ...	60 L	60 L	B
					150 .....	203 ...	242 ...	220 L	220 L	A
	1.1B	UN0106	II 1.1B ...		None ...	62 ...	None	Forbidden	Forbidden	11
	1.2B	UN0107	II 1.2B ...		None ...	62 ...	None	Forbidden	Forbidden	11
	1.4B	UN0257	II 1.4B ...	116	None ...	62 ...	None	Forbidden	75 kg	06
	1.4S	UN0367	II 1.4S ...	116	None ...	62 ...	None	25 kg	100 kg	05
	1.1D	UN0408	II 1.1D ..		None ...	62 ...	None	Forbidden	Forbidden	07
	1.2D	UN0409	II 1.2D ..		None ...	62 ...	None	Forbidden	Forbidden	07
	1.4D	UN0410	II 1.4D ..	116	None ...	62 ...	None	Forbidden	75 kg	06
	1.3G	UN0316	II 1.3G ..		None ...	62 ...	None	Forbidden	Forbidden	07
	1.4G	UN0317	II 1.4G ..		None ...	62 ...	None	Forbidden	75 kg	06
	1.4S	UN0368	II 1.4S ...		None ...	62 ...	None	25 kg	100 kg	05
	Forbidden									
	8	UN2803	III 8 .....	T1, TP33	None ...	162 ...	240 ...	20 kg	20 kg	48
	2.1	UN2037	II 2.1 .....		306 .....	304 ...	None	1 kg	15 kg	40
	2.3	NA9035	II 2.3 .....	6	None ...	194 ...	None	Forbidden	Forbidden	D
	3	UN1202	III 3 .....	144, B1, IB3, T2, TP1	150 .....	203 ...	242 ...	60 L	220 L	A
	2.1	UN3312	II 2.1 .....	T75, TP5	None ...	316 ...	318 ...	Forbidden	Forbidden	D
	2.2	UN3158	II 2.2 .....	T75, TP5	320 .....	316 ...	318 ...	50 kg	500 kg	D
	2.2	UN3311	II 2.2 .....	T75, TP5, TP22	320 .....	316 ...	318 ...	Forbidden	Forbidden	D
	2.1	UN3167	II 2.1 .....		306 .....	302 ...	None	1 L	5 L	D
	2.3	UN3168	II 2.3 .....	6	306 .....	302 ...	None	Forbidden	1 L	D
	2.3	UN3169	II 2.3 .....	6	306 .....	302 ...	None	Forbidden	1 L	D
	3	NA1203	II 3 .....	144, 177	150 .....	202 ...	242 ...	5 L	60 L	E
	3	UN1203	II 3 .....	144, 177, B1, IB2, TB	150 .....	202 ...	242 ...	5 L	60 L	E



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	<i>Gelatine, blasting, see Explosive, blasting, type A.</i> <i>Gelatine dynamites, see Explosive, blasting, type A.</i> Germane .....	2.3	UN2192		2.3, 2.1.	2	None ...	302 ...	245 ...	Forbidden	Forbidden	D	40
	<i>Glycerol-1,3-dinitrate</i> .....	Forbidden											
	<i>Glycerol gluconate trinitrate</i> .....	Forbidden											
	<i>Glycerol lactate trinitrate</i> .....	Forbidden											
	<i>Glycerol alpha-monochlorohydrin</i> .....	6.1	UN2689	III	6.1 .....	IB3, T4, TP1	153 .....	203 ...	241 ...	60 L	220 L	A	40
	<i>Glyceryl trinitrate, see Nitroglycerin, etc.</i>												
	<i>Glycidaldehyde</i> .....	3	UN2622	II	3, 6.1		150 .....	202 ...	243 ...	1 L	60 L	A	40
	<i>Grenades, hand or rifle, with bursting charge.</i>	1.1D	UN0284	II	1.1D ..	IB2, IP8, T7, TP1	62 .....	62 ...	None	Forbidden	Forbidden	07	
	<i>Grenades, hand or rifle, with bursting charge.</i>	1.2D	UN0285	II	1.2D ..		62 .....	62 ...	None	Forbidden	Forbidden	07	
	<i>Grenades, hand or rifle, with bursting charge.</i>	1.1F	UN0292	II	1.1F ...		62 .....	62 ...	None	Forbidden	Forbidden	08	
	<i>Grenades, hand or rifle, with bursting charge.</i>	1.2F	UN0293	II	1.2F ...		62 .....	62 ...	None	Forbidden	Forbidden	08	
	<i>Grenades, illuminating, see Ammunition, illuminating, etc.</i>												
	<i>Grenades, practice, hand or rifle</i> .....	1.4S	UN0110	II	1.4S ...		62 .....	62 ...	None	25 kg	100 kg	05	
	<i>Grenades, practice, hand or rifle</i> .....	1.3G	UN0318	II	1.3G ..		62 .....	62 ...	None	Forbidden	Forbidden	07	
	<i>Grenades, practice, hand or rifle</i> .....	1.2G	UN0372	II	1.2G ..		62 .....	62 ...	None	Forbidden	Forbidden	07	
	<i>Grenades, practice, hand or rifle</i> .....	1.4G	UN0452	II	1.4G ..		62 .....	62 ...	None	Forbidden	75 kg	06	
	<i>Grenades, smoke, see Ammunition, smoke, etc.</i>												
	<i>Guanine nitrate</i> .....	5.1	UN1467	III	5.1 .....	A1, IB8, IP3, T1, TP33	152 .....	213 ...	240 ...	25 kg	100 kg	A	73
	<i>Guanyl nitrosaminoquanylidene hydrazine (dry).</i>	Forbidden											
	<i>Guanyl nitrosaminoquanylidene hydrazine, wetted with not less than 30 percent water, by mass.</i>	1.1A	UN0113	II	1.1A ...	111, 117	None ...	62 .....	None	Forbidden	Forbidden	12	
	<i>Guanyl nitrosaminoquanyltetrazeno (dry).</i>	Forbidden											

1.1A	UN0114	II	1.1A	111, 117	None	62	None	Forbidden	Forbidden	12
	Guanyl nitrosaminoguanyltetraazene, wetted or Tetraazene, wetted with not less than 30 percent water or mixture of alcohol and water, by mass.									
4.2	UN2545	I	4.2	A19, A20, IB6, IP2, N34, T3, TP33	None	211	242	Forbidden	Forbidden	D
		II	4.2		None	212	241	15 kg	50 kg	D
4.1	UN1326	III	4.2	IB8, IP3, T1, TP33	None	213	241	25 kg	100 kg	D
		II	4.1	A6, A19, A20, IB6, IP2, N34, T3, TP33	None	212	241	15 kg	50 kg	E
	Hafnium powder, wetted with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns.									74
	Hand signal device, see Signal devices, hand.									
	Hazardous substances, liquid or solid, n.o.s., see Environmentally hazardous substances, etc.									
D G	9 NA3082	III	9	IB3, T2, TP1	155	203	241	No limit	No limit	A
D G	9 NA3077	III	9	B54, IB8, IP2, T1, TP33	155	213	240	No limit	No limit	A
	3 UN1202	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A
	2.2 UN1046		2.2		306	302	302, 314,	75 kg	150 kg	A
	2.2 UN1963		2.2	T75, TP5	320	316	318	50 kg	500 kg	D
	2.2 UN3296		2.2	T50	306	304	314,	75 kg	150 kg	A
	3 UN3056	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A
	3 UN1206	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B
	3 UN2278	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B
	6.1 UN2661	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	B
	6.1 UN2729	III	6.1	B3, IB8, IP3, T1, TP33	153	203	241	60 L	220 L	A
	6.1 UN2279	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A
	6.1 UN2646	I	6.1	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D
	6.1 UN2875	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A
	8 UN1781	II	8	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	242	Forbidden	30 L	C
	3 UN2458	II	3	IB2, T4, TP1	None	202	242	5 L	60 L	B
	2.3 UN1612		2.3		None	334	None	Forbidden	Forbidden	D
	Hexachlorophene									40
	Hexadecylchlorosilane									40
	Hexadienes									40
	Hexaethyl tetraphosphate and compressed gas mixtures.									40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
	Hexaethyl tetraphosphate, liquid	6.1	UN1611	II	6.1	IB2, N76, T7, TP2	153	202	243	5 L	60 L	E	40	
	Hexaethyl tetraphosphate, solid	6.1	UN1611	II	6.1	IB8, IP2, IP4, N76	153	212	242	25 kg	100 kg	E	40	
	Hexafluoroacetone	2.3	UN2420		2.3, 8	2, B9, B14	None	304	314	Forbidden	Forbidden	D	40	
	Hexafluoroacetone hydrate, liquid	6.1	UN2552	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	B	40	
	Hexafluoroacetone hydrate, solid	6.1	UN3436	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	40	
	Hexafluoroethane, or Refrigerant gas R 116.	2.2	UN2193		2.2		306	304	314	75 kg	150 kg	A		
	Hexafluorophosphoric acid	8	UN1782	II	8	A6, A7, B2, IB2, N3, N34, T8, TP2	None	202	242	1 L	30 L	A		
	Hexafluoropropylene compressed or Refrigerant gas R 1216.	2.2	UN1858		2.2	T50	306	304	314	75 kg	150 kg	A		
	Hexaldehyde	3	UN1207	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Hexamethylene diisocyanate	6.1	UN2281	II	6.1	IB2, T7, TP2, TP13	153	202	243	5 L	60 L	C	13, 40	
	Hexamethylene triperoxide diamine (dry).	Forbidden												
	Hexamethylenediamine, solid	8	UN2280	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	12	
	Hexamethylenediamine solution	8	UN1783	III	8	IB2, T7, TP2	None	202	242	1 L	30 L	A		
	Hexamethyleneimine	3	UN2493	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A		
	Hexamethylenetetramine	3	UN1328	III	3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	40	
	Hexamethylol benzene hexanitrate	4.1	UN1328	III	4.1	A1, IB8, IP3, T1, TP33	151	213	240	25 kg	100 kg	A		
	Hexanes	3	UN1208	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	E		
	2,2', 4,4', 6,6'-Hexanitro-3,3'-dihydroxyazobenzene (dry).	Forbidden												
	Hexanitroazoxy benzene	Forbidden												
	N,N'-(hexanitrodiphenyl) ethylene diamine (dry).	Forbidden												
	Hexanitrodiphenyl urea	Forbidden												
	2,2', 3,3', 4,4', 6-Hexanitrodiphenylamine	Forbidden												
	Hexanitrodiphenylamine	Forbidden												
	Hexanitrodiphenylamine or Dipicylamine or Hexyl.	1.1D	UN0079	II	1.1D		None	62	None	Forbidden	Forbidden	10		
	2,3', 4,4', 6,6'-Hexanitrodiphenylether	Forbidden												
	Hexanitroethane	Forbidden												
	Hexanitrooxamide	Forbidden												
	Hexanitrosilbene	1.1D	UN0392	II	1.1D		None	62	None	Forbidden	Forbidden	10		
	Hexanoic acid, see Corrosive liquids, n.o.s.													

Hexanols .....	3 UN2282	III 3 .....	B1, IB3, T2, TP1	150 .....	203 .....	242 .....	60 L	220 L	A	74
1-Hexene .....	3 UN2370	II 3 .....	IB2, T4, TP1	150 .....	202 .....	242 .....	5 L	60 L	E	
Hexogen cycloctetramethylenetetramine mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized <i>etc.</i> Hexogen and HMX mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized <i>etc.</i>										
Hexogen and octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or de- sensitized <i>etc.</i>										
Hexogen, see Cyclotrimethylenetrinitramine, <i>etc.</i>										
Hexolite, or Hexitol dry or wetted with less than 15 percent water, by mass.	1.1D UN0118	II 1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10	
Hexonal .....	1.1D UN0393	II 1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10	
Hexyl, see Hexanitrodiphenylamine.										
Hexyltrichlorosilane .....	8 UN1784	II 8 .....	A7, B2, B6, N34, T10, TP2, TP7, TP13	None ...	206 .....	242 .....	Forbidden	30 L	C	40
High explosives, see individual explo- sives' entries.										
HMX, see Cycloctetramethylenete- trinitramine, <i>etc.</i>										
Hydrazine, anhydrous .....	8 UN2029	I 8, 3, 6.1.	A3, A6, A7, A10, B7, B16, B53	None ...	201 .....	243 .....	Forbidden	2.5 L	D	40, 52, 125.
Hydrazine, aqueous solution, with not more than 37 percent hydrazine, by mass.	6.1 UN3293	III 6.1 .....	IB3, T4, TP1	153 .....	203 .....	241 .....	60 L	220 L	A	52.
Hydrazine aqueous solution, flam- mable with more than 37% hydra- zine, by mass.	8 UN3484	I 8, 3, 6.1.	B16, B53, T10, TP2, TP13	None ...	201 .....	243 .....	Forbidden	2.5 L	D	40, 52, 125
Hydrazine aqueous solution, with more than 37% hydrazine, by mass.	8 UN2030	I 8, 6.1	B16, B53, T10, TP2, TP13	None ...	201 .....	243 .....	Forbidden	2.5 L	D	40, 52
Hydrazine azide .....		II 8, 6.1	B16, B53, IB2, T7, TP2, TP13	None ...	202 .....	243 .....	Forbidden	30 L	D	40, 52
Hydrazine chlorate .....		III 8, 6.1	B16, B53, IB3, T4, TP1	154 .....	203 .....	241 .....	5 L	60 L	D	40, 52
Hydrazine dicarbonic acid diazide .....										
.....										
Hydrazine perchlorate .....		II 8, 6.1	B16, B53, IB2, T7, TP2, TP13	None ...	202 .....	243 .....	Forbidden	30 L	D	40
Hydrazine selenate .....		III 8, 6.1	B16, B53, IB3, T4, TP1	154 .....	203 .....	241 .....	5 L	60 L	D	40
.....										
.....										

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							(8A) Excep-tions	(8B) Non-bulk	(8C) Bulk	(9A) Passenger aircraft/rail	(9B) Cargo air-craft only	(10A) Loca-tion	(10B) Other	
	Hydriodic acid, anhydrous, see Hydrogen iodide, anhydrous. Hydriodic acid .....	8	UN1787	II III	8 .....	A3, A6, B2, IB2, N41, T7, TP2 IB3, T4, TP1	154 .....	202 ... 203 ...	242 ... 241 ...	1 L 5 L	30 L 60 L	C C	8	
	Hydrobromic acid, anhydrous, see Hydrogen bromide, anhydrous. Hydrobromic acid, with more than 49 percent hydrobromic acid .....	8	UN1788	II	8 .....	B2, B15, IB2, N41, T7, TP2 IB3, T4, TP1	154 .....	202 ...	242 ...	Forbidden	Forbidden	C	8	
	Hydrobromic acid, with not more than 49 percent hydrobromic acid .....	8	UN1788	III	8 .....	A3, A6, B2, B15, IB2, N41, T7, TP2	154 .....	202 ...	242 ...	Forbidden	Forbidden	C	8	
	Hydrocarbon gas mixture, compressed, n.o.s. Hydrocarbon gas mixture, liquefied, n.o.s. Hydrocarbons, liquid, n.o.s. ....	2.1 2.1 3	UN1964 UN1965 UN3295	III I II III	8 .....	A3, IB3, T4, TP1 T50 144, T11, TP1, TP8, TP28 144, IB2, T7, TP1, TP8, TP28 144, B1, IB3, T4, TP1, TP29	154 .....	203 ... 302 ... 304 ... 201 ...	241 ... 314, 315, 314, 315, 243 ...	5 L Forbidden Forbidden 1 L	60 L 150 kg 150 kg 30 L	C E E E	8 40 40	
	Hydrochloric acid, anhydrous, see Hydrogen chloride, anhydrous. Hydrochloric acid .....	8	UN1789	II III	8 .....	A3, A6, B3, B15, IB2, N41, T8, TP2 A3, IB3, T4, TP1	154 .....	202 ...	242 ...	1 L	30 L	C	8	
	Hydrocyanic acid, anhydrous, see Hydrogen cyanide etc. Hydrocyanic acid, aqueous solutions or Hydrogen cyanide, aqueous solutions, with not more than 20 percent hydrogen cyanide. Hydrocyanic acid, aqueous solutions with less than 5 percent hydrogen cyanide.	6.1 6.1	UN1613 NA1613	I II	6.1 .....	2, B61, B65, B77, B82, T20, TP2, TP13 IB1, T14, TP2, TP13, TP27	None ...	195 ...	244 ...	Forbidden	Forbidden	D	40 40	

Hydrocyanic acid, liquefied, see Hydrogen cyanide, etc.																							
Hydrocyanic acid (prussic), unstabilized.	8	UN1786	I	8, 6.1	A6, A7, B15, B23, N5, N34, T10, TP2, TP13	None	201	243	Forbiddn	2.5 L	D	40											
Hydrofluoric acid and Sulfuric acid mixtures.	8	UN1790	I	8, 6.1	A6, A7, B4, B15, B23, N5, N34, T10, TP2, TP13	None	201	243	0.5 L	2.5 L	D	12, 40											
Hydrofluoric acid, anhydrous, see Hydrogen fluoride, anhydrous.																							
Hydrofluoric acid, with more than 60 percent strength.	8	UN1790	II	8, 6.1	A6, A7, B15, B2, N5, N34, T8, TP2	154	202	243	1 L	30 L	D	12, 40											
Hydrofluoric acid, with not more than 60 percent strength.																							
Hydrofluoroboric acid, see Fluoroboric acid.																							
Hydrofluorosilic acid, see Fluorosilicic acid.																							
Hydrogen and Methane mixtures, compressed.	2.1	UN2034		2.1	N89	306	302	302, 314, 315, 314, 315, 315,	Forbiddn	150 kg	E	40, 57											
Hydrogen bromide, anhydrous	2.3	UN1048		2.3, 8	3, B14, N86, N89	None	304	314, 315,	Forbiddn	Forbiddn	D	40											
Hydrogen chloride, anhydrous	2.3	UN1050		2.3, 8	3, N86, N89	None	304	None	Forbiddn	Forbiddn	D	40											
Hydrogen chloride, refrigerated liquid	2.3	UN2186		2.3, 8	3, B6	None	None	314, 315,	Forbiddn	Forbiddn	B	40											
Hydrogen, compressed	2.1	UN1049		2.1	N89	306	302	302, 302,	Forbiddn	150 kg	E	40, 57											
Hydrogen cyanide, solution in alcohol with not more than 45 percent hydrogen cyanide.	6.1	UN3294	I	6.1, 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbiddn	Forbiddn	D	40											
Hydrogen cyanide, stabilized with less than 3 percent water.	6.1	UN1051	I	6.1, 3	1, B35, B61, B65, B77, B82	None	195	244	Forbiddn	Forbiddn	D	40											
Hydrogen cyanide, stabilized, with less than 3 percent water and absorbed in a porous inert material.	6.1	UN1614	I	6.1	5	None	195	None	Forbiddn	Forbiddn	D	25, 40											
Hydrogen fluoride, anhydrous	8	UN1052	I	8.6.1	3, B7, B46, B77, N86, T10, TP2, 167	None	163	244	Forbiddn	Forbiddn	D	40											
Hydrogen in a metal hydride storage system or Hydrogen in a metal hydride storage system contained in equipment or Hydrogen in a metal hydride storage system packed with equipment.	2.1	UN3468		2.1		None	311	None	Forbiddn	100 kg gross	D												
Hydrogen iodide, anhydrous	2.3	UN2197		2.3, 8	3, B14, N86, N89	None	304	314, 315,	Forbiddn	Forbiddn	D	40											
Hydrogen iodide solution, see Hydroiodic acid.			III	8	IB8, IP3, N3, N34, T1, TP33	154	213	240	25 kg	100 kg	A	25, 40, 52.											

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Hydrogendifluoride, solid, n.o.s. ....	8	UN1740	II	8	IB8, IP2, IP4, N3, N34, T3, TP33	None	212	240	15 kg	50 kg	A	25, 40, 52
	Hydrogendifluoride solution, n.o.s. ....	8	UN3471	III	8	IB8, IP3, N3, N34, T1, TP33	154	213	240	25 kg	100 kg	A	25, 40, 52
	Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water, and not more than 5 percent peroxyacetic acid.	5.1	UN3149	III	8, 6.1	IB2, T7, TP2	154	202	242	1 L	30 L	A	25, 40, 52
	Hydrogen peroxide, aqueous solutions with not less than 40 percent hydrogen peroxide (stabilized as necessary).	5.1	UN2014	II	5.1, 8	IB3, T4, TP1	154	203	241	5 L	60 L	A	25, 40, 52
	Hydrogen peroxide, aqueous solutions with not less than 20 percent hydrogen peroxide (stabilized as necessary).	5.1	UN2014	II	5.1, 8	145, A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24	None	202	243	1 L	5 L	D	25, 66, 75
	Hydrogen peroxide, aqueous solutions with not less than 8 percent hydrogen peroxide (stabilized as necessary).	5.1	UN2014	II	5.1, 8	12, A60, B53, B80, B81, B85, IB2, IP5, T7, TP2, TP6, TP24, TP37	None	202	243	Forbidden	Forbidden	D	25, 66, 75
	Hydrogen peroxide, aqueous solutions with not less than 20 percent hydrogen peroxide (stabilized as necessary).	5.1	UN2984	III	5.1	A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24, TP37	None	202	243	1 L	5 L	D	25, 66, 75
	Hydrogen peroxide, stabilized or hydrogen peroxide, aqueous solutions, stabilized with more than 60 percent hydrogen peroxide.	5.1	UN2015	I	5.1, 8	A1, IB2, IP5, T4, TP1, TP6, TP24, TP37	152	203	241	2.5 L	30 L	B	25, 66, 75
	Hydrogen, refrigerated liquid (cryogenic liquid).	2.1	UN1966	2.1	2.1	T75, TP5	None	316	318, 319	Forbidden	Forbidden	D	40
	Hydrogen selenide, anhydrous	2.3	UN2202	2.3	2.1	1	None	192	245	Forbidden	Forbidden	D	40
	Hydrogen sulfate, see Sulfuric acid.	2.3	UN1053	2.3	2.1	2, B9, B14, N89	None	304	314, 315	Forbidden	Forbidden	D	40
	Hydrogen sulfide	2.3	UN1053	2.3	2.1		None	304	314, 315	Forbidden	Forbidden	D	40

Hydrosilicofluoric acid, see Fluorosilicic acid.																									
1-Hydroxybenzotriazole, anhydrous, dry or wetted with less than 20 percent water, by mass.	1.3C	UN0508		1.3C		None	62	None	Forbiddén	Forbiddén	10		28, 36												
1-Hydroxybenzotriazole, monohydrate.	4.1	UN3474	I	4.1	N90	None	211	None	0.5 kg	0.5 kg	D														
Hydroxyl amine iodide	Forbiddén		III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	26													
Hydroxylamine sulfate	8	UN2865	II	8	A7, B2, B15, B2, IP5, N34, T7, TP2, TP24	154	202	242	1 L	30 L	B														
Hypochlorite solutions	8	UN1791	III	8	IB3, N34, T4, TP2, TP24	154	203	241	5 L	60 L	B	26													
	5.1	UN3212	II	5.1	349, A9, IB8, IP2, IP4, T3, TP33	152	212	240	5 kg	25 kg	D	4, 48, 52, 56,													
Hypochlorites, inorganic, n.o.s.																									
Hyoconitrous acid	Forbiddén																								
Igniter fuse, metal clad, see Fuse, igniter, tubular, metal clad.																									
Igniters	1.1G	UN0121	II	1.1G		None	62	None	Forbiddén	Forbiddén	07														
	1.2G	UN0314	II	1.2G		None	62	None	Forbiddén	Forbiddén	07														
	1.3G	UN0315	II	1.3G		None	62	None	Forbiddén	Forbiddén	07														
	1.4G	UN0325	II	1.4G		None	62	None	Forbiddén	75 kg	06														
	1.4S	UN0454	II	1.4S		None	62	None	Forbiddén	100 kg	05														
3,3'-iminodipropylamine	8	UN2269	III	8	IB3, T4, TP2	154	203	241	5 L	60 L	A														
Infectious substances, affecting animals only.	6.2	UN2900		6.2	A82	134	196	None	50 mL or 50 g	4 L or 4 kg	B	40													
Infectious substances, affecting humans.	6.2	UN2814		6.2	A82	134	196	None	50 mL or 50 g	4 L or 4 kg	B	40													
Inflammable, see Flammable.																									
Initiating explosives (dry)	Forbiddén																								
Inositol hexanitrate (dry)	Forbiddén																								
Insecticide gases, n.o.s.	2.2	UN1968		2.2		306	304	314, 315	75 kg	150 kg	A														
	2.1	UN3354		2.1	T50	306	304	314, 315	Forbiddén	150 kg	D	40													
	2.3	UN3355		2.3, 2.1	1	None	192	245	Forbiddén	Forbiddén	D	40													
Insecticide gases, toxic, flammable, n.o.s. Inhalation hazard Zone A.	2.3	UN3355		2.3, 2.1	2, B9, B14	None	302, 305	314, 315	Forbiddén	Forbiddén	D	40													
Insecticide gases, toxic, flammable, n.o.s. Inhalation hazard Zone B.	2.3	UN3355		2.3, 2.1	3, B14	None	302, 305	314, 315	Forbiddén	Forbiddén	D														
Insecticide gases, toxic, flammable, n.o.s. Inhalation hazard Zone C.	2.3	UN3355		2.3, 2.1	4	None	302, 305	314, 315	Forbiddén	Forbiddén	D														
Insecticide gases, toxic, flammable, n.o.s. Inhalation hazard Zone D.	2.3	UN1967		2.3	3	None	193, 334	245	Forbiddén	Forbiddén	D	40													
Inulin trinitrate (dry)	Forbiddén																								
Iodine	8	UN3495	III	8, 6.1	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	B	40, 55													
Iodine azide (dry)	Forbiddén																								
Iodine monochloride	8	UN1792	II	8	B6, IB8, IP2, IP4, N41, T7, TP2	None	212	240	Forbiddén	50 kg	D	40, 66, 74, 89, 90													



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Iodine pentafluoride .....	5.1	UN2495	I	5.1, 6.1, 8.		None ...	205 ...	243 ...	Forbidden	Forbidden	D	25, 40, 52, 66, 90
	2-Iodobutane .....	3	UN2390	II	3	IB2, T4, TP1	150 ...	202 ...	242 ...	5 L	60 L	B	
	Iodomethypropanes .....	3	UN2391	II	3	IB2, T4, TP1	150 ...	202 ...	242 ...	5 L	60 L	B	
	Iodopropanes .....	3	UN2392	III	3	B1, IB3, T2, TP1	150 ...	203 ...	242 ...	60 L	220 L	A	
	<i>Iodoxy compounds (dry)</i> .....	Forbidden											
	<i>Iridium nitratopentamine iridium ni-trate.</i> .....	Forbidden											
	<i>Iron chloride, see Ferric chloride.</i> .....	4.2	UN1376	III	4.2	B18, IB8, IP3, T1, TP33	None ...	213 ...	240 ...	Forbidden	Forbidden	E	
	<i>Iron oxide, spent, or iron sponge, spent obtained from coal gas puri-ficator.</i> .....	6.1	UN1994	I	6.1, 3	1, B9, B14, B30, B77, T22, TP2, TP13, TP38, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40
	<i>Iron sesquichloride, see Ferric chlo-ride.</i> .....												
	<i>Irritating material, see Tear gas sub-stances, etc.</i> .....	2.1	UN1969		2.1	19, T50	306 ...	304 ...	314, 315.	Forbidden	150 kg	E	40
	Isobutane <i>see also</i> Petroleum gases, liquefied. ....	3	UN1212	III	3	B1, IB3, T2, TP1	150 ...	203 ...	242 ...	60 L	220 L	A	
	Isobutyl acetate .....	3	UN1213	II	3	IB2, T4, TP1	150 ...	202 ...	242 ...	5 L	60 L	B	
	Isobutyl acrylate, stabilized .....	3	UN2527	III	3	B1, IB3, T2, TP1	150 ...	203 ...	242 ...	60 L	220 L	A	
	Isobutyl alcohol, <i>see</i> Isobutanol. ....												
	Isobutyl aldehyde, <i>see</i> Isobutyraldehyde. ....												
	Isobutyraldehyde. ....	3	UN2393	II	3	IB2, T4, TP1	150 ...	202 ...	242 ...	5 L	60 L	B	
	Isobutyl formate .....	3	UN2528	III	3	B1, IB3, T2, TP1	150 ...	203 ...	242 ...	60 L	220 L	A	
	Isobutyl isobutyrate .....	6.1	UN2486	I	6.1, 3	1, B9, B14, B30, T20, TP2, TP13, TP27	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40
	Isobutyl isocyanate .....												
	Isobutyl methacrylate, stabilized .....	3	UN2283	III	3	B1, IB3, T2, TP1	150 ...	203 ...	242 ...	60 L	220 L	A	
	Isobutyl propionate .....	3	UN2394	III	3	B1, IB3, T2, TP1	150 ...	202 ...	242 ...	60 L	220 L	B	
	Isobutylamine .....	3	UN1214	III	3, 8	IB2, T7, TP1	150 ...	203 ...	243 ...	1 L	5 L	B	40
	Isobutylene <i>see also</i> Petroleum gases, liquefied. ....	2.1	UN1055		2.1	19, T50	306 ...	304 ...	314, 315.	Forbidden	150 kg	E	40

Isobutyraldehyde or isobutyl aldehyde	3 UN2045	II	3	.....	IB2, T4, TP1	150	202	242	5 L	60 L	E	40
Isobutyric acid	3 UN2529	III	3, 8	.....	B1, IB3, T4, TP1	150	203	242	5 L	60 L	A	40
Isobutyronitrile	3 UN2284	II	3, 6.1	.....	IB2, T7, TP2, TP13	150	202	243	1 L	60 L	E	40
Isobutyl chloride	3 UN2395	II	3, 8	.....	IB1, T7, TP2	150	202	243	1 L	5 L	C	40
Isocyanates, flammable, toxic, n.o.s., or isocyanate solutions, flammable, toxic, n.o.s., flash point less than 23 degrees C.	3 UN2478	II	3, 6.1	.....	5, A3, A7, IB2, T11, TP2, TP13, TP27	150	202	243	1 L	60 L	D	40
Isocyanates, toxic, flammable, n.o.s., or isocyanate solutions, toxic, flammable, n.o.s., flash point not less than 23 degrees C, but not more than 61 degrees C and boiling point less than 300 degrees C.	6.1 UN3080	III	3, 6.1	.....	5, A3, A7, IB3, T7, TP1, TP13, TP28	150	203	242	60 L	220 L	A	25, 40, 48
Isocyanates, toxic, n.o.s., or isocyanate solutions, toxic, n.o.s., flash point more than 61 degrees C and boiling point less than 300 degrees C.	6.1 UN2206	II	6.1	.....	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	E	25, 40, 48
Isocyanatobenzotrifluorides	6.1 UN2285	III	6.1	.....	IB3, T7, TP1, TP13, TP28	153	203	241	60 L	220 L	E	25, 40, 48
Isheptenes	3 UN2287	II	3	.....	5, IB2, T7, TP2	153	202	243	5 L	60 L	D	25, 40, 48
Isobutane, see Octanes.	3 UN2288	II	3	.....	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
Isocetenes	3 UN1216	II	3	.....	IB2, IP8, T11, TP1	150	202	242	5 L	60 L	E	40
Isopentane, see Pentane.												
Isopentanoic acid, see Corrosive liquids, n.o.s.												
Isopentenes	3 UN2371	I	3	.....	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
Isophorone diisocyanate	6.1 UN2290	III	6.1	.....	T11, TP2	150	201	243	1 L	30 L	E	40
Isophoronediamine	8 UN2289	III	8	.....	IB3, T4, TP2	153	203	241	60 L	220 L	B	40
Isoprene, stabilized	3 UN1218	I	3	.....	IB3, T4, TP1	154	203	241	5 L	60 L	A	40
Isopropanol or isopropyl alcohol	3 UN1219	II	3	.....	T11, TP2	150	201	243	1 L	30 L	E	40
Isopropenyl acetate	3 UN2403	II	3	.....	IB2, T4, TP1	4b, 150	202	242	5 L	60 L	B	40
Isopropenylbenzene	3 UN2303	III	3	.....	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
Isopropyl acetate	3 UN1220	II	3	.....	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
Isopropyl acid phosphate	8 UN1793	III	8	.....	IB2, T4, TP1	154	213	240	5 L	60 L	B	40
Isopropyl alcohol, see Isopropanol.	3 UN2405	III	3	.....	B1, IB3, T2, TP1	150	203	242	25 kg	100 kg	A	40
Isopropyl butyrate	3 UN2947	III	3	.....	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
Isopropyl chloroacetate	6.1 UN2407	I	6.1, 3, 8	.....	2, B9, B14, B32, B77, T20, TP2, TP13, TP38, TP44	None	227	244	Forbidden	Forbidden	B	40
Isopropyl chloroformate												
Isopropyl 2-chloropropionate	3 UN2934	III	3	.....	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
Isopropyl isobutyrate	3 UN2406	II	3	.....	IB2, T4, TP1	150	202	242	5 L	60 L	B	40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
+	Isopropyl isocyanate .....	6.1	UN2483	I	6.1, 3	1, B9, B14, B30, T20, TP2, TP13, TP36, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40
	<i>Isopropyl mercaptan, see Propanethiols.</i>												
	Isopropyl nitrate .....	3	UN1222	II	3	IB9	150	202	None	5 L	60 L	D	
	<i>Isopropyl phosphoric acid, see Isopropyl acid phosphate.</i>												
	Isopropyl propionate .....	3	UN2409	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	Isopropylamine .....	3	UN1221	I	3, 8	T11, TP2	None ...	201	243	0.5 L	2.9 L	E	
	Isopropylbenzene .....	3	UN1918	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	<i>Isopropylcumyl hydroperoxide, with more than 72 percent in solution.</i>	Forbidden											
	Isosorbide dinitrate mixture with not less than 60 percent lactose, mannose, starch or calcium hydrogen phosphate.	4.1	UN2907	II	4.1	IB6, IP2, N85	None ...	212	None	15 kg	50 kg	E	28, 36
	Isosorbide-5-mononitrate .....	4.1	UN3251	III	4.1	66, 159 IB8	151	223	240	Forbidden	Forbidden	D	12
	<i>Isothiocyanic acid</i> .....	Forbidden											
	<i>Jet fuel, see Fuel aviation, turbine engine.</i>												
	D Jet perforating guns, charged oil well, with detonator.	1.1D	NA0124	II	1.1D	55, 56	None ...	62	None	Forbidden	Forbidden	07	
D Jet perforating guns, charged oil well, with detonator.	1.4D	NA0494	II	1.4D	55, 56	None ...	62	None	Forbidden	Forbidden	06		
Jet perforating guns, charged oil well, without detonator.	1.1D	UN0124	II	1.1D	55	None ...	62	None	Forbidden	Forbidden	07		
Jet perforating guns, charged, oil well, without detonator.	1.4D	UN0494	II	1.4D	55, 114	None ...	62	None	Forbidden	300 kg	06		
<i>Jet perforators, see Charges, shaped, etc.</i>													
<i>Jet tappers, without detonator, see Charges, shaped, etc.</i>													
<i>Jet thrust igniters, for rocket motors or Jato, see Igniters.</i>													
<i>Jet thrust unit (Jato), see Rocket motors.</i>													
G Kerosene .....		3	UN1223	III	3	144, B1, IB3, T2, TP2	150	203	242	60 L	220 L	A	
	Ketones, liquid, n.o.s. ....	3	UN1224	I	3	T11, TP1, TP8, TP27	None ...	201	243	1 L	30 L	E	

..... Krypton, compressed .....	2.2	UN1056	III 3 306 2.2	3 3 306 307 2.2	IB2, T7, TP1, TP8, TP28 B1, IB3, T4, TP1, TP29 302	150 150 None 320	202 203 75 kg None	242 242 150 kg None	5 L 60 L A 50 kg	60 L 220 L A 500 kg D	
Krypton, refrigerated liquid (cryogenic liquid).	2.2	UN1970	III 3 306 307 2.2	3 3 306 307 2.2	T75, TP5	320	None	None	500 kg	D	
Lacquer base or lacquer chips, nitrocellulose, dry, see Nitrocellulose, etc. (UN 2557). Lacquer base or lacquer chips, plastic, wet with alcohol or solvent, see Nitrocellulose (UN2059, UN2555, UN2556, UN2557) or Paint etc. (UN1263).	6.1	UN1616	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	A	
Lead acetate .....	6.1	UN1617	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	A	
Lead arsenates .....	6.1	UN1618	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	A	
Lead arsenites .....	Forbiddn										
Lead azide (dry) .....	1.1A	UN0129	II	1.1A	111, 117	None	62	None	Forbiddn	12	
Lead azide, wetted with not less than 20 percent water or mixture of alcohol and water, by mass.	6.1	UN2291	III	6.1	138, IB8, IP3, T1, TP33	153	213	240	100 kg	A	52
Lead compounds, soluble, n.o.s .....	6.1	UN1620	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	A	
Lead cyanide .....	5.1	UN1872	III	5.1	A1, IB8, IP3, T1, TP33	152	213	240	25 kg	A	
Lead dioxide .....	5.1	UN1469	II	5.1, 6.1	IB8, IP2, IP4, T3, TP33	152	212	242	5 kg	A	
Lead dross, see Lead sulfate, with more than 3 percent free acid.	Forbiddn										
Lead nitrate .....	5.1	UN1470	II	5.1, 6.1	IB6, IP2, T3, TP33	152	212	242	5 kg	A	56, 58
Lead nitroresorcinate (dry) .....	5.1	UN3408	II	5.1, 6.1	IB2, T4, TP1	152	202	243	1 L	A	56, 58
Lead perchlorate, solid .....	5.1		III	5.1, 6.1	IB2, T4, TP1	152	203	242	2.5 L	A	56, 58
Lead perchlorate, solution .....	4.1	UN2989	II	4.1	IB8, IP2, IP4, T3, TP33	None	212	240	15 kg	B	34,
Lead peroxide, see Lead dioxide.	Forbiddn										34,
Lead phosphite, dibasic .....	Forbiddn										
Lead picrate (dry) .....	1.1A	UN0130	II	1.1A	111, 117	None	62	None	Forbiddn	12	
Lead styphnate (dry) .....	1.1A		II	1.1A		None	212	240	15 kg	B	
Lead styphnate, wetted or Lead trinitroresorcinate, wetted with not less than 20 percent water or mixture of alcohol and water, by mass.	8	UN1794	II	8	IB8, IP2, IP4, T3, TP33	154	212	240	50 kg	A	
Lead sulfate with more than 3 percent free acid.											
Lead trinitroresorcinate, see Lead styphnate, etc.											

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Life-saving appliances, not self inflating containing dangerous goods as equipment.	9	UN3072		None		None ...	219 ...	None	No limit	No limit	A	
	Life-saving appliances, self inflating ...	9	UN2990		None		None ...	219 ...	None	No limit	No limit	A	
	Lighters containing flammable gas ...	2.1	UN1057		2.1 .....		168	21,308	None	1 kg	15 kg	B	40
	Lighters, new or empty, purged of all residual fuel and vapors.				.....		168						
	Lighters, non-pressurized, containing flammable liquid.	3	NA1057	II	3 .....		168	21 .....	None	Forbidden	Forbidden	B	40
	Lighter refills containing flammable gas not exceeding 4 fluid ounces (7.22 cubic inches) and 65 grams of flammable gas.	2.1	UN1057		2.1 .....		169	306 .....	None	1 kg	15 kg	B	40
	Lighter replacement cartridges containing liquefied petroleum gases see Lighter refills containing flammable gas. Etc.												
	Lighters, fuse .....	1.4S	UN0131	II	1.4S ...		None ...	62 .....	None	25 kg	100 kg	05	
G	Lime, unslaked, see Calcium oxide.	2.1	UN3161		2.1 .....		306 .....	304 ...	314, 315.	Forbidden	150 kg	D	40
G	Liquefied gas, flammable, n.o.s. ....	2.2	UN3163		2.2 .....		T50						
G	Liquefied gas, n.o.s. ....	2.2	UN3163		2.2 .....		T50	306 .....	314, 315.	75 kg	150 kg	A	
G	Liquefied gas, oxidizing, n.o.s. ....	2.2	UN3157		2.2, 5.1, 2.3, 8		A14	306 .....	314, 315.	75 kg	150 kg	D	
G I	Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A.	2.3	UN3308		2.3, 8		1	None ...	245 ...	Forbidden	Forbidden	D	40
G I	Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone B.	2.3	UN3308		2.3, 8		2, B9, B14	304 ...	314, 315.	Forbidden	Forbidden	D	40
G I	Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone C.	2.3	UN3308		2.3, 8		3, B14	304 ...	314, 315.	Forbidden	Forbidden	D	40
G I	Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone D.	2.3	UN3308		2.3, 8		4	None ...	314, 315.	Forbidden	Forbidden	D	40
G I	Liquefied gas, toxic, flammable, corrosive, n.o.s. Inhalation Hazard Zone A.	2.3	UN3309		2.3, 2.1, 8.		1	None ...	245 ...	Forbidden	Forbidden	D	17, 40

G I	Liquefied gas toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3309	2.3, 2.1, 8.	2, B9, B14	None ...	304 ...	314, 315.	Forbidden	D	17, 40
G I	Liquefied gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3309	2.3, 2.1, 8.	3, B14	None ...	304 ...	314, 315.	Forbidden	D	17, 40
G I	Liquefied gas, toxic, flammable, corrosive, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3309	2.3, 2.1, 8.	4	None ...	304 ...	314, 315.	Forbidden	D	17, 40
G	Liquefied gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN3160	2.3, 2.1.	1	None ...	192 ...	245 ...	Forbidden	D	40
G	Liquefied gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3160	2.3, 2.1.	2, B9, B14	None ...	304 ...	314, 315.	Forbidden	D	40
G	Liquefied gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3160	2.3, 2.1.	3, B14	None ...	304 ...	314, 315.	Forbidden	D	40
G	Liquefied gas, toxic, flammable, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3160	2.3, 2.1.	4	None ...	304 ...	314, 315.	Forbidden	D	40
G	Liquefied gas, toxic, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN3162	2.3 .....	1	None ...	192 ...	245 ...	Forbidden	D	40
G	Liquefied gas, toxic, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3162	2.3 .....	2, B9, B14	None ...	304 ...	314, 315.	Forbidden	D	40
G	Liquefied gas, toxic, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3162	2.3 .....	3, B14	None ...	304 ...	314, 315.	Forbidden	D	40
G	Liquefied gas, toxic, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3162	2.3 .....	4	None ...	304 ...	314, 315.	Forbidden	D	40
G I	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN3310	2.3, 5.1, 8.	1	None ...	192 ...	245 ...	Forbidden	D	40, 89, 90
G I	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3310	2.3, 5.1, 8.	2, B9, B14	None ...	304 ...	314, 315.	Forbidden	D	40, 89, 90
G I	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3310	2.3, 5.1, 8.	3, B14	None ...	304 ...	314, 315.	Forbidden	D	40, 89, 90
G I	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3310	2.3, 5.1, 8.	4	None ...	304 ...	314, 315.	Forbidden	D	40, 89, 90
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone A.</i>	2.3	UN3307	2.3, 5.1.	1	None ...	192 ...	245 ...	Forbidden	D	40
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone B.</i>	2.3	UN3307	2.3, 5.1.	2, B9, B14	None ...	304 ...	314, 315.	Forbidden	D	40
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone C.</i>	2.3	UN3307	2.3, 5.1.	3, B14	None ...	304 ...	314, 315.	Forbidden	D	40
G	Liquefied gas, toxic, oxidizing, n.o.s. <i>Inhalation Hazard Zone D.</i>	2.3	UN3307	2.3, 5.1.	4	None ...	304 ...	314, 315.	Forbidden	D	40
	Liquefied gases, non-flammable charged with nitrogen, carbon dioxide or air.	2.2	UN1058	2.2 .....	306 .....	304 ...	304 ...	None	75 kg	A	150 kg

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identifi-cation Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	<i>Liquefied hydrocarbon gas, see Hydrocarbon gas mixture, liquefied, n.o.s.</i>												
	<i>Liquefied natural gas, see Methane, etc. (UN 1972).</i>												
	<i>Liquefied petroleum gas see Petroleum gases, liquefied.</i>												
	Lithium .....	4.3	UN1415	I	4.3 .....	A7, A19, IB4, IP1, N45	None ...	211 ...	244 ...	Forbidden	15 kg	E	52
	<i>Lithium acetylide ethylenediamine complex, see Water reactive solid etc.</i>												
	Lithium aluminum hydride .....	4.3	UN1410	I	4.3 .....	A19	None ...	211 ...	242 ...	Forbidden	15 kg	E	52
	Lithium aluminum hydride, ethereal ..	4.3	UN1411	I	4.3, 3	A2, A3, A11, N34	None ...	201 ...	244 ...	Forbidden	1 L	D	40
	Lithium batteries, contained in equip-ment.	9	UN3091	II	9 .....	29, 188, 189, 190, A54, A55, A101, A104	185 .....	185 ...	None	See A101, A104.	35 kg	A	
	Lithium batteries packed with equip-ment.	9	UN3091	II	9 .....	29, 188, 189, 190, A54, A55, A101, A103	185 .....	185 ...	None	See A101, A103.	35 kg gross	A	
	Lithium battery .....	9	UN3090	II	9 .....	29, 188, 189, 190, A54, A55, A100.	185 .....	185 ...	None	See A100	35 kg gross	A	
	Lithium borohydride .....	4.3	UN1413	I	4.3 .....	A19, N40	None ...	211 ...	242 ...	Forbidden	15 kg	E	52
	Lithium ferrosilicon .....	4.3	UN2830	II	4.3 .....	A19, IB7, IP2, T3, TP33	151 .....	212 ...	241 ...	15 kg	50 kg	E	40, 85, 103
	Lithium hydride .....	4.3	UN1414	I	4.3 .....	A19, N40	None ...	211 ...	242 ...	Forbidden	15 kg	E	52
	Lithium hydride, fused solid .....	4.3	UN2805	II	4.3 .....	A8, A19, A20, IB4, T3, TP33	151 .....	212 ...	241 ...	15 kg	50 kg	E	52
	Lithium hydroxide .....	8	UN2680	II	8 .....	IB8, IP2, IP4, T3, TP33	154 .....	212 ...	240 ...	15 kg	50 kg	A	52.
	Lithium hydroxide, solution .....	8	UN2679	III	8 .....	B2, IB2, T7, TP2	154 .....	202 ...	242 ...	1 L	30 L	A	29, 52.
					III	IB3, T4, TP2	154 .....	203 ...	241 ...	5 L	60 L	A	29, 52, 96.
	Lithium hypochlorite, dry or Lithium hypochlorite mixture.	5.1	UN1471	II	5.1 .....	A9, IB8, IP2, IP4, N34, T3, TP33	152 .....	212 ...	240 ...	5 kg	25 kg	A	4, 48, 52, 56, 58, 69, 106, 116

Lithium in cartridges, see Lithium.																				4, 48, 52, 56, 58, 69, 106, 116	
Lithium nitrate																					
Lithium nitride																					
Lithium peroxide																					13, 52, 66, 75, 85, 103
Lithium silicon																					
LNG, see Methane etc. (UN 1972).																					
London purple																					
LPG, see Petroleum gases, liquefied.																					
Lye, see Sodium hydroxide, solutions.																					
Magnesium aluminum phosphide																					
Magnesium arsenate																					
Magnesium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.																					
Magnesium bromate																					
Magnesium chlorate																					40, 52, 85
Magnesium diamide																					
Magnesium dross, wet or hot																					
Magnesium fluorosilicate																					
Magnesium granules, coated, particle size not less than 149 microns.																					
Magnesium hydride																					
Magnesium or Magnesium alloys with more than 50 percent magnesium in pellets, turnings or ribbons.																					52, 39, 52, 53, 74, 101
Magnesium nitrate																					
Magnesium perchlorate																					
Magnesium peroxide																					
Magnesium phosphide																					
Magnesium, powder or Magnesium alloys, powder.																					
Magnesium scrap, see Magnesium, etc. (UN 1869).																					

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Magnesium silicide .....	4.3	UN2624	II	4.3 .....	A19, A20, IB7, IP2, T3, TP33	151 .....	212 .....	241 .....	15 kg	50 kg	B	85, 103
	<i>Magnetized material, see § 173.21.</i>												
	Maleic anhydride .....	8	UN2215	III	8 .....	IB8, IP3, T1, TP33	154 .....	213 .....	240 .....	25 kg	100 kg	A	
	Maleic anhydride, molten .....	8	UN2215	III	8 .....	T4, TP3	None .....	213 .....	240 .....	Forbidden	Forbidden	A	
	Malononitrile .....	6.1	UN2647	II	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 .....	242 .....	25 kg	100 kg	A	12
	<i>Mancozeb (manganese ethylenebisdithiocarbamate complex with zinc) see Maneb.</i>												
	Maneb or Maneb preparations with not less than 60 percent maneb, Maneb stabilized or Maneb preparations, stabilized against self-heating.	4.2	UN2210	III	4.2, 4.3 .....	57, A1, A19, IB6, T1, TP33	None .....	213 .....	242 .....	25 kg	100 kg	A	34
	Manganese nitrate .....	5.1	UN2724	III	5.1 .....	A1, IB8, IP3, T1, TP33	152 .....	213 .....	240 .....	25 kg	100 kg	A	
	Manganese resinates .....	4.1	UN1330	III	4.1 .....	A1, IB6, T1, TP33	151 .....	213 .....	240 .....	25 kg	100 kg	A	34, 52
	Mannitol hexanitrate .....	Forbidden											
	Mannitol hexanitrate (dry) .....	Forbidden											
	Nitromannite, wetted with not less than 40 percent water, or mixture of alcohol and water, by mass.	1.1D	UN0133	II	1.1D ..	121	None ..	62 .....	None	Forbidden	Forbidden	10	
	Marine pollutants, liquid or solid, n.o.s., see Environmentally hazardous substances, liquid or solid, n.o.s.												
	Matches, block, see Matches, strike anywhere.												
	Matches, fusee .....	4.1	UN2254	III	4.1 .....		186 .....	186 .....	None	Forbidden	Forbidden	A	
	Matches, safety (book, card or strike or box) .....	4.1	UN1944	III	4.1 .....		186 .....	186 .....	None	25 kg	100 kg	A	
	Matches, strike anywhere .....	4.1	UN1331	III	4.1 .....		186 .....	186 .....	None	Forbidden	Forbidden	B	
	Matches, wax, Vesta .....	4.1	UN1945	III	4.1 .....		186 .....	186 .....	None	25 kg	100 kg	B	
	Matting acid, see Sulfuric acid.												
	Medicine, liquid, flammable, toxic, n.o.s.	3	UN3248	II	3, 6.1	IB2	150 .....	202 .....	243 .....	1 L	60 L	B	40
	Medicine, liquid, toxic, n.o.s. ....	6.1	UN1851	III	3, 6.1	IB3	150 .....	203 .....	242 .....	60 L	220 L	A	40
				II	6.1 .....		153 .....	202 .....	243 .....	5 L	60 L	C	

Medicine, solid, toxic, n.o.s.	6.1	UN3249	III	6.1	T3, TP33	153	203	241	60 L	220 L	C	40
<i>Mermetrihydrophthalic arhydride, see Corrosive liquids, n.o.s.</i>			III	6.1	T3, TP33	153	212	242	25 kg	100 kg	C	40
Mercaptans, liquid, flammable, n.o.s. or Mercaptan mixture, liquid, flammable, n.o.s.	3	UN3336	I	3	T11, TP2	150	201	243	1 L	30 L	E	95
Mercaptans, liquid, flammable, toxic, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3	UN1228	II	3	IB2, T7, TP1, TP8, TP28 B1, B52, IB3, T4, TP1, TP29	150	202	242	5 L	60 L	B	95
Mercaptans, liquid, toxic, flammable, n.o.s. or Mercaptan mixtures, liquid, flammable, toxic, n.o.s.	3	UN1228	III	3	IB2, T11, TP2, TP27	None	202	243	Forbidden	60 L	B	40, 95
Mercaptans, liquid, toxic, flammable, n.o.s. or Mercaptan mixtures, liquid, toxic, flammable, n.o.s., flash point not less than 23 degrees C.	6.1	UN3071	III	3, 6.1	A6, B1, IB3, T7, TP1, TP28	150	203	242	5 L	220 L	A	40, 95
5-Mercaptoisotrazol-1-acetic acid	1.4C	UN0448	II	1.4C	A6, IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	C	40, 121
Mercuric arsenate	6.1	UN1623	II	6.1	IB8, IP2, IP4, T3, TP33	None	62	None	Forbidden	75 kg	09	
Mercuric chloride	6.1	UN1624	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Mercuric compounds, see Mercury compounds, etc.			II	6.1	IB8, IP2, IP4, N73, T3, TP33	153	212	242	25 kg	100 kg	A	
Mercuric nitrate	6.1	UN1625	I	6.1	IB7, IP1, N74, N75, T6, TP33	None	211	242	5 kg	50 kg	A	52
Mercuric potassium cyanide	6.1	UN1626	I	6.1								
Mercuric sulfocyanate, see Mercury thiocyanate.												
Mercuroyl, see Mercury nucleate.												
Mercurous azide	Forbidden											
Mercurous compounds, see Mercury compounds, etc.												
Mercurous nitrate	6.1	UN1627	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Mercuroyl	8	UN2809	III	8	IB8, IP2, IP4, T3, TP33	164	164	240	35 kg	35 kg	B	40, 97
Mercury acetate	6.1	UN1629	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Mercury acetylde	Forbidden											
Mercury ammonium chloride	6.1	UN1630	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Mercury based pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	3	UN2778	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	B	40
Mercury based pesticides, liquid, toxic.	6.1	UN3012	II	3, 6.1	IB2, T11, TP2, TP13, TP27	150	202	243	1 L	60 L	B	40
			I	6.1	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
			II	6.1	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
			III	6.1	IB3, T7, TP2, TP28	153	203	241	60 L	220 L	A	40

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Mercury based pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	6.1	UN3011	I	6.1, 3	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
							153	202	243	5 L	60 L	B	40
							153	203	242	60 L	220 L	A	40
							None	211	242	5 kg	50 kg	A	40
	Mercury based pesticides, solid, toxic	6.1	UN2777	III	6.1, 3	IB3, T7, TP2, TP28	None	213	242	25 kg	100 kg	A	40
							153	212	242	100 kg	200 kg	A	40
							153	213	240	25 kg	100 kg	A	40
							153	212	242	25 kg	100 kg	A	40
G	Mercury benzoate	6.1	UN1631	II	6.1	IB8, IP3, T1, TP33	None	201	243	1 L	30 L	B	40
							153	202	243	5 L	60 L	B	40
							153	203	241	60 L	220 L	B	40
							None	211	242	5 kg	50 kg	A	40
G	Mercury compound, liquid, n.o.s.	6.1	UN1634	III	6.1	IB8, IP2, IP4, T3, TP33	None	212	242	25 kg	100 kg	A	40
							153	213	240	100 kg	200 kg	A	40
							153	212	242	25 kg	100 kg	A	40
							153	213	240	100 kg	No limit	B	40, 97
G	Mercury compound, solid, n.o.s.	6.1	UN2025	III	6.1	IB2, IB3	None	201	243	1 L	30 L	B	40
							153	202	243	5 L	60 L	B	40
							153	203	241	60 L	220 L	B	40
							None	211	242	5 kg	50 kg	A	40
A	Mercury contained in manufactured articles.	8	UN2809	III	8	IB8, IP3, T1, TP33	None	164	None	No limit	No limit	B	40, 97
							153	212	242	25 kg	100 kg	A	52
							None	62	None	Forbidden	Forbidden	12	
							None	211	242	25 kg	100 kg	A	
	Mercury fulminate, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass.	1.1A	UN0135	II	1.1A	T3, TP33	None	111, 117	None	Forbidden	Forbidden	12	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury gluconate	6.1	UN1637	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury iodide	6.1	UN1638	II	6.1	IB2, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury iodide aquabasic ammonobasic (iodide of Million's base).	Forbidden	UN1638	II	6.1	IB2, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury nitride	Forbidden	UN1639	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury nucleate	6.1	UN1640	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury oleate	6.1	UN1641	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury cyanide	Forbidden	UN1642	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	52, 91
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury potassium iodide	6.1	UN1643	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury salicylate	6.1	UN1644	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
	Mercury sulfates	6.1	UN1645	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	
							153	212	242	25 kg	100 kg	A	

G	6.1 3 6.1	UN1646 UN1229 UN3281	Mercury thiocyanate Mesityl oxide Metal carbonyls, liquid, n.o.s.	II III I	6.1 3 6.1	IB8, IP2, IP4, T3, TP33 B1, IB3, T2, TP1 5, T14, TP2, TP13, TP27	153 150 None	212 203 201	242 242 243	25 kg 60 L 1 L	100 kg 220 L 30 L	A A B	40
G	6.1	UN3466	Metal carbonyls, solid, n.o.s.	I	6.1	IB2, T11, TP2, TP27 IB3, T7, TP1, TP28 IB7, IP1, T6, TP33 IB8, IP2, IP4, T3, TP33 IB8, IP3, T1, TP33	153 153 None 153 153	202 203 211 212 213	243 241 242 240 240	5 L 220 L 5 kg 100 kg 200 kg	60 L 220 L 50 kg 100 kg 200 kg	B D A D B	40 40 40 40 40
G	4.2	UN2881	Metal catalyst, dry	I	4.2	N34, T21, TP7, TP33 IB6, IP2, N34, T3, TP33 IB8, IP3, N34, T1, TP33 A2, A8, IB1, N34, T3, TP33	None None None None	187 187 187 212	None 242 241 None	Forbidden Forbidden 25 kg Forbidden	Forbidden 50 kg 100 kg 50 kg	C C C C	
G	4.2 4.1 4.3 4.3	UN1378 UN3182 UN1409	Metal catalyst, wetted with a visible excess of liquid. Metal hydrides, flammable, n.o.s. Metal hydrides, water reactive, n.o.s.	III III I II	4.2 4.1 4.3 4.3	A1, IB4, T3, TP33 A1, IB4, T1, TP33 A19, N34, N40 A19, IB4, N34, N40, T3, TP33	151 151 None 151	212 213 211 212	240 240 242 242	15 kg 25 kg Forbidden 15 kg	50 kg 100 kg 15 kg 50 kg	E E D D	52 52
G	4.2 4.1 4.1	UN3189 UN3089	Metal powder, self-heating, n.o.s. Metal powders, flammable, n.o.s.	III II	4.2 4.1	IB6, IP2, T3, TP33 IB8, IP3, T1, TP33 IB8, IP2, IP4, T3, TP33 IB6, T1, TP33	None None 151 151	212 213 212 213	241 241 240 240	15 kg 25 kg 15 kg 25 kg	50 kg 100 kg 50 kg 100 kg	C C B B	40
G	4.1 4.3	UN3181 UN1332 UN3208	Metal salts of methyl nitramine (dry) Metal salts of organic compounds, flammable, n.o.s. Metaldehyde Metallic substance, water-reactive, n.o.s.	II III I	4.1 4.1 4.3	A1, IB8, IP2, IP4, T3, TP33 A1, IB8, IP3, T1, TP33 A1, IB8, IP3, T1, TP33 A7, IB4	151 151 151 None	212 213 213 211	240 240 240 242	15 kg 25 kg 25 kg Forbidden	50 kg 100 kg 100 kg 15 kg	B B A E	40 40 40
G	4.3	UN3209	Metallic substance, water-reactive, self-heating, n.o.s.	II	4.3	A7, IB7, IP2, T3, TP33 A7, IB8, IP4, T1, TP33 A7	151 151 None	212 213 211	242 241 242	15 kg 25 kg Forbidden	50 kg 100 kg 15 kg	E E E	40 40 40
	3 8	UN2396 UN2531	Methacryaldehyde, stabilized Methacrylic acid, stabilized	III II	4.3 4.3 4.2 3, 6.1 8	A7, IB5, IP2, T3, TP33 A7, IB8, IP4, T1, TP33 45, IB2, T7, TP1, TP13 41, IB2, T7, TP1, TP18, TP30	None None 150 154	212 213 202 202	242 242 243 242	15 kg 25 kg 1 L 1 L	50 kg 100 kg 60 L 30 L	E E E C	40 40
+	6.1 3	UN3079 UN2614	Methacrylonitrile, stabilized Methallyl alcohol Methane and hydrogen mixtures, see Hydrogen and methane, mixtures, etc.	I III	6.1, 3 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45 B1, IB3, T2, TP1	None 150	227 203	244 242	Forbidden 60 L	Forbidden 220 L	D A	12, 40, 48
	2.1	UN1971	Methane, compressed or Natural gas, compressed (with high methane content).	III	2.1		306	302	302	Forbidden	150 kg	E	40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Methane, refrigerated liquid ( <i>cryogenic liquid</i> ) or Natural gas, refrigerated liquid ( <i>cryogenic liquid</i> ), with high methane content.	2.1	UN1972		2.1	T75, TP5	None	None	318	Forbidden	Forbidden	D	40
	Methanesulfonyl chloride	6.1	UN3246	I	6.1, 8	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
+I	Methanol	3	UN1230	II	3, 6.1	IB2, T7, TP2	150	202	242	1 L	60 L	B	40
D	Methanol	3	UN1230	II	3	IB2, T7, TP2	150	202	242	1 L	60 L	B	40
	Methanoic acid	Forbidden											
	4-Methoxy-4-methylpentan-2-one	3	UN2293	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
	1-Methoxy-2-propanol	3	UN3092	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
+	Methoxymethyl isocyanate	6.1	UN2605	I	6.1, 3	1, B9, B14, B30, T20, TP2, TP13, TP38, TP44	None	226	244	Forbidden	Forbidden	D	40
	Methyl acetate	3	UN1231	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
	Methyl acetylene and propadiene mixtures, stabilized.	2.1	UN1060		2.1	N88, T50	306	304	314, 315	Forbidden	150 kg	B	40
	Methyl acrylate, stabilized	3	UN1919	II	3	IB2, T4, TP1, TP13	150	202	242	5 L	60 L	B	40
	Methyl alcohol, see Methanol.												
	Methyl allyl chloride	3	UN2554	II	3	IB2, T4, TP1, TP13	150	202	242	5 L	60 L	E	40
	Methyl amyl ketone, see Amyl methyl ketone.												
	Methyl bromide	2.3	UN1062		2.3	3, B14, N86, T50	None	193	314, 315	Forbidden	Forbidden	D	40
	Methyl bromide and chloropicrin mixtures with more than 2 percent chloropicrin, see Chloropicrin and methyl bromide mixtures.												
	Methyl bromide and chloropicrin mixtures with not more than 2 percent chloropicrin, see Methyl bromide, chloropicrin, and ethylene dibromide mixtures, liquid.												
	Methyl bromoacetate												
	2-Methylbutanal	6.1	UN2643	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	D	40
	2-Methyl-1-butene	3	UN3371	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
	2-Methyl-2-butene	3	UN2459	I	3	T11, TP2	None	201	243	1 L	30 L	E	40
	3-Methyl-1-butene	3	UN2460	II	3	IB2, IP8, T7, TP1	None	202	242	5 L	60 L	E	40
	3-Methyl-1-butene	3	UN2561	I	3	T11, TP2	None	201	243	1 L	30 L	E	40

Methyl tert-butyl ether	3 UN2398	II 3	IB2, T7, TP1	150	202	242	5 L	E	40
Methyl butyrate	3 UN1237	II 3	IB2, T4, TP1	150	202	242	5 L	B	
Methyl chloride or Refrigerant gas R 40.	2.1 UN1063	2.1	N86, T50	306	304	314, 315	5 kg	D	
<i>Methyl chloride and chloropicrin mixtures, see Chloropicrin and methyl chloride mixtures.</i>									
Methyl chloride and methylene chloride mixtures.	2.1 UN1912	2.1	N86, T50	306	304	314, 315	Forbidden	D	40
Methyl chloroacetate	6.1 UN2295	I 6.1, 3	T14, TP2, TP13	None	201	243	1 L	D	
<i>Methyl chloroacetate, see Methyl chloroformate.</i>									
<i>Methyl chloroform, see 1,1,1-Trichloroethane.</i>									
Methyl chloroformate	6.1 UN1238	I 6.1, 3, 8	1, B9, B14, B30, N34, T22, TP2, TP13, TP38, TP44	None	226	244	Forbidden	D	21, 40, 100
Methyl chloromethyl ether	6.1 UN1239	I 6.1, 3	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44	None	226	244	Forbidden	D	40
Methyl 2-chloropropionate	3 UN2933	III 3	B1, IB3, T2, TP1	150	203	242	60 L	A	
Methyl dichloroacetate	6.1 UN2299	III 6.1	IB3, T4, TP1	153	203	241	60 L	A	
<i>Methyl ethyl ether, see Ethyl methyl ether.</i>									
Methyl ethyl ketone, <i>see Ethyl methyl ketone.</i>									
<i>Methyl ethyl ketone peroxide, in solution with more than 9 percent by mass active oxygen.</i>	Forbidden								
2-Methyl-5-ethylpyridine	6.1 UN2300	III 6.1	IB3, T4, TP1	153	203	241	60 L	A	40
Methyl fluoride, or Refrigerant gas R 41.	2.1 UN2454	2.1		306	304	314, 315	Forbidden	E	
Methyl formate	3 UN1243	I 3	T11, TP2	150	201	243	1 L	E	
2-Methyl-2-heptanethiol	6.1 UN3023	I 6.1, 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	D	40, 102
Methyl iodide	6.1 UN2644	I 6.1	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	D	12, 40
Methyl isobutyl carbinol	3 UN2053	III 3	B1, IB3, T2, TP1	150	203	242	60 L	A	
Methyl isobutyl ketone	3 UN1245	II 3	IB2, T4, TP1	150	202	242	5 L	B	
<i>Methyl isobutyl ketone peroxide, in solution with more than 9 percent by mass active oxygen.</i>	Forbidden								
Methyl isocyanate	6.1 UN2480	I 6.1, 3	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44	None	226	244	Forbidden	D	40, 52
Methyl isopropenyl ketone, stabilized	3 UN1246	II 3	IB2, T4, TP1	150	202	242	5 L	B	
Methyl isothiocyanate	6.1 UN2477	I 6.1, 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	D	40
Methyl isovalerate	3 UN2400	II 3	IB2, T4, TP1	150	202	242	5 L	B	
Methyl magnesium bromide, in ethyl ether.	4.3 UN1928	I 4.3, 3		None	201	243	Forbidden	D	

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Methyl mercaptan .....	2.3	UN1064		2.3, 2.1	3, B7, B9, B14, N89, T50	None ...	304 ...	314, 315	Forbidden	Forbidden	D	40
	<i>Methyl mercaptopropionaldehyde, see 4-Thiapentanal.</i>												
	Methyl methacrylate monomer, stabilized.	3	UN1247	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
	<i>Methyl nitramine (dry)</i> .....	Forbidden											
	<i>Methyl nitrate</i> .....	Forbidden											
	<i>Methyl nitrite</i> .....	Forbidden											
	<i>Methyl norbornene dicarboxylic anhydride, see Corrosive liquids, n.o.s.</i>	6.1	UN2606	I	6.1, 3	2, B9, B14, B32, T20, TP2, TP13, TP38, TP45	None ...	227	244	Forbidden	Forbidden	D	40
D	Methyl orthosilicate .....	6.1	NA9206	I	6.1, 8	2, B9, B14, B32, N34, N43, T20, TP4, TP13, TP38, TP45	None ...	227	244	Forbidden	Forbidden	C	
	Methyl phosphonic dichloride .....												
D	<i>Methyl phosphonic dichloride, anhydrous, see Corrosive liquid, n.o.s.</i>	6.1	NA2845	I	6.1, 4.2	2, B9, B14, B16, B32, B74, T20, TP4, TP13, TP38, TP45	None ...	227	244	Forbidden	Forbidden	D	18
	<i>Methyl picric acid (heavy metal salts of).</i>	Forbidden											
	Methyl propionate .....	3	UN1248	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
	Methyl propyl ether .....	3	UN2612	II	3	IB2, IP8, T7, TP2	150	202	242	5 L	60 L	E	
	Methyl propyl ketone .....	3	UN1249	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
	<i>Methyl sulfide, see Dimethyl sulfide.</i>												
	Methyl trichloroacetate .....	6.1	UN2533	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	40
	<i>Methyl trimethylol methane trinitrate</i> .....	Forbidden											
	Methyl vinyl ketone, stabilized .....	6.1	UN1251	I	6.1, 3, 8	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44	None ...	226	244	Forbidden	Forbidden	B	40
	Methyl .....	3	UN1234	II	3	IB2, IP8, T7, TP2	None	202	242	5 L	60 L	E	40
	Methylamine, anhydrous .....	2.1	UN1061	II	2.1	N87, T50	306	304	314, 315	Forbidden	150 kg	B	40
	Methylamine, aqueous solution .....	3	UN1235	II	3, 8	B1, IB2, T7, TP1	150	202	243	1 L	5 L	E	52, 135

<i>Methylamine dinitramine and dry salts thereof</i>																						
<i>Methylamine nitroform</i>	ForbIDDEN																					
<i>Methylamine perchlorate (dry)</i>	ForbIDDEN																					
Methylamyl acetate	3	UN1233	III	3				150	203	242		60 L	220 L	A								
N-Methylaniline	6.1	UN2294	III	6.1	IB3, T4, TP1		153	203	241	241	60 L	220 L	A									
alpha-Methylbenzyl alcohol, liquid	6.1	UN2937	III	6.1	IB3, T4, TP1		153	203	241	241	60 L	220 L	A									
alpha-Methylbenzyl alcohol, solid	6.1	UN3438	III	6.1	IB8, IP3, T1, TP33		153	213	240	240	100 kg	200 kg	A									
3-Methylbutan-2-one	3	UN2397	III	3	IB2, T4, TP1		150	202	242	242	5 L	60 L	B									
N-Methylbutylamine	3	UN2945	III	3, 8	IB2, T7, TP1		150	202	243	243	1 L	5 L	B									
Methylchlorosilane	2.3	UN2534	III	2.3, 2.1, 8	2, B9, B14, N34	None	None	226	314, 315	315	ForbIDDEN	ForbIDDEN	D									40, 17, 40
Methylcyclohexane	3	UN2296	III	3	B1, IB2, T4, TP1		150	202	242	242	5 L	60 L	B									
Methylcyclohexanols, flammable	3	UN2617	III	3	B1, IB3, T2, TP1		150	203	242	242	60 L	220 L	A									
Methylcyclohexanone	3	UN2297	III	3	B1, IB3, T2, TP1		150	203	242	242	60 L	220 L	A									
Methylcyclopentane	3	UN2298	III	3	IB2, T4, TP1		150	202	242	242	5 L	60 L	B									
Methylchloroarsine	6.1	NA1556	I	6.1	2, T20, TP4, TP13, TP38, TP45	None	None	192	None	None	ForbIDDEN	ForbIDDEN	D									40
Methylchlorosilane	4.3	UN1242	I	4.3, 8, 3	A2, A3, A7, B6, B77, N34, T14, TP2, TP7, TP13	None	None	201	243	243	ForbIDDEN	1 L	D									21, 28, 40, 49, 100
<i>Methylene chloride, see Dichloromethane.</i>																						
<i>Methylene glycol dinitrate</i>	ForbIDDEN																					
2-Methylfuran	3	UN2301	III	3	IB2, T4, TP1		150	202	242	242	5 L	60 L	E									
<i>a-Methylglucoside tetranitrate</i>	ForbIDDEN																					
<i>a-Methylglycerol trinitrate</i>	ForbIDDEN																					
5-Methylhexan-2-one	3	UN2302	III	3	B1, IB3, T2, TP1		150	203	242	242	60 L	220 L	A									
Methylhydrazine	6.1	UN1244	I	6.1, 3, 8	1, B7, B9, B14, B30, B77, N34, T22, TP2, TP13, TP38, TP44	None	None	226	244	244	ForbIDDEN	ForbIDDEN	D									21, 40, 49, 52 and 100
4-Methylmorpholine or n-methylmorpholine.	3	UN2535	III	3, 8	B6, IB2, T7, TP1		150	202	243	243	1 L	5 L	B									40
Methylpentadienes	3	UN2461	III	3	IB2, T4, TP1		150	202	242	242	5 L	60 L	E									
2-Methylpentan-2-ol	3	UN2560	III	3	B1, IB3, T2, TP1		150	203	242	242	60 L	220 L	A									
Methylperoxides, see Hexanes.																						
Methylphenylchlorosilane	8	UN2437	III	8	T10, TP2, TP7, TP13	None	None	206	243	243	ForbIDDEN	30 L	C									40
1-Methylpiperidine	3	UN2399	III	3, 8	IB2, T7, TP1		150	202	242	242	1 L	5 L	B									52.
Methyltetrahydrofuran	3	UN2536	III	3	IB2, T4, TP1		150	202	242	242	5 L	60 L	B									
Methyltrichlorosilane	3	UN1250	III	3, 8	A7, B6, B77, N34, T10, TP2, TP7, TP13	None	None	206	243	243	1 L	5 L	B									40
alpha-Methylvaleraldehyde	3	UN2367	III	3	B1, IB2, T4, TP1		150	202	242	242	5 L	60 L	B									
Mine rescue equipment containing carbon dioxide, see Carbon dioxide.																						
Mines with bursting charge	1.1F	UN0136	II	1.1F				62	None	None	ForbIDDEN	ForbIDDEN	08									
Mines with bursting charge	1.1D	UN0137	II	1.1D				62	62	62	ForbIDDEN	ForbIDDEN	03									
Mines with bursting charge	1.2D	UN0138	II	1.2D				62	62	62	ForbIDDEN	ForbIDDEN	03									



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Mines with bursting charge ..... Mixed acid, see Nitrating acid, mix-tures etc. Mobility aids, see Battery powered equipment or Battery powered ve-hicle. Model rocket motor ..... Model rocket motor ..... Molybdenum pentachloride ..... Monochloroacetone (unstabilized) ..... Monochloroethylene, see Vinyl chlo-ride, stabilized. Monoethanolamine, see Ethanol-amine, solutions. Monoethylamine, see Ethylamine. Morpholine ..... Morpholine, aqueous, mixture, see Corrosive liquids, n.o.s. Motor fuel anti-knock compounds see Motor fuel anti-knock mixtures. Motor fuel anti-knock mixture, flam-mable. Motor fuel anti-knock mixtures .....	1.2F  1.4C 1.4S 8 Forbidden	UN0294  NA0276 NA0323 UN2508	II  II III	1.2F  1.4C 1.4S 8	(7)	.....  None None None 154 213	62  62 62 213	None  None None 240	Forbidden  Forbidden 25 kg 25 kg	Forbidden  75 kg 100 kg 100 kg	08  06 05 C	
+	Motor fuel anti-knock mixtures .....	6.1	UN3483	I	6.1, 3	14, T14, TP2, TP13	None	201	244	Forbidden	Forbidden	D	25, 40
+	Motor fuel anti-knock mixtures .....	6.1	UN1649	I	6.1	14, B9, B90, T14, TP2, TP13	None	201	244	Forbidden	Forbidden	D	25, 40
	Motor spirit, see Gasoline. Muriatic acid, see Hydrochloric acid. Musk xylene, see 5-tert-Butyl-2,4,6-trinitro-m-xylene. Naphtha see Petroleum distillates n.o.s. Naphthalene, crude or Naphthalene, refined. Naphthalene diazonide ..... beta-Naphthylamine, solid ..... beta-Naphthylamine solution ..... alpha-Naphthylamine ..... Naphthalene, molten .....	4.1 Forbidden 6.1 6.1 6.1 4.1	UN1334  UN1650 UN3411 UN2077 UN2304	III  II III III	4.1  6.1 6.1 6.1 4.1	A1, IB8, IP3, T1, TP33  IB8, IP2, IP4, T3, TP33 IB2, T7, TP2 IB2, T7, TP2 IB8, IP3, T1, TP33 IB1, T1, TP3	151  153 153 153 153 151	213  212 202 203 213	240  242 243 241 240	25 kg  25 kg 5 L 60 L 100 kg Forbidden	100 kg  100 kg 60 L 220 L 200 kg Forbidden	A  A A A A C	

Proper Shipping Name	UN Number	Class	Division	Packaging Group	Substance	Quantity	Exception	Label Code	Quantity	Label Code
Naphthylamineperchlorate	UN1651	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	A
Naphthylthiourea	UN1652	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	A
Natural gases (with high methane content), see Methane, etc. (UN 1971, UN 1972).										
Neohexane, see Hexanes.										
Neon, compressed	UN1065	2.2	306, 307.		302	None	75 kg	150 kg	500 kg	D
Neon, refrigerated liquid (cryogenic liquid).	UN1913	2.2	2.2		T75, TP5	320	316	None	50 kg	A
New explosive or explosive device, see §§ 173.51 and 173.56.										
Nickel carbonyl	UN1259	6.1	I	6.1, 3	1	None	198	None	Forbidden	D
Nickel cyanide	UN1653	6.1	II	6.1	IB8, IP2, IP4, N74, N75, T3, TP33	153	212	242	100 kg	A
Nickel nitrate	UN2725	5.1	III	5.1	A1, IB8, IP3, T1, TP33	152	213	240	100 kg	A
Nickel nitrite	UN2726	5.1	III	5.1	A1, IB8, IP3, T1, TP33	152	213	240	100 kg	A
Nickel picrate	Forbidden									
Nicotine	UN1654	6.1	II	6.1	IB2	153	202	243	60 L	A
Nicotine compounds, liquid, n.o.s. or Nicotine preparations, liquid, n.o.s.	UN3144	6.1	I	6.1	A4	None	201	243	30 L	B
Nicotine compounds, solid, n.o.s. or Nicotine preparations, solid, n.o.s.	UN1655	6.1	II	6.1	IB2, T11, TP2, TP27	153	202	243	60 L	B
			III	6.1	IB3, T7, TP1, TP28	153	203	241	220 L	B
			I	6.1	IB7, IP1, T6, TP33	None	211	242	50 kg	B
Nicotine compounds, solid, n.o.s. or Nicotine preparations, solid, n.o.s.	UN1655	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	A
			III	6.1	IB8, IP3, T1, TP33	153	213	240	200 kg	A
			I	6.1	IB7, IP1, T6, TP33	None	211	242	50 kg	B
Nicotine hydrochloride liquid or solution.	UN1656	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	A
			III	6.1	IB8, IP3, T1, TP33	153	213	240	200 kg	A
			II	6.1	IB2	153	202	243	60 L	A
Nicotine hydrochloride, solid	UN3444	6.1	III	6.1	IB3	153	203	241	220 L	A
Nicotine salicylate	UN1657	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	A
Nicotine sulfate solution	UN1658	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	A
			III	6.1	IB2, T7, TP2	153	202	243	60 L	A
			III	6.1	IB3, T7, TP2	153	203	241	220 L	A
Nicotine sulphate, solid	UN3445	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	A
Nicotine tartrate	UN1659	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	A
Nitrated paper (unstable)	Forbidden									
Nitrates, inorganic, aqueous solution, n.o.s.	UN3218	5.1	II	5.1	58, IB2, T4, TP1	152	202	242	5 L	B
			III	5.1	58, IB2, T4, TP1	152	203	241	30 L	B
Nitrates, inorganic, n.o.s.	UN1477	5.1	II	5.1	IB8, IP2, IP4, T3, TP33	152	212	240	25 kg	A
			III	5.1	IB8, IP3, T1, TP33	152	213	240	100 kg	A
Nitrates of diazonium compounds	Forbidden									

56, 58, 133  
56, 58, 133  
56, 58, 56, 58

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Nitrating acid mixtures, spent with more than 50 percent nitric acid.	8	UN1826	I	8, 5.1	A7, T10, TP2, TP13	None ...	158 ...	243 ...	Forbidden	2.5 L	D	40, 66
	Nitrating acid mixtures spent with not more than 50 percent nitric acid.	8	UN1826	II	8	A7, B2, IB2, T8, TP2	None ...	158 ...	242 ...	Forbidden	30 L	D	40
	Nitrating acid mixtures with more than 50 percent nitric acid.	8	UN1796	I	8, 5.1	A7, T10, TP2, TP13	None ...	158 ...	243 ...	Forbidden	2.5 L	D	40, 66
	Nitrating acid mixtures with not more than 50 percent nitric acid.	8	UN1796	II	8	A7, B2, IB2, T8, TP2, TP13	None ...	158 ...	242 ...	Forbidden	30 L	D	40
	Nitric acid other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid.	8	UN2031	II	8, 5.1	A6, B2, B47, B53, IB2, IP15, T8, TP2	None ...	158 ...	242 ...	Forbidden	30 L	D	66, 74, 89, 90
	Nitric acid other than red fuming, with more than 20 percent and less than 65 percent nitric acid.	8	UN2031	II	8	A6, B2, B47, B53, IB2, IP15, T8, TP2	None ...	158 ...	242 ...	Forbidden	30 L	D	44, 66, 74, 89, 90
	Nitric acid, red fuming	8	UN2032	I	8, 5.1, 6.1	2, B9, B32, T20, TP2, TP13, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40, 66, 74, 89, 90
	Nitric acid other than red fuming, with more than 70 percent nitric acid.	8	UN2031	I	8, 5.1	A3, B47, B53, T10, TP2, TP12, TP13	None ...	158 ...	243 ...	Forbidden	2.5 L	D	44, 66, 88, 90, 110, 111
	Nitric oxide, compressed	2.3	UN1660	2.3, 5.1, 8	2.3, 5.1, 8	1, B77	None ...	337 ...	None	Forbidden	Forbidden	D	40, 89, 90
	Nitric oxide and dinitrogen tetroxide mixtures or Nitric oxide and nitrogen dioxide mixtures.	2.3	UN1975	2.3, 5.1, 8	2.3, 5.1, 8	1, B77	None ...	337 ...	None	Forbidden	Forbidden	D	40, 89, 90
G	Nitriles, flammable, toxic, n.o.s.	3	UN3273	I, II	3, 6.1, 3, 6.1	T14, TP2, TP13, TP27, IB2, T11, TP2, TP13, TP27	None ...	201 ...	243 ...	Forbidden	30 L	E	40, 52
							150 ...	202 ...	243 ...	1 L	60 L	B	40, 52
G	Nitriles, toxic, flammable, n.o.s.	6.1	UN3275	I, II	6.1, 3, 6.1, 3	5, T14, TP2, TP13, TP27, IB2, T11, TP2, TP13, TP27	None ...	201 ...	243 ...	1 L	30 L	B	40, 52
							153 ...	202 ...	243 ...	5 L	60 L	B	40, 52

G	Nitriles, toxic, liquid, n.o.s. ....	6.1	UN3276	I	6.1 .....	5, T14, TP2, TP13, TP27	None .....	201 .....	243 .....	1 L	30 L	B	52							
				II	6.1 .....	IB2, T11, TP2, TP27	153 .....	202 .....	243 .....	5 L	60 L	B	52							
				III	6.1 .....	IB3, T7, TP1, TP28	153 .....	203 .....	241 .....	60 L	220 L	A	52							
G	Nitriles, toxic, solid, n.o.s. ....	6.1	UN3439	I	6.1 .....	IB7, IP1, T6, TP33	None .....	211 .....	242 .....	5 kg	50 kg	D	52							
				II	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 .....	242 .....	25 kg	100 kg	B	52							
				III	6.1 .....	IB8, IP3, T1, TP33	153 .....	213 .....	240 .....	100 kg	200 kg	A	52							
G	Nitrites, inorganic, aqueous solution, n.o.s. ....	5.1	UN3219	III	5.1 .....	IB1, T4, TP1	152 .....	202 .....	242 .....	1 L	5 L	B	46, 56, 58, 133							
				III	5.1 .....	IB2, T4, TP1	152 .....	203 .....	241 .....	2.5 L	30 L	B	46, 56, 58, 133							
G	Nitrites, inorganic, n.o.s. ....	5.1	UN2627	II	5.1 .....	33, IB8, IP2, IP4, T3, TP33	152 .....	212 .....	None	5 kg	25 kg	A	46, 56, 58, 133							
				II	6.1 .....	IB2, T7, TP2	153 .....	202 .....	243 .....	5 L	60 L	A	46, 56, 58, 13							
	3-Nitro-4-chlorobenzotrifluoride .....	6.1	UN2307	Forbiddén																
	6-Nitro-4-diazobluene-3-sulfonic acid (dry) .....	Forbiddén																		
	Nitro isobutane triol trinitrate .....	Forbiddén																		
	N-Nitro-N-methylglycolamide nitrate .....	Forbiddén																		
	2-Nitro-2-methylpropanol nitrate .....	Forbiddén																		
	Nitro urea .....	1.1D	UN0147	II	1.1D ..		None ..	62 .....	None	Forbiddén	Forbiddén	10								
	N-Nitroaniline .....	Forbiddén																		
+	Nitroanilines (o-; m-; p-) .....	6.1	UN1661	II	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 .....	242 .....	25 kg	100 kg	A	40							
	Nitroanisole, liquid .....	6.1	UN2730	III	6.1 .....	IB3, T4, TP1	153 .....	203 .....	241 .....	60 L	220 L	A	40							
	Nitroanisoles, solid .....	6.1	UN3458	III	6.1 .....	IB8, IP3, T1, TP33	153 .....	213 .....	240 .....	100 kg	200 kg	A	40							
+	Nitrobenzene .....	6.1	UN1662	II	6.1 .....	IB2, T7, TP2	153 .....	202 .....	243 .....	5 L	60 L	A	40							
	m-Nitrobenzene diazonium perchlorate .....	Forbiddén																		
	Nitrobenzenesulfonic acid .....	8	UN2305	II	8 .....	B2, B4, IB8, IP2, IP4, T3, TP33	154 .....	202 .....	242 .....	1 L	30 L	A								
	Nitrobenzol, see Nitrobenzene .....																			
	5-Nitrobenzotriazol .....	1.1D	UN0385	II	1.1D ..		None ..	62 .....	None	Forbiddén	Forbiddén	10								
	Nitrobenzotrifluorides, liquid .....	6.1	UN2306	II	6.1 .....	IB2, T7, TP2	153 .....	202 .....	243 .....	5 L	60 L	A	40							
	Nitrobenzotrifluorides, solid .....	6.1	UN3431	II	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 .....	242 .....	25 kg	100 kg	A	40							
	Nitrobromobenzenes, liquid .....	6.1	UN2782	III	6.1 .....	IB3, T4, TP1	153 .....	203 .....	241 .....	60 L	220 L	A								
	Nitrobromobenzenes, solid .....	6.1	UN3459	III	6.1 .....	IB8, IP3, T1, TP33	153 .....	213 .....	240 .....	100 kg	200 kg	A	27E							
	Nitrocellulose, dry or wetted with less than 25 percent water (or alcohol), by mass .....	1.1D	UN0340	II	1.1D ..		None ..	62 .....	None	Forbiddén	Forbiddén	13								
	Nitrocellulose, with not more than 12.6 percent, by dry mass mixture with or without plasticizer, with or without pigment .....	4.1	UN2557	II	4.1 .....	44	151 .....	212 .....	None	1 kg	15 kg	D	28, 36							
	Nitrocellulose membrane filters, with not more than 12.6% nitrogen, by dry mass .....	4.1	UN3270	II	4.1 .....	43, A1	151 .....	212 .....	240 .....	1 kg	15 kg	D								
	Nitrocellulose, plasticized with not less than 18 percent plasticizing substance, by mass .....	1.3C	UN0343	II	1.3C ..		None ..	62 .....	None	Forbiddén	Forbiddén	10								

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
	Nitrocellulose, solution, flammable with not more than 12.6 percent nitrogen, by mass, and not more than 55 percent nitrocellulose.	3	UN2059	I	3	198, T11, TP1, TP8, TP27	None	201	243	1 L	30 L	E		
	Nitrocellulose, unmodified or plasticized with less than 18 percent plasticizing substance, by mass.	1.1D	UN0341	II	3	198, IB2, T4, TP1, TP8	150	202	242	5 L	60 L	B		
	Nitrocellulose, wetted with not less than 25 percent alcohol, by mass.	1.3C	UN0342	III	3	198, B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Nitrocellulose with alcohol with not less than 25 percent alcohol by mass, and with not more than 12.6 percent nitrogen, by dry mass.	4.1	UN2556	II	1.1D		None	62	None	Forbidden	Forbidden	13	27E	
	Nitrocellulose with water with not less than 25 percent water by mass.	4.1	UN2555	II	1.3C		None	62	None	Forbidden	Forbidden	10		
	Nitrochlorobenzene, see Chloronitrobenzenes etc.						212	None	1 kg	15 kg	D	28, 36		
	Nitrocresols, liquid	6.1	UN3434	III	4.1	151	212	None	15 kg	50 kg	E	28, 36		
	Nitrocresols, solid	6.1	UN2446	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A		
	Nitroethane	3	UN2842	III	6.1	IB8, JP3, T1, TP33	153	213	240	100 kg	200 kg	A		
	Nitroethyl nitrate	Forbidden			3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Nitroethylene polymer	Forbidden												
	Nitrogen, compressed	2.2	UN1066		2.2		306, 307	302	314, 315	75 kg	150 kg	A		
	Nitrogen dioxide, see Dinitrogen tetroxide.													
	Nitrogen fertilizer solution, see Fertilizer ammoniating solution etc.													
	Nitrogen peroxide, see Dinitrogen tetroxide.													
	Nitrogen, refrigerated liquid cryogenic liquid.	2.2	UN1977		2.2	345, 346, T75, TP5	320	316	318	50 kg	500 kg	D		
	Nitrogen tetroxide and nitric oxide mixtures, see Nitric oxide and nitrogen tetroxide mixtures.													

Nitrogen tetroxide, see Dinitrogen tetroxide																						40	
Nitrogen trichloride	Forbidden 2.2	UN2451	2.2, 5.1																				
Nitrogen trifluoride	Forbidden 2.3	UN2421	2.3, 5.1, 6.1	1	None ...	302 ...	336 ...	245 ...															40, 89, 90
Nitrogen triiodide	Forbidden 1.1D	UN0143	1.1D, 6.1	125	None ...	62 ...																	21E
Nitroglycerin, desensitized with not less than 40 percent non-volatile water insoluble phlegmatizer, by mass.	Forbidden 3	UN3343	3	129	None ...	214 ...																	
Nitroglycerin mixture, desensitized, liquid, flammable, n.o.s. with not more than 30 percent nitroglycerin, by mass.	3	UN3357	3	142	None ...	202 ...	243 ...																
Nitroglycerin mixture, desensitized, liquid, n.o.s. with not more than 30% nitroglycerin, by mass.	4.1	UN3319	4.1	118	None ...	None																	
Nitroglycerin mixture, desensitized, solid, n.o.s. with more than 2 percent but not more than 10 percent nitroglycerin, by mass.	3	UN3064	3	N8	None ...	202 ...																	
Nitroglycerin, solution in alcohol, with more than 1 percent but not more than 5 percent nitroglycerin.	1.1D	UN0144	1.1D		None ...	62																	21E
Nitroglycerin, solution in alcohol, with more than 1 percent but not more than 10 percent nitroglycerin.	3	UN1204	3	IB2, N34	150	202																	
Nitroglycerin, solution in alcohol with not more than 1 percent nitroglycerin.	Forbidden 1.1D	UN0282	1.1D		None ...	62																	
Nitroguanidine nitrate	Forbidden 4.1	UN1336	4.1	23, A8, A19, A20, N41	None ...	211																	28, 36
Nitroguanidine or Picrite, dry or wetted with less than 20 percent water, by mass.	Forbidden 8	UN1798	8	A3, B10, N41, T10, TP2, TP13	None ...	201																	40, 66, 74, 89, 90
Nitroguanidine, wetted or Picrite, wetted with not less than 20 percent water, by mass.																							
1-Nitrohydantoin																							
Nitrohydrochloric acid																							
Nitromannite (dry)	Forbidden 3	UN1261	3		150	202																	
Nitromannite, wetted, see Mannitol hexanitrate, etc.																							
Nitromethane																							

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	<i>Nitromuriatic acid, see Nitrohydrochloric acid.</i>												
	Nitronaphthalene	4.1	UN2538	III	4.1	A1, IB8, IP3, T1, TP33	151	213	240	25 kg	100 kg	A	
	Nitrophenols (o-, m-, p-)	6.1	UN1663	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
	<i>m-Nitrophenyldinitro methane</i>	Forbidden											
	<i>4-Nitrophenylhydrazine, with not less than 30 percent water, by mass.</i>	4.1	UN3376	I	4.1	162, A8, A19, A20, N41	None	211	None	Forbidden	15 kg	E	28, 36
	Nitropropanes	3	UN2608	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	
	<i>p-Nitrosodimethylaniline</i>	4.2	UN1369	II	4.2	A19, A20, IB6, IP2, N34, T3, TP33	None	212	241	15 kg	50 kg	D	34
	Nitrostarch, dry or wetted with less than 20 percent water, by mass.	1.1D	UN0146	II	1.1D		None	62	None	Forbidden	Forbidden	10	
	Nitrostarch, wetted with not less than 20 percent water, by mass.	4.1	UN1337	I	4.1	23, A8, A19, A20, N41	None	211	None	1 kg	15 kg	D	28, 36
	<i>Nitrosugars (dry)</i>	Forbidden											
	Nitrosyl chloride	2.3	UN1069	II	2.3, 8	3, B14	None	304	314, 315	Forbidden	Forbidden	D	40
	Nitrosylsulfuric acid, liquid	8	UN2308	II	8	A3, A6, A7, B2, IB2, N34, T8, TP2	154	202	242	1 L	30 L	D	40, 66, 74, 89, 90
	Nitrosylsulfuric acid, solid	8	UN3456	II	8	IB8, IP2, IP4, T3, TP33	154	212	240	15 kg	50 kg	D	40, 66, 74, 89, 90
	Nitrotoluenes, liquid	6.1	UN1664	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	
	Nitrotoluenes, solid	6.1	UN3446	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	Nitrotoluidines (mono)	6.1	UN2660	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
	Nitrotriazolone or NTO	1.1D	UN0490	II	1.1D		None	62	None	Forbidden	Forbidden	10	
	Nitrous oxide	2.2	UN1070	II	2.2, 5.1	A14	306	304	314, 315	75 kg	150 kg	A	40
	Nitrous oxide, refrigerated liquid	2.2	UN2201	II	2.2, 5.1	B6, T75, TP5, TP22	None	304	314, 315	Forbidden	Forbidden	D	40
	Nitroxylene, liquid	6.1	UN1665	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	
	Nitroxylene, solid	6.1	UN3447	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	<i>Nitroxylol, see Nitroxylene.</i>												
	Nonanes	3	UN1920	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	

Material description	UN number	Classification	Packing group	Label	Special provisions	Quantity	Restrictions	Additional restrictions	Other
Nonliquefied gases, see Compressed gases, etc.									
Nonliquefied hydrocarbon gas, see Hydrocarbon gas mixture, compressed, n.o.s.									40
Nonyltrichlorosilane	8 UN1799	8	II	8	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	242	30 L C
Nordhausen acid, see Sulfuric acid, fuming etc.									
2,5-Norbornadiene, stabilized, see Bicycle [2.2.1] hepta-2,5-diene, stabilized.									
Octadecyltrichlorosilane	8 UN1800	8	II	8	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	242	30 L C
Octadiene	3 UN2309	Forbidden	II	3	B1, IB2, T4, TP1	150	202	242	60 L B
1,7-Octadine-3,5-diene-1,8-dimethoxy-9-octadecyenoic acid.									
Octafluorobut-2-ene or Refrigerant gas R 1318.	2.2 UN2422	2.2	2.2	2.2	T50	None	304	314, 315	150 kg A
Octafluorocyclobutane, or Refrigerant gas RC 318.	2.2 UN1976	2.2	2.2	2.2	T50	None	304	314, 315	150 kg A
Octafluoropropane or Refrigerant gas R 218.	2.2 UN2424	2.2	2.2	2.2	T50	None	304	314, 315	150 kg A
Octanes	3 UN1262	3	II	3	IB2, T4, TP1	150	202	242	60 L B
Octogen, etc. see Cyclohexamethylene tetranitramine, etc.									
Octolite or Octol, dry or wetted with less than 15 percent water, by mass.	1.1D UN0266	1.1D	II	1.1D		None	62	None	Forbidden 10
Octonal	1.1D UN0496	1.1D	III	1.1D		None	62	None	Forbidden 10
Octyl aldehydes	3 UN1191	3	III	3	B1, IB3, T2, TP1	150	203	242	220 L A
Octyltrichlorosilane	8 UN1801	8	II	8	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	242	30 L C
Oil gas, compressed	2.3 UN1071	2.3		2.3, 2.1.	6	None	304	314, 315	25 kg D
Oleum, see Sulfuric acid, fuming.									
Organic peroxide type A, liquid or solid	Forbidden	Forbidden							
Organic peroxide type B, liquid	5.2 UN3101	5.2	II	5.2, 1	53	152	225	None	Forbidden D
Organic peroxide type B, liquid, temperature controlled.	5.2 UN3111	5.2	II	5.2, 1	53	None	225	None	Forbidden D
Organic peroxide type B, solid	5.2 UN3102	5.2	II	5.2, 1	53	152	225	None	Forbidden D
Organic peroxide type B, solid, temperature controlled.	5.2 UN3112	5.2	II	5.2, 1	53	None	225	None	Forbidden D
Organic peroxide type C, liquid	5.2 UN3103	5.2	II	5.2		152	225	None	10 L D



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
G	Organic peroxide type C, liquid, tem-perature controlled.	5.2	UN3113	II	5.2 .....		None ...	225 ...	None	Forbidden	Forbidden	D	2, 40, 52, 53
G	Organic peroxide type C, solid .....	5.2	UN3104	II	5.2 .....		152 .....	225 ...	None	5 kg	10 kg	D	12, 40, 52, 53
G	Organic peroxide type C, solid, tem-perature controlled.	5.2	UN3114	II	5.2 .....		None ...	225 ...	None	Forbidden	Forbidden	D	2, 40, 52, 53
G	Organic peroxide type D, liquid .....	5.2	UN3105	II	5.2 .....		152 .....	225 ...	None	5 L	10 L	D	12, 40, 52, 53
G	Organic peroxide type D, liquid, tem-perature controlled.	5.2	UN3115	II	5.2 .....		None ...	225 ...	None	Forbidden	Forbidden	D	2, 40, 52, 53
G	Organic peroxide type D, solid .....	5.2	UN3106	II	5.2 .....		152 .....	225 ...	None	5 kg	10 kg	D	12, 40, 52, 53
G	Organic peroxide type D, solid, tem-perature controlled.	5.2	UN3116	II	5.2 .....		None ...	225 ...	None	Forbidden	Forbidden	D	2, 40, 52, 53
G	Organic peroxide type E, liquid .....	5.2	UN3107	II	5.2 .....		152 .....	225 ...	None	10 L	25 L	D	12, 40, 52, 53
G	Organic peroxide type E, liquid, tem-perature controlled.	5.2	UN3117	II	5.2 .....		None ...	225 ...	None	Forbidden	Forbidden	D	2, 40, 52, 53
G	Organic peroxide type E, solid .....	5.2	UN3108	II	5.2 .....		152 .....	225 ...	None	10 kg	25 kg	D	12, 40, 52, 53
G	Organic peroxide type E, solid, tem-perature controlled.	5.2	UN3118	II	5.2 .....		None ...	225 ...	None	Forbidden	Forbidden	D	2, 40, 52, 53
G	Organic peroxide type F, liquid .....	5.2	UN3109	II	5.2 .....	IP5	152 .....	225 ...	225 ...	10 L	25 L	D	12, 40, 52, 53
G	Organic peroxide type F, liquid, tem-perature controlled.	5.2	UN3119	II	5.2 .....	IP5	None ...	225 ...	225 ...	Forbidden	Forbidden	D	2, 40, 52, 53
G	Organic peroxide type F, solid .....	5.2	UN3110	II	5.2 .....	TP33	152 .....	225 ...	225 ...	10 kg	25 kg	D	12, 40, 52, 53
G	Organic peroxide type F, solid, tem-perature controlled.	5.2	UN3120	II	5.2 .....	TP33	None ...	225 ...	225 ...	Forbidden	Forbidden	D	2, 52, 53
D	Organic phosphate, mixed with com-pressed gas or Organic phosphate compound, mixed with compressed gas or Organic phosphorus com-pound, mixed with compressed gas.	2.3	NA1955	2.3	2.3 .....	3	None ...	334 ...	None	Forbidden	Forbidden	D	40
	Organic pigments, self-heating .....	4.2	UN3313	III	4.2 .....	IB8, IP2, IP4, T3, TP33	None ...	212 ...	241 ...	15 kg	50 kg	C	
	.....				4.2 .....	IB8, IP3, T1, TP33	None ...	213 ...	241 ...	25 kg	100 kg	C	

UN number	Proper shipping name	Class	Subclass	Label	Quantity	Special provisions	Quantity	Special provisions	Quantity	Special provisions	Quantity	Special provisions
6.1 UN3280	Organoarsenic compound, liquid, n.o.s.	I	6.1	5, T14, TP2, TP13, TP27	None	201	242	1 L	30 L	B		
6.1 UN3465	Organoarsenic compound, solid, n.o.s.	II	6.1	IB2, T11, TP2, TP27	153	202	242	5 L	60 L	B		
3 UN2762	Organochlorine pesticides liquid, flammable, toxic, flash point less than 23 degrees C.	I	6.1	IB3, T7, TP1, TP28 IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	B		
6.1 UN2996	Organochlorine pesticides, liquid, toxic.	II	6.1	IB8, IP2, IP4, T3, TP33 IB8, IP3, T1, TP33	153	212	242	25 kg	100 kg	B		40
6.1 UN2995	Organochlorine pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	I	6.1, 3	T14, TP2, TP13, TP27	None	201	243	100 kg	200 kg	A		
6.1 UN2761	Organochlorine pesticides, solid, toxic.	II	6.1, 3	IB2, T11, TP2, TP13, TP27	150	202	243	1 L	60 L	B		40
6.1 UN3282	Organometallic compound, toxic, liquid, n.o.s.	III	6.1, 3	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B		40
6.1 UN3467	Organometallic compound, toxic, solid, n.o.s.	II	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B		40
4.2 UN3392	Organometallic substance, liquid, pyrophoric.	III	6.1, 3	B1, IB3, T7, TP2, TP28 IB7, IP1, T6, TP33	153	203	242	60 L	220 L	A		40
4.2 UN3394	Organometallic substance, liquid, water-reactive.	I	6.1	IB8, IP2, IP4, T3, TP33 IB8, IP3, T1, TP33	153	212	242	25 kg	100 kg	A		40
4.3 UN3398	Organometallic substance, liquid, water-reactive.	I	4.3	T14, TP2, TP13, TP27	None	201	242	100 kg	200 kg	A		40
4.3 UN3399	Organometallic substance, liquid, water-reactive, flammable.	II	4.3, 3	IB2, T11, TP2, TP13, TP27	153	202	242	5 L	60 L	B		40
		III	4.3, 3	IB3, T7, TP2, TP28 IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A		40
		I	4.3	IB8, IP2, IP4, T3, TP33 IB8, IP3, T1, TP33	153	212	242	25 kg	100 kg	B		40
		I	4.3	B11, T21, TP2, TP7, TP36	None	181	244	Forbiddn	Forbiddn	D		78
		I	4.3	B11, T21, TP2, TP7, TP36	None	181	244	Forbiddn	Forbiddn	D		78
		I	4.3	T13, TP2, TP7, TP36	None	201	244	Forbiddn	1 L	E		40, 52
		II	4.3	IB1, T7, TP2, TP7, TP36 IB2, T7, TP2, TP7, TP36	None	202	243	1 L	5 L	E		40, 52
		III	4.3, 3	T13, TP2, TP7, TP36	None	203	242	5 L	60 L	E		40, 52
		II	4.3, 3	IB1, IP2, T7, TP2, TP7, TP36	None	202	243	1 L	5 L	D		40, 52
		III	4.3, 3	IB2, IP4, T7, TP2, TP7, TP36	None	203	242	5 L	60 L	E		40, 52

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
G	Organometallic substance, solid, pyrophoric.	4.2	UN3391	I	4.2	T21, TP7, TP33, TP36	None	187	244	Forbidden	Forbidden	D	
G	Organometallic substance, solid, pyrophoric, water-reactive.	4.2	UN3393	I	4.2, 4.3	B11, T21, TP7, TP33, TP36	None	187	244	Forbidden	Forbidden	D	52
G	Organometallic substance, solid, self-heating.	4.2	UN3400	II	4.2	IB6, T3, TP33, TP36	None	212	242	15 kg	50 kg	C	
G	Organometallic substance, solid, water-reactive.	4.3	UN3395	III	4.2, 4.3	IB8, T1, TP33, TP36 N40, T9, TP7, TP33, TP36	None	213	242	25 kg	100 kg	C	40, 52
G	Organometallic substance, solid, water-reactive, flammable.	4.3	UN3396	III	4.3	IB4, T3, TP33, TP36	151	212	242	15 kg	50 kg	E	40, 52
G	Organometallic substance, solid, water-reactive, self-heating.	4.3	UN3397	III	4.3, 4.1	IB6, T1, TP33, TP36	151	213	241	25 kg	100 kg	E	40, 52
G	Organometallic substance, solid, water-reactive, self-heating.	4.3	UN3399	I	4.3, 4.2	N40, T9, TP7, TP33, TP36	None	211	242	Forbidden	15 kg	E	40, 52
G	Organometallic substance, solid, water-reactive, self-heating.	4.3	UN3399	II	4.3, 4.2	IB4, T3, TP33, TP36	None	212	242	15 kg	50 kg	E	40, 52
G	Organometallic substance, solid, water-reactive, self-heating.	4.2	UN3391	III	4.2	IB6, T1, TP33, TP36	None	213	241	25 kg	100 kg	E	40, 52
G	Organometallic substance, solid, water-reactive, self-heating.	4.2	UN3393	I	4.2	T21, TP7, TP33	None	187	244	Forbidden	Forbidden	D	52
G	Organometallic substance, solid, water-reactive, self-heating.	4.2	UN3400	II	4.2	B11, T21, TP7, TP33	None	187	244	Forbidden	Forbidden	D	
G	Organometallic substance, solid, water-reactive.	4.3	UN3395	III	4.2, 4.3	IB6, T3, TP33	None	212	242	15 kg	50 kg	C	
G	Organometallic substance, solid, water-reactive, flammable.	4.3	UN3396	III	4.2, 4.3	IB8, T1, TP33 N40, T9, TP7, TP33	None	203	242	25 kg	100 kg	C	40, 52
G	Organometallic substance, solid, water-reactive, flammable.	4.3	UN3396	I	4.3	IB4, T3, TP33 IB6, T1, TP33	151	212	242	15 kg	50 kg	E	40, 52
G	Organometallic substance, solid, water-reactive, flammable.	4.3	UN3396	II	4.3, 4.1	N40, T9, TP7, TP33	None	211	242	Forbidden	Forbidden	E	40, 52
G	Organometallic substance, solid, water-reactive, flammable.	4.3	UN3396	II	4.3, 4.1	IB4, T3, TP33	151	212	242	15 kg	50 kg	E	40, 52

G	Description	Class	UN	Hazard Class	P-Code	Label	Packaging	Quantity	Special Provisions	Hazard Class	P-Code	Label	Packaging	Quantity	Special Provisions
	Organometallic substance, solid, water-reactive, self-heating.	4.3	UN3397	4.3	III	4.3, 4.1, 4.2, 4.3, 4.2, 4.3, 4.2	IB6, T1, TP33	151	213	241	241	241	100 kg	E	40, 52
	Organophosphorus compound, toxic, flammable, n.o.s.	6.1	UN3279	6.1, 3	I	6.1, 3	N40, T9, TP7, TP33	None	211	242	242	242	Forbidden	E	40, 52
	Organophosphorus compound, toxic, liquid, n.o.s.	6.1	UN3278	6.1, 3	II	6.1, 3	IB4, T3, TP33	None	212	242	242	242	15 kg	E	40, 52
	Organophosphorus compound, toxic, solid, n.o.s.	6.1	UN3464	6.1, 3	III	6.1, 3	IB6, T1, TP33	None	213	241	241	241	25 kg	E	40, 52
	Organophosphorus pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	3	UN2784	6.1, 3	II	6.1, 3	5, T14, TP2, TP13, TP27	None	201	243	243	243	1 L	B	40
	Organophosphorus pesticides, liquid, toxic.	6.1	UN3018	6.1, 3	II	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	243	243	5 L	B	40
	Organophosphorus pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	6.1	UN3017	6.1, 3	III	6.1, 3	IB2, T11, TP2, TP13, TP27	153	203	241	241	241	60 L	A	40
	Organophosphorus pesticides, solid, toxic.	6.1	UN2783	6.1, 3	I	6.1, 3	IB2, N76, T11, TP2, TP13, TP27	153	202	243	243	243	5 L	B	40
	Organotin compounds, liquid, n.o.s.	6.1	UN2788	6.1, 3	III	6.1, 3	B1, IB3, N76, T7, TP2, TP28	153	203	242	242	242	60 L	A	40
	Organotin compounds, solid, n.o.s.	6.1	UN3146	6.1, 3	II	6.1, 3	IB7, IP1, N77, T6, TP33	None	211	242	242	242	5 kg	A	40
	Organotin compounds, liquid, n.o.s.	6.1	UN3146	6.1, 3	III	6.1, 3	IB8, IP2, IP4, N77, T3, TP33	153	212	242	242	242	25 kg	A	40
	Organotin compounds, solid, n.o.s.	6.1	UN3146	6.1, 3	I	6.1, 3	IB8, IP3, N77, T1, TP33	153	213	240	240	240	100 kg	A	40
	Organotin compounds, liquid, n.o.s.	6.1	UN3146	6.1, 3	II	6.1, 3	A3, N33, N34, T14, TP2, TP13, TP27	None	201	243	243	243	1 L	B	40
	Organotin compounds, solid, n.o.s.	6.1	UN3146	6.1, 3	III	6.1, 3	A3, IB2, N33, N34, T11, TP2, TP13, TP27	153	202	243	243	243	5 L	A	40
	Organotin compounds, solid, n.o.s.	6.1	UN3146	6.1, 3	I	6.1, 3	IB3, T7, TP2, TP28	153	203	241	241	241	60 L	A	40
	Organotin compounds, liquid, n.o.s.	6.1	UN3146	6.1, 3	II	6.1, 3	IB8, IP2, IP4, T3, TP33	153	212	242	242	242	5 kg	B	40
	Organotin compounds, solid, n.o.s.	6.1	UN3146	6.1, 3	III	6.1, 3	IB8, IP3, T1, TP33	153	213	240	240	240	25 kg	A	40
	Organotin compounds, liquid, n.o.s.	6.1	UN3146	6.1, 3	II	6.1, 3	IB8, IP3, T1, TP33	153	213	240	240	240	100 kg	A	40
	Organotin compounds, solid, n.o.s.	6.1	UN3146	6.1, 3	III	6.1, 3	IB8, IP3, T1, TP33	153	213	240	240	240	25 kg	A	40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Organotin pesticides, liquid, flam-mable, toxic, flash point less than 23 degrees C.	3	UN2787	I	3, 6.1	T14, TP2, TP13, TP27	None ...	201 ...	243 ...	30 L	Forbidden	B	40
	Organotin pesticides, liquid, toxic	6.1	UN3020	II	3, 6.1	IB2, T11, TP2, TP13, TP27	150 .....	202 ...	243 ...	1 L	1 L	B	40
	Organotin pesticides, liquid, toxic	6.1	UN3019	I	6.1	T14, TP2, TP13, TP27	None ...	201 ...	243 ...	30 L	1 L	B	40
	Organotin pesticides, liquid, toxic	6.1	UN3019	II	6.1	T14, TP2, TP13, TP27	153 .....	202 ...	243 ...	60 L	60 L	B	40
	Organotin pesticides, liquid, toxic	6.1	UN2786	III	6.1, 3	IB2, T11, TP2, TP13, TP27	153 .....	202 ...	243 ...	5 L	5 L	B	40
	Organotin pesticides, solid, toxic	6.1	UN2786	I	6.1, 3	B1, IB3, T7, TP2, TP28	153 .....	203 ...	242 ...	60 L	60 L	A	40
	Organotin pesticides, solid, toxic	6.1	UN2786	II	6.1	IB7, IP1, T6, TP33	None ...	211 ...	242 ...	5 kg	5 kg	A	40
	Organotin pesticides, solid, toxic	6.1	UN2786	III	6.1	IB8, IP2, IP4, T3, TP33	153 .....	212 ...	242 ...	100 kg	100 kg	A	40
	Ortho-nitroaniline, see Nitroanilines etc.	6.1	UN2471	I	6.1	IB8, IP3, T1, TP33	153 .....	213 ...	240 ...	200 kg	200 kg	A	40
	Cesium tetroxide	6.1	UN2471	I	6.1	A8, IB7, IP1, N33, N34, T6, TP33	None ...	211 ...	242 ...	5 kg	5 kg	B	40
D G	Other regulated substances, liquid, n.o.s.	9	NA3082	III	9	IB3, T2, TP1	155 .....	203 ...	241 ...	No limit	No limit	A	
D G	Other regulated substances, solid, n.o.s.	9	NA3077	III	9	B54, IB8, IP2, T1, TP33	155 .....	213 ...	240 ...	No limit	No limit	A	
G	Oxidizing liquid, corrosive, n.o.s.	5.1	UN3098	I	5.1, 8	62, A6	None ...	201 ...	244 ...	2.5 L	Forbidden	D	13, 56, 56, 106, 138
				II	5.1, 8	62, IB1	None ...	202 ...	243 ...	1 L	1 L	B	13, 34, 56, 58, 106, 138
				III	5.1, 8	62, IB2	152 .....	203 ...	242 ...	2.5 L	2.5 L	B	13, 34, 56, 58, 106, 138

G	Oxidizing liquid, n.o.s. ....	5.1	UN3139	I	5.1	62, 127, A2, A6	None	201	243	Forbidden	2.5 L	D	56, 58, 106, 138
				II	5.1	62, 127, A2, IB2	152	202	242	1 L	5 L	B	56, 58, 106, 138
				III	5.1	62, 127, A2, IB2	152	203	241	2.5 L	30 L	B	56, 58, 106, 138
G	Oxidizing liquid, toxic, n.o.s. ....	5.1	UN3099	I	5.1, 6.1	62, A6	None	201	244	Forbidden	2.5 L	D	56, 58, 106, 138
				II	5.1, 6.1	62, IB1	152	202	243	1 L	5 L	B	56, 58, 95, 106, 138
				III	5.1, 6.1	62, IB2	152	203	242	2.5 L	30 L	B	56, 58, 95, 106, 138
G	Oxidizing solid, corrosive, n.o.s. ....	5.1	UN3085	I	5.1, 8	62	None	211	242	1 kg	15 kg	D	13, 56, 58, 106, 138
				II	5.1, 8	62, IB6, IP2, T3, TP33	None	212	242	5 kg	25 kg	B	13, 34, 56, 58, 106, 138
				III	5.1, 8	62, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	B	13, 34, 56, 58, 106, 138
G	Oxidizing solid, flammable, n.o.s. ....	5.1	UN3137	I	5.1, 4.1	62	None	214	214	Forbidden	Forbidden		56, 58, 106, 138
G	Oxidizing solid, n.o.s. ....	5.1	UN1479	I	5.1	62, IB5, IP1	None	211	242	1 kg	15 kg	D	56, 58, 106, 138
				II	5.1	62, IB8, IP2, IP4, T3, TP33	152	212	240	5 kg	25 kg	B	56, 58, 106, 138
				III	5.1	62, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	B	56, 58, 106, 138
G	Oxidizing solid, self-heating, n.o.s. ....	5.1	UN3100	I	5.1, 4.2	62	None	214	214	Forbidden	Forbidden		56, 58, 106, 138
				II	5.1, 4.2	62	None	214	214	Forbidden	Forbidden		56, 58, 106, 138
G	Oxidizing solid, toxic, n.o.s. ....	5.1	UN3087	I	5.1, 6.1	62	None	211	242	1 kg	15 kg	D	56, 58, 106, 138

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
				II	5.1, 6.1	62, IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	B	56, 58, 95, 106, 138
				III	5.1, 6.1	62, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	B	56, 58, 95, 106, 138
G	Oxidizing solid, water reactive, n.o.s.	5.1	UN3121		5.1, 4.3	62	None	214	214	Forbidden	Forbidden		
	Oxygen, compressed	2.2	UN1072		2.2, 5.1	110, A14	306	302	314, 315	75 kg	150 kg		
	Oxygen difluoride, compressed	2.3	UN2190		2.3, 5.1, 8	1, N86	None	304	None	Forbidden	Forbidden	D	13, 40, 89, 90
	Oxygen generator, chemical (including when contained in associated equipment, e.g., passenger service units (PSUs), portable breathing equipment (PBE), etc.).	5.1	UN3356	II	5.1		None	168	None	Forbidden	25 kg	D	56, 58, 69, 106
+	Oxygen generator, chemical, spent ..	9	NA3356	III	9	61	None	213	None	Forbidden	Forbidden	A	
	Oxygen, refrigerated liquid (cryogenic liquid).	2.2	UN1073		2.2, 5.1	T75, TP5, TP22	320	316	318	Forbidden	Forbidden	D	
	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base.	3	UN1263	I	3	T11, TP1, TP8, TP27	150	201	243	1 L	30 L	E	
				II	3	149, B52, IB2, T4, TP1, TP8, TP28	150	173	242	5 L	60 L	B	
				III	3	B1, B52, IB3, T2, TP1, TP29	150	173	242	60 L	220 L	A	
	Paint or Paint related material	8	UN3066	II	8	B2, IB2, T7, TP2, TP28	154	173	242	1 L	30 L	A	40
	Paint related material including paint thinning, drying, removing, or reducing compound.	3	UN1263	I	3	B52, IB3, T4, TP1, TP29	154	173	241	5 L	60 L	A	40
						T11, TP1, TP8, TP27	150	201	243	1 L	30 L	E	
				II	3	149, B52, IB2, T4, TP1, TP8, TP28	150	173	242	5 L	60 L	B	

Paint, corrosive, flammable (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base).	8	UN3470	III	3	.....	B1, B52, IB3, T2, TP1, TP29	150	173	242	60 L	220 L	A	40.
Paint related material corrosive, flammable (including paint thinning or reducing compound).	8	UN3470	II	8, 3	....	IB2, T7, TP2, TP8, TP28	154	202	243	1 L	30 L	B	40.
Paint related material, flammable, corrosive (including paint thinning or reducing compound).	3	UN3469	I	3, 8	....	T11, TP2, TP27	None	201	243	0.5 L	2.5 L	E	40
Paint, flammable, corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base).	3	UN3469	I	3, 8	....	T11, TP2, TP27	None	201	243	0.5 L	2.5 L	E	40.
Paper, unsaturated oil treated completely dried (including carbon paper).	4.2	UN1379	II	3, 8	....	IB2, T7, TP2, TP8, TP28	150	202	243	1 L	5 L	B	40.
Paraformaldehyde	4.1	UN2213	III	3, 8	....	IB3, T4, TP1, TP29	150	203	242	5 L	60 L	A	40.
Paraldehyde	3	UN1264	III	4.2	....	IB8, IP3	None	213	241	Forbidden	Forbidden	A	
Paranitroaniline solid, see Nitroanilines etc.													
Parathion and compressed gas mixture.	2.3	NA1967		2.3	....	3	None	334	245	Forbidden	Forbidden	E	40
Paris green, solid, see Copper acetoarsenite.													
PCB, see Polychlorinated biphenyls.													
Pentaborane	4.2	UN1380	I	4.2, 6.1,		1	None	205	245	Forbidden	Forbidden	D	
Pentachloroethane	6.1	UN1689	II	6.1	....	IB2, T7, TP2	153	202	243	5 L	60 L	A	40
Pentachlorophenol	6.1	UN3155	II	6.1	....	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Pentaerythrite tetranitrate (dry)	Forbidden												
Pentaerythrite tetranitrate mixture, desensitized, solid, n.o.s. or Pentaerythritol tetranitrate mixture, desensitized, solid, n.o.s. or PETN mixture, desensitized, solid, n.o.s., with more than 10 percent but not more than 20 percent PETN, by mass.	4.1	UN3344	II	4.1	....	118, N85	None	214	None	Forbidden	Forbidden	E	
Pentaerythrite tetranitrate or Pentaerythritol tetranitrateor PETN, with not less than 7 percent wax by mass.	1.1D	UN0411	II	1.1D	..	120	None	62	None	Forbidden	Forbidden	10	



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage		
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
	Pentaerythrite tetranitrate, wetted or Pentaerythritol tetranitrate, wetted, or PETN, wetted with not less than 25 percent water, by mass, or Pentaerythrite tetranitrate, or Pentaerythritol tetranitrate or PETN, desensitized with not less than 15 percent phlegmatizer by mass. see Pentaerythritol tetranitrate, etc. Pentaerythrite tetranitrate, etc. Pentafluoroethane or Refrigerant gas R 125.	1.1D	UN0150	II	1.1D ..	121	None ...	62 .....	None	Forbidden	Forbidden	10		
	Pentamethylheptane .....	3	UN2286	III	3 .....	T50	306 .....	304 .....	314 .....	75 kg	150 kg	A		
	Pentane-2,4-dione .....	3	UN2310	III	3, 6.1 .....	B1, IB3, T2, TP1	150 .....	203 .....	242 .....	60 L	220 L	A		
	Pentanes .....	3	UN1265	I	3 .....	B1, IB3, T4, TP1	150 .....	203 .....	242 .....	60 L	220 L	A		
	Pentanoic acid, n.o.s. .....	3	UN1265	I	3 .....	T11, TP2	150 .....	201 .....	243 .....	1 L	30 L	E		
	Pentanoic acid, n.o.s. .....	3	UN1265	I	3 .....	IB2, IP8, T4, TP1	150 .....	202 .....	242 .....	5 L	60 L	E		
	Pentanoic acid, n.o.s. .....	3	UN1265	I	3 .....	IB2, T4, TP1, TP29	150 .....	202 .....	242 .....	5 L	60 L	B		
	Pentanoic acid, n.o.s. .....	3	UN1265	I	3 .....	B1, IB3, IB3, T2, TP1	150 .....	203 .....	242 .....	60 L	220 L	A		
	Pentane-1,3-dithiolane .....	3	UN1108	I	3 .....	T11, TP2	150 .....	201 .....	243 .....	1 L	30 L	E		
	Pentane-1,3-dithiolane .....	3	UN1108	I	3 .....	B2, IB2, T7, TP2	154 .....	202 .....	242 .....	1 L	30 L	B		
	Pentolite, dry or wetted with less than 15 percent water, by mass. Pepper spray, see Aerosols, etc. or Self-defense spray, non-pressurized.	1.1D	UN2705	II	8 .....		None ...	62 .....	None	Forbidden	Forbidden	10	26, 27	
	Pentolite, dry or wetted with less than 15 percent water, by mass. Pepper spray, see Aerosols, etc. or Self-defense spray, non-pressurized.	1.1D	UN0151	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10	26, 27	
	Perchlorates, inorganic, aqueous solution, n.o.s. ....	5.1	UN3211	II	5.1 .....	IB2, T4, TP1	152 .....	202 .....	242 .....	1 L	5 L	B	56, 58, 133	
	Perchlorates, inorganic, n.o.s. ....	5.1	UN1481	III	5.1 .....	IB2, T4, TP1	152 .....	202 .....	241 .....	2.5 L	30 L	B	56, 58, 69, 133	
	Perchloric acid, with more than 72 percent acid by mass. ....	5.1	UN1481	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 .....	242 .....	5 kg	25 kg	A	56, 58	
	Perchloric acid, with more than 50 percent but not more than 72 percent acid, by mass. ....	5.1	UN1873	III	5.1 .....	IB8, IP3, T1, TP33	152 .....	213 .....	240 .....	25 kg	100 kg	A	56, 58	
	Perchloric acid, with more than 72 percent acid, by mass. ....	5.1	UN1873	I	5.1, 8	A2, A3, N41, T10, TP1	None ...	201 .....	243 .....	Forbidden	Forbidden	2.5 L	D	66

	8	UN1802	II	8, 5.1	IB2, N41, T7, TP2	None ...	202 ...	243 ...	Forbidden	30 L	C	66
Perchloric acid with not more than 50 percent acid by mass. <i>see</i> Perchloroethylene, Tetrachloroethylene.	6.1	UN1670	I	6.1	2, B9, B14, B32, N34, T20, TP2, TP13, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40
Perchloromethyl mercaptan	2.3	UN3083	2.3, 5.1	2.3, 5.1	2, B9, B14	None ...	302 ...	314, 315	Forbidden	Forbidden	D	40
Perchloryl fluoride	2.1	UN3154	2.1	2.1		306 ...	302, 304, 305	314, 315	Forbidden	150 kg	E	40
Percussion caps, <i>see</i> Primers, cap type.												
Perfluoro-2-butene, <i>see</i> Octafluorobut-2-ene.												
Perfluoro(ethyl vinyl ether)	2.1	UN3153	2.1	2.1	T50	306 ...	302, 304, 305	314, 315	Forbidden	150 kg	E	40
Perfluoro(methyl vinyl ether)	2.1	UN3153	2.1	2.1		306 ...	302, 304, 305	314, 315	Forbidden	150 kg	E	40
Perfumery products with flammable solvents.	3	UN1266	II	3	149, IB2, T4, TP1, TP8	150 ...	202 ...	242 ...	15 L	60 L	B	
Permanganates, inorganic, aqueous solution, n.o.s.	5.1	UN3214	III	3	B1, IB3, T2, TP1	150 ...	203 ...	242 ...	60 L	220 L	A	56, 58, 133, 138
	5.1	UN3214	II	5.1	26, 353, IB2, T4, TP1	152 ...	202 ...	242 ...	1 L	5 L	D	56, 58, 133, 138
	5.1	UN1482	III	5.1	26, 353, A30, IB6, IP2, T3, TP33	152 ...	212 ...	242 ...	5 kg	25 kg	D	56, 58, 133, 138
	5.1	UN1482	III	5.1	26, 353, A30, IB8, IP3, T1, TP33	152 ...	213 ...	240 ...	25 kg	100 kg	D	56, 58, 13
Permeation devices for calibrating air quality monitoring equipment <i>See</i> §173.175.	5.1	UN1483	II	5.1	A7, A20, IB6, IP2, N34, T3, TP33	None ...	212 ...	242 ...	5 kg	25 kg	A	13, 52, 66, 75
Peroxides, inorganic, n.o.s.	5.1	UN1483	III	5.1	A7, A20, IB8, IP3, N34, T1, TP33	152 ...	213 ...	240 ...	25 kg	100 kg	A	13, 52, 66, 75
Peroxyacetic acid, with more than 43 percent and with more than 6 percent hydrogen peroxide.	Forbidden											
Persulfates, inorganic, aqueous solution, n.o.s.	5.1	UN3216	III	5.1	IB2, T4, TP1, TP29	152 ...	203 ...	241 ...	2.5 L	30 L	A	56, 133
Pesticides, inorganic, n.o.s.	5.1	UN3215	III	5.1	IB8, IP3, T1, TP33	152 ...	213 ...	240 ...	25 kg	100 kg	A	56, 58
Pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	3	UN3021	I	3, 6.1	B5, T14, TP2, TP13, TP27	None ...	201 ...	243 ...	Forbidden	30 L	B	
	II		II	3, 6.1	IB2, T11, TP2, TP13, TP27	150 ...	202 ...	243 ...	1 L	60 L	B	
Pesticides, liquid, toxic, flammable, n.o.s. flash point not less than 23 degrees C.	6.1	UN2903	I	6.1, 3	T14, TP2, TP13, TP27	None ...	201 ...	243 ...	1 L	30 L	B	40

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Other (10B)	Loca-tion (10A)	
G	Pesticides, liquid, toxic, n.o.s.	6.1	UN2902	III	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40	
							153	203	242	60 L	220 L	A	40	
							None	201	243	1 L	30 L	B	40	
G	Pesticides, solid, toxic, n.o.s.	6.1	UN2588	III	6.1	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40	
							153	203	241	60 L	220 L	A	40	
							None	211	242	5 kg	50 kg	A	40	
D	Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	3	UN1267	I	3	144, 357, T11, TP1, TP8	150	201	243	1 L	30 L	E	40	
							150	202	242	5 L	60 L	B	40	
							150	203	242	60 L	220 L	A	40	
D	Petroleum gases, liquefied or Liquefied petroleum gas.	2.1	UN1075	III	3	144, 357, B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40	
							306	304	314, 315	Forbidden	150 kg	E	40	
							None	201	243	1 L	30 L	E	40	
I	Petroleum sour crude oil, flammable, toxic.	3	UN3494	I	3, 6.1	343, T14, TP2, TP13	None	201	243	Forbidden	30 L	D	40	
							150	203	242	60 L	220 L	A	40	
							153	212	242	25 kg	100 kg	B	40	
+	Phenyl bromide	6.1	UN2645	III	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B	40	
							153	203	241	60 L	220 L	A	40	
							None	202	243	Forbidden	Forbidden	B	40	
+	Phenol, molten	6.1	UN2312	III	6.1	IB8, IP2, IP4, N78, T3, TP33	153	212	242	25 kg	100 kg	A	40	
							153	203	243	Forbidden	Forbidden	B	40	
							153	212	242	25 kg	100 kg	A	40	

6.1	UN2821	Phenol solutions	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	40
			III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	
	8	Phenolsulfonic acid, liquid	II	8	B2, IB2, N41, T7, TP2	154	202	242	1 L	30 L	C	14
	3	Phenoxyacetic acid derivative pesticide, liquid, flammable, toxic flash point less than 23 degrees C.	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	B	40
6.1	UN3348	Phenoxyacetic acid derivative pesticide, liquid, toxic.	II	3, 6.1	IB2, T11, TP2, TP13, TP27	150	202	243	1 L	60 L	B	40
			I	6.1	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
6.1	UN3347	Phenoxyacetic acid derivative pesticide, liquid, toxic, flammable, flash point not less than 23 degrees C.	III	6.1	IB2, T11, TP2, TP27	153	202	243	5 L	60 L	B	40
			I	6.1, 3	IB3, T7, TP2, TP28	153	203	241	60 L	220 L	A	40
			I	6.1, 3	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
6.1	UN3345	Phenoxyacetic acid derivative pesticide, solid, toxic.	II	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
			III	6.1, 3	IB3, T7, TP2, TP28	153	203	241	60 L	220 L	A	40
			I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	40
6.1	UN2746	Phenyl chloroformate	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
			III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	12, 13, 21, 25, 40, 100
			I	6.1, 8	IB2, T7, TP2, TP13	153	202	243	1 L	30 L	A	40
6.1	UN2487	Phenyl isocyanate	I	6.1, 3	2, B9, B14, B32, B77, N33, N34, T20, TP2, TP13, TP36, TP45	None	227	244	Forbidden	Forbidden	D	40
6.1	UN2337	Phenyl mercaptan	I	6.1, 3	2, B9, B14, B32, B77, T20, TP2, TP13, TP36, TP45	None	227	244	Forbidden	Forbidden	D	40, 52
8	UN2798	Phenyl phosphorus dichloride	II	8	B2, B15, IB2, T7, TP2	154	202	242	Forbidden	30 L	B	40
8	UN2799	Phenyl phosphorus trichloride	II	8	B2, B15, IB2, T7, TP2	154	202	242	Forbidden	30 L	B	40
6.1	UN3002	Phenyl urea pesticides, liquid, toxic	I	6.1	T14, TP2, TP27	None	201	243	1 L	30 L	B	40
			II	6.1	T7, TP2	None	202	243	5 L	60 L	B	40
			III	6.1	T4, TP1	153	203	241	60 L	220 L	A	40
6.1	UN2470	Phenylacetone, liquid	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	52
8	UN2577	Phenylacetyl chloride	II	8	B2, IB2, T7, TP2	154	202	242	1 L	30 L	C	40
6.1	UN1672	Phenylacetylamine chloride	I	6.1	2, B9, B14, B32, T20, TP2, TP13, TP36, TP45	None	227	244	Forbidden	Forbidden	D	40
Forbidden		<i>m</i> -Phenylene diaminedipchlorate (dry).	Forbidden									
6.1	UN1673	Phenylenediamines (o-, m-, p-)	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
6.1	UN2572	Phenylhydrazine	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	
6.1	UN1674	Phenylmercuric acetate	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
6.1	UN2026	Phenylmercuric compounds, n.o.s.	I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	
			II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
			III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	
6.1	UN1894	Phenylmercuric hydroxide	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Phenylmercuric nitrate .....	6.1	UN1895	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
	Phenyltrichlorosilane .....	8	UN1804	II	8	A7, B6, N34, T10, TP2, TP7, TP13	None	206	242	Forbidden	30 L	C	40
	Phosgene .....	2.3	UN1076	II	2.3, 8	1, B7, B46	None	192	314	Forbidden	Forbidden	D	40
	9-Phosphabicyclonanes or Cyclooctadiene phosphines.	4.2	UN2940	II	4.2	A19, IB6, IP2, T3, TP33	None	212	241	15 kg	50 kg	A	
	Phosphine .....	2.3	UN2199	II	2.3, 2.1	1	None	192	245	Forbidden	Forbidden	D	40
	Phosphoric acid solution .....	8	UN1805	III	8	A7, IB3, N34, T4, TP1	154	203	241	5 L	60 L	A	
	Phosphoric acid solid .....	8	UN3453	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	
	Phosphoric acid triethylamine, see Tris-(1-aziridinyl)phosphine oxide, solution.												
	Phosphoric anhydride, see Phosphorus pentoxide.												
	Phosphorous acid .....	8	UN2834	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	48
	Phosphorus, amorphous .....	4.1	UN1338	III	4.1	A1, A19, B1, B9, B26, IB8, IP3, T1, TP33	None	213	243	25 kg	100 kg	A	74
	Phosphorus bromide, see Phosphorus tribromide.												
	Phosphorus chloride, see Phosphorus trichloride.												
	Phosphorus heptasulfide, free from yellow or white phosphorus.	4.1	UN1339	II	4.1	A20, IB4, N34, T3, TP33	None	212	240	15 kg	50 kg	B	74
	Phosphorus oxybromide .....	8	UN1939	II	8	B8, IB8, IP2, IP4, N41, N43, T3, TP33	None	212	240	Forbidden	50 kg	C	12, 40
	Phosphorus oxybromide, molten .....	8	UN2576	II	8	B2, B8, IB1, N41, N43, T7, TP3, TP13	None	202	242	Forbidden	Forbidden	C	40
	Phosphorous oxychloride .....	6.1	UN1810	I	6.1, 8	2, B9, B14, B32, B77, N34, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40
+	Phosphorus pentabromide .....	8	UN2691	II	8	A7, IB8, IP2, IP4, N34, T3, TP33	154	212	240	Forbidden	50 kg	B	12, 40, 53, 55
	Phosphorus pentachloride .....	8	UN1806	II	8	A7, IB8, IP2, IP4, N34, T3, TP33	None	212	240	Forbidden	50 kg	C	40, 44, 89, 100, 141

Phosphorus Pentafluoride .....	2.3	UN2198	2, 3, 8	2, B9, B14	None ...	302, 304	314, 315	Forbidden	D	40
Phosphorus pentasulfide, free from yellow or white phosphorus.	4.3	UN1340	4.3, 4.1	A20, B59, IB4, T3, TP33	151 .....	212 ...	242 ...	15 kg	B	74
Phosphorus pentoxide .....	8	UN1807	8	A7, IB8, IP2, IP4, N34, T3, TP33	154 .....	212 ...	240 ...	15 kg	A	74
Phosphorus sesquisulfide, free from yellow or white phosphorus.	4.1	UN1341	4.1	A20, IB4, N34, T3, TP33	None ...	212 ...	240 ...	15 kg	B	74
Phosphorus tribromide .....	8	UN1808	8	A3, A6, A7, B2, B25, IB2, N34, N43, T7, TP2	None ...	202 ...	242 ...	Forbidden	C	40
Phosphorus trichloride .....	6.1	UN1809	6.1, 8	2, B9, B14, B15, B32, B77, N34, T20, TP2, TP13, TP38, TP45	None ...	227 ...	244 ...	Forbidden	C	40
Phosphorus trioxide .....	8	UN2578	8	IB8, IP3, T1, TP33	154 .....	213 ...	240 ...	25 kg	A	12
Phosphorus trisulfide, free from yellow or white phosphorus.	4.1	UN1343	4.1	A20, IB4, N34, T3, TP33	None ...	212 ...	240 ...	15 kg	B	74
Phosphorus, white dry or Phosphorus, white, under water or Phosphorus white, in solution or Phosphorus, yellow dry or Phosphorus, yellow, under water or Phosphorus, yellow, in solution.	4.2	UN1381	4.2, 6.1	B9, B26, N34, T9, TP3, TP31	None ...	188 ...	243 ...	Forbidden	E	
Phosphorus white, molten .....	4.2	UN2447	4.2, 6.1	B9, B26, N34, T21, TP3, TP7, TP26	None ...	188 ...	243 ...	Forbidden	D	
Phosphorus (white or red) and a chlorate mixtures of oxychloride.	Forbidden									
Phosphoryl chloride, see Phosphorus oxychloride.										
Phthalic anhydride with more than .05 percent maleic anhydride.	8	UN2214	8	IB8, IP3, T1, TP33	154 .....	213 ...	240 ...	25 kg	A	
Picolines .....	3	UN2313	3	B1, IB3, T4, TP1	150 .....	203 ...	242 ...	60 L	A	40
Picric acid, see Trinitrophenol, etc.										
Picrite, see Nitroguanidine, etc.										
Picryl chloride, see Trinitrochlorobenzene.										
Pine oil .....	3	UN1272	3	B1, IB3, T2, TP1	150 .....	203 ...	242 ...	60 L	A	
alpha-Pinene .....	3	UN2368	3	B1, IB3, T2, TP1	150 .....	203 ...	242 ...	60 L	A	
Piperazine .....	8	UN2579	8	IB8, IP3, T1, TP33	154 .....	213 ...	240 ...	25 kg	A	12, 52
Piperidine .....	8	UN2401	1, 8, 3	A10, T10, TP2	None ...	201 ...	243 ...	0.5 L	B	52
Phthaloyl chloride, see Trimethylacetyl chloride.										
Plastic molding compound in dough, sheet or extruded rope form evolving flammable vapor.	9	UN3314	9	32, IB8, IP3, IP7	155 .....	221 ...	221 ...	100 kg	E	19, 21, 25, 87, 144.
Plastic solvent, n.o.s., see Flammable liquids, n.o.s.										
Plastics, nitrocellulose-based, self-heating, n.o.s.	4.2	UN2006	4.2		None ...	213 ...	None	Forbidden	C	

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Poisonous gases, n.o.s., see Com-pressed or liquefied gases, flam-mable or toxic, n.o.s. <i>Polyalkylamines, n.o.s., see Amines, etc.</i> Polyamines, flammable, corrosive, n.o.s. see Amines, flammable, cor-rosive, n.o.s. Polyamines, liquid, corrosive, n.o.s. see Amines, liquid, corrosive, n.o.s. Polyamines, liquid, corrosive, flam-mable, n.o.s. see Amines, liquid, corrosive, flammable, n.o.s. Polychlorinated biphenyls, liquid ..... Polychlorinated biphenyls, solid .....	9 9	UN2315 UN3432	II II	9 9	9, 81, 140, IB3, T4, TP1 9, 81, 140, IB8, IP2, IP4, T3, TP33	155 155	202 212	241 240	100 L 100 kg	220 L 200 kg	A A	95 95
	Polyester resin kit ..... Polyhalogenated biphenyls, liquid or Polyhalogenated terphenyls liquid. Polyhalogenated biphenyls, solid or Polyhalogenated terphenyls, solid. Polymeric beads expandable, evalu- ating flammable vapor.	3 9 9 9	UN3269 UN3151 UN3152	II II II	9 9 9	40, 149 IB2 IB8, IP2, IP4, T3, TP33	165 155 155	165 204 204	None 241 241	5 kg 100 L 100 kg	5 kg 220 L 200 kg	B A A	95 95 95
	Potassium .....	4.3	UN2257	I	4.3	32, IB8, IP3, IP7, T1, TP33	155	221	221	100 kg	200 kg	E	19, 21, 25, 87, 144, 52
	Potassium arsenate ..... Potassium arsenite ..... <i>Potassium bisulfite solution, see Bisulfites, aqueous solutions, n.o.s.</i> Potassium borohydride ..... Potassium bromate ..... Potassium carbonyl ..... Potassium chlorate .....	6.1 6.1 4.3 5.1 Forbidden 5.1	UN1677 UN1678 UN1870 UN1484 UN1485 UN2427	II II I II	6.1 6.1 4.3 5.1 5.1 5.1	IB8, IP2, IP4, T3, TP33 IB8, IP2, IP4, T3, TP33 A19, N40 A9, IB8, IP2, IP4, N34, T3, TP33 A2, IB2, T4, TP1	153 153 None 152 152 152	212 212 211 212 212 202	242 242 242 242 242 241	25 kg 25 kg Forbidden 5 kg 5 kg 1 L	100 kg 100 kg 15 kg 25 kg 25 kg 5 L	A A E A A B	52 56, 58 56, 58 56, 58 56, 58, 133

UN number	Proper shipping name	Class	Subclass	Label	Quantity	Special provisions	Quantity	Label	Special provisions
6.1 UN1679	Potassium chlorate mixed with mineral oil, see Explosive, blasting, type C.	III	5.1	A2, IB2, T4, TP1	152	203	241	30 L	56, 58, 69, 133
6.1 UN1680	Potassium cuprocyanide	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	100 kg	52
6.1 UN3413	Potassium cyanide, solid	I	6.1	B69, B77, IB7, IP1, N74, N75, T6, TP33	None	211	242	5 kg	52
	Potassium cyanide solution	I	6.1	B69, B77, N74, N75, T14, TP2, TP13	None	201	243	30 L	52
		II	6.1	B69, B77, IB2, N74, N75, T11, TP2, TP13, TP27	153	202	243	60 L	52
		III	6.1	B69, B77, IB3, N74, N75, T7, TP2, TP13, TP28	153	203	241	220 L	52
4.2 UN1929	Potassium dichloro isocyanurate or Potassium dichloro-s-triazinetrione, see Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts etc.	II	4.2	A8, A19, A20, IB6, IP2, T3, TP33	None	212	241	50 kg	13
6.1 UN1812	Potassium dithionite or Potassium fluoride, solid	III	6.1	IB8, IP3, T1, TP33	153	213	240	200 kg	52
6.1 UN3422	Potassium fluoride solution	III	6.1	IB3, T4, TP1	153	203	241	220 L	52
6.1 UN2628	Potassium fluoroacetate	I	6.1	IB7, IP1, T6, TP33	None	211	242	50 kg	52
6.1 UN2655	Potassium fluorosilicate	III	6.1	IB8, IP3, T1, TP33	153	213	240	200 kg	52
	Potassium hydrate, see Potassium hydroxide, solid.								
	Potassium hydrogen fluoride, see Potassium hydrogen difluoride.								
	Potassium hydrogen fluoride solution, see Corrosive liquid, n.o.s.								
8 UN2509	Potassium hydrogen sulfate	II	8	A7, IB8, IP2, IP4, N34, T3, TP33	154	212	240	50 kg	25, 40, 52
8 UN1811	Potassium hydrogendifluoride solid	II	8, 6.1	IB8, IP2, IP4, N3, N34, T3, TP33	154	212	240	50 kg	25, 40, 52
8 UN3421	Potassium hydrogendifluoride solution.	II	8, 6.1	IB2, N3, N34, T7, TP2	154	202	243	30 L	25, 40, 52
	Potassium hydrosulfite, see Potassium dithionite.	III	8, 6.1	IB3, N3, N34, T4, TP1	154	203	241	60 L	40, 52
	Potassium hydroxide, liquid, see Potassium hydroxide solution.								
8 UN1813	Potassium hydroxide, solid	II	8	IB8, IP2, IP4, T3, TP33	154	212	240	50 kg	52
8 UN1814	Potassium hydroxide, solution	II	8	B2, IB2, T7, TP2	154	202	242	30 L	52
		III	8	IB3, T4, TP1	154	203	241	60 L	52
	Potassium hypochlorite, solution, see Hypochlorite solutions, etc.								
4.3 UN1420	Potassium, metal alloys, liquid	I	4.3	A7, A19, A20, B27	None	201	244	1 L	40, 52



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Potassium, metal alloys, solid .....	4.3	UN3403	I	4.3 .....	A19, A20, B27, IB4, IP1, T9, TP7, TP33	None ...	211 ...	244 ...	Forbidden	15 kg	D	
	Potassium metavanadate .....	6.1	UN2864	II	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 ...	242 ...	25 kg	100 kg	A	
	Potassium monoxide .....	8	UN2033	II	8 .....	IB8, IP2, IP4, T3, TP33	154 .....	212 ...	240 ...	15 kg	50 kg	A	29, 52.
	Potassium nitrate .....	5.1	UN1486	III	5.1 .....	A1, A29, IB8, IP3, T1, TP33, W1	152 .....	213 ...	240 ...	25 kg	100 kg	A	
	Potassium nitrate and sodium nitrite mixtures.	5.1	UN1487	II	5.1 .....	B78, IB8, IP2, IP4, T3, TP33	152 .....	212 ...	240 ...	5 kg	25 kg	A	56, 58
	Potassium nitrite .....	5.1	UN1488	II	5.1 .....	IB8, IP2, IP4, T3, TP33	152 .....	212 ...	242 ...	5 kg	25 kg	A	56, 58
	Potassium perchlorate .....	5.1	UN1489	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 ...	242 ...	5 kg	25 kg	A	56, 58
	Potassium permanganate .....	5.1	UN1490	II	5.1 .....	IB8, IP2, IP4, T3, TP33	152 .....	212 ...	240 ...	5 kg	25 kg	D	138
	Potassium peroxide .....	5.1	UN1491	I	5.1 .....	A20, IB6, IP1, N34	None ...	211 ...	None	Forbidden	15 kg	B	13, 52, 66, 75
	Potassium persulfate .....	5.1	UN1492	III	5.1 .....	A1, A29, IB8, IP3, T1, TP33	152 .....	213 ...	240 ...	25 kg	100 kg	A	58, 145
	Potassium phosphide .....	4.3	UN2012	I	4.3, 6.1.	A19, N40	None ...	211 ...	None	Forbidden	15 kg	E	40, 52, 85
	<i>Potassium selenate, see Selenates or Selenites.</i> <i>Potassium selenite, see Selenates or Selenites.</i>												
	Potassium sodium alloys, liquid .....	4.3	UN1422	I	4.3 .....	A7, A19, B27, N34, N40, T9, TP3, TP7, TP31	None ...	201 ...	244 ...	Forbidden	1 L	E	40, 52
	Potassium sodium alloys, solid .....	4.3	UN3404	I	4.3 .....	A19, B27, N34, N40, T9, TP7, TP33	None ...	211 ...	244 ...	Forbidden	15 kg	D	52
	Potassium sulfide, anhydrous or Potassium sulfide with less than 30 percent water of crystallization.	4.2	UN1382	II	4.2 .....	A19, A20, B16, IB6, IP2, N34, T3, TP33	None ...	212 ...	241 ...	15 kg	50 kg	A	52
	Potassium sulfide, hydrated with not less than 30 percent water of crystallization.	8	UN1847	II	8 .....	IB8, IP2, IP4, T3, TP33	154 .....	212 ...	240 ...	15 kg	50 kg	A	52
	Potassium superoxide .....	5.1	UN2466	I	5.1 .....	A20, IB6, IP1	None ...	211 ...	None	Forbidden	15 kg	B	13, 52, 66, 75
	Powder cake, wetted or Powder paste, wetted with not less than 17 percent alcohol by mass.	1.1C	UN0433	II	1.1C ..		None ...	62 .....	None	Forbidden	Forbidden	10	



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
	Propane see also Petroleum gases, liquefied.	2.1	UN1978		2.1	19, T50	306	304	314	Forbidden	150 kg	E	40	
	Propanethiols	3	UN2402	II	3	A6, IB2, T4, TP1, TP13	150	202	242	5 L	60 L	E	95, 102	
	n-Propanol or Propyl alcohol, normal	3	UN1274	III	3	B1, IB2, T4, TP1	150	202	242	5 L	60 L	B		
	Propellant, liquid	1.3C	UN0495	II	1.3C	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Propellant, liquid	1.1C	UN0497	II	1.1C	37	None	62	None	Forbidden	Forbidden	10		
	Propellant, solid	1.1C	UN0498	II	1.1C	37	None	62	None	Forbidden	Forbidden	10	26E	
	Propellant, solid	1.3C	UN0499	II	1.3C		None	62	None	Forbidden	Forbidden		26E	
	Propionic acid	1.4C	UN0501	II	1.4C	IB2, T7, TP1	150	202	242	5 L	60 L	E	24E	
	Propionic acid with not less than 90% acid by mass.	3	UN1275	II	3	IB2, T7, TP2	154	202	243	1 L	30 L	A		
	Propionic acid with not less than 10% and less than 90% acid by mass.	8	UN3463	III	8, 3	IB3, T4, TP1	154	203	241	5 L	60 L	A		
	Propionitrile	3	UN2496	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	40	
	Propionyl chloride	3	UN2404	II	3, 6.1	IB2, T7, TP1, TP13	None	202	243	Forbidden	60 L	E	40	
	n-Propyl acetate	3	UN1815	II	3, 8	IB1, T7, TP1	150	202	243	1 L	5 L	B	40	
	Propyl alcohol, see Propanol.	3	UN1276	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B		
	n-Propyl benzene	3	UN2364	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	21, 40, 100	
	n-Propyl chloroformate	6.1	UN2740	I	6.1, 3, 8	2, B9, B14, B32, B77, N34, T20, TP2, TP13, TP38, TP44	None	227	244	Forbidden	Forbidden	B		
	Propyl chloride see 1-Chloropropane.													
	Propyl formates	3	UN1281	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40	
	n-Propyl isocyanate	6.1	UN2482	I	6.1, 3	1, B9, B14, B30, T20, TP2, TP13, TP38, TP44	None	226	244	Forbidden	Forbidden	D		
	Propyl mercaptan, see Propanethiols.													
	n-Propyl nitrate	3	UN1865	II	3	IB9	150	202	None	5 L	60 L	D	44, 89, 90, 100	
	Propylamine	3	UN1277	II	3, 8	A7, IB2, N34, T7, TP1	150	202	243	1 L	5 L	E	40	
	Propylene see also Petroleum gases, liquefied.	2.1	UN1077	II	2.1	19, T50	306	304	314	Forbidden	150 kg	E	40	
	Propylene chlorohydrin	6.1	UN2611	II	6.1, 3	IB2, T7, TP2, TP13	153	202	243	5 L	60 L	A	12, 40, 48	
	Propylene oxide	3	UN1280	I	3	A3, N34, T11, TP2, TP7	None	201	243	1 L	30 L	E	40	

Propylene tetramer	3 UN2850	III 3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
1,2-Propylenediamine	8 UN2258	II 8, 3	A3, A6, IB2, N34, T7, TP2	None	202	243	1 L	30 L	A	40
Propyleneimine, stabilized	3 UN1921	I 3, 6.1	A3, N34, T14, TP2, TP13	None	201	243	1 L	30 L	B	40
Propyltrichlorosilane	8 UN1816	II 8, 3	A7, B2, B6, N34, T10, TP2, TP7, TP13	None	206	243	Forbidden	30 L	C	40
<i>Prussic acid, see Hydrogen cyanide.</i>										
Pyrethroid pesticide, liquid, flammable, toxic, flash point less than 23 degrees C.	3 UN3350	I 3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	B	40
Pyrethroid pesticide, liquid toxic	6.1 UN3352	II 3, 6.1	IB2, T11, TP2, TP13, TP27	150	202	243	1 L	60 L	B	40
			T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
			IB2, T11, TP2, TP27	153	202	243	5L	60L	B	40
			IB3, T7, TP2, TP28	153	203	241	60L	220L	A	40
			T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40
Pyrethroid pesticide, liquid, toxic, flammable, flash point not less than 23 degrees C.	6.1 UN3351	I 6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
			IB3, T7, TP2, TP28	153	203	241	60 L	220 L	B	40
			IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	40
			IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
			IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
			IB2, T4, TP2	None	202	242	5 L	60 L	B	21, 100
Pyridine	3 UN1282	II 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
<i>Pyridine perchlorate</i>	Forbidden									
Pyrophoric liquid, inorganic, n.o.s.	4.2 UN3194	I 4.2	B11, T22, TP2, TP7	None	181	244	Forbidden	Forbidden	D	78
Pyrophoric liquids, organic, n.o.s.	4.2 UN2845	I 4.2	B11, T21, TP7, TP33	None	181	244	Forbidden	Forbidden	D	78
Pyrophoric metals, n.o.s., or Pyrophoric alloys, n.o.s.	4.2 UN1383	I 4.2	T21, TP7, TP33	None	187	242	Forbidden	Forbidden	D	
Pyrophoric solid, inorganic, n.o.s.	4.2 UN3200	I 4.2	B2, IB2, T8, TP2	None	187	242	Forbidden	Forbidden	D	
Pyrophoric solids, organic, n.o.s.	4.2 UN2846	I 4.2		None	187	242	Forbidden	Forbidden	D	
Pyrosulfuryl chloride	8 UN1817	II 8		154	202	242	1 L	30 L	C	40
<i>Pyroxylin solution or solvent, see Nitrocellulose.</i>										
Pyrolydine	3 UN1922	II 3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	40, 52
<i>Quebrachitol pentanitrate</i>	Forbidden									
Quinoline, see Calcium oxide.										
Quinoline	6.1 UN2656	III 6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	12
R 12, see Dichlorodifluoromethane.										
R 12B1, see Chlorodifluoromethane.										
R 13, see Chlorotrifluoromethane.										
R 13B1, see Bromotrifluoromethane.										
R 14, see Tetrafluoromethane.										
R 21, see Chlorotrifluoromethane.										
R 22, see Chlorodifluoromethane.										
R 114, see Dichlorotetrafluoroethane.										
R 115, see Chloropentafluoroethane.										

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	R 116, see Hexafluoroethane. R 124, see Chlorotrifluoroethane. R 133a, see Chlorotrifluoroethane. R 152a, see Difluoroethane. R 500, see Dichlorodifluoromethane and difluoroethane, etc. R 502, see Chlorodifluoromethane and chloropentafluoroethane mixture, etc. R 503, see Chlorotrifluoromethane and trifluoromethane, etc. Radioactive material, excepted pack-age-articles manufactured from natural uranium or depleted ura-nium or natural thorium. Radioactive material, excepted pack-age-empty packaging. Radioactive material, excepted pack-age-instruments or articles. Radioactive material, excepted pack-age-limited quantity of material. Radioactive material, low specific ac-tivity (LSA-I) non fissile or fissile-excepted. Radioactive material, low specific ac-tivity (LSA-II) non fissile or fissile-excepted. Radioactive material, low specific ac-tivity (LSA-III) non fissile or fissile-excepted. Radioactive material, surface con-laminated objects (SCO-I or SCO-II) non fissile or fissile-excepted. Radioactive material, transported under special arrangement, non fissile or fissile excepted. Radioactive material, transported under special arrangement, fissile.	7	UN2909		None			422, 426.	422, 426.				
		7	UN2908		Empty			422, 428.	422, 428.				A
		7	UN2911		None			422, 424.	422, 424.				A
		7	UN2910		None			421, 422.	421, 422.				A
		7	UN2912		7 .....	A56, T5, TP4, W7		421, 422.	421, 422.				A
		7	UN3321		7 .....	A56, T5, TP4, W7		421, 428.	421, 428.				A
		7	UN3322		7 .....	A56, T5, TP4, W7		421, 428.	421, 428.				A
		7	UN2913		7 .....	A56		421, 428.	421, 428.				A
		7	UN2919		7 .....	A56, 139		428.	428.				A
		7	UN3331		7 .....	A56, 139		.....	.....				A

Radioactive material, Type A package, fissile non-special form.	7	UN3327	7	.....	A56, W7, W8	453	417	417	417	A	95, 105, 131
Radioactive material, Type A package non-special form, non fissile or fissile-excepted.	7	UN2915	7	.....	A56, W7, W8	None	415, 418, 419	415, 418, 419	415, 418, 419	A	95, 130
Radioactive material, Type A package, special form non fissile or fissile-excepted.	7	UN3332	7	.....	A56, W7, W8	.....	415, 476	415, 476	415, 476	A	95
Radioactive material, Type A package, special form, fissile.	7	UN3333	7	.....	A56, W7, W8	453	417, 476	417, 476	417, 476	A	95, 105
Radioactive material, Type B(M) package, fissile.	7	UN3329	7	.....	A56	453	417	417	417	A	95, 105
Radioactive material, Type B(M) package non fissile or fissile-excepted.	7	UN2917	7	.....	A56	.....	416	416	416	A	95, 105
Radioactive material, Type B(U) package, fissile.	7	UN3328	7	.....	A56	453	417	417	417	A	95, 105
Radioactive material, Type B(U) package non fissile or fissile-excepted.	7	UN2916	7	.....	A56	.....	416	416	416	A	95, 105
Radioactive material, uranium hexafluoride non fissile or fissile-excepted.	7	UN2978	7, 8	.....		423	420, 427	420, 427	420, 427	A	95, 132
Radioactive material, uranium hexafluoride, fissile.	7	UN2977	7, 8	.....		453	417, 420	417, 420	417, 420	A	95, 132
Rags, oily	4.2	UN1856	III	4.2		151	213	240	240	Forbidden	
Railway torpedo, see Signals, railway track, explosive.											
RC 318, see Octafluorocyclobutane, RDX and cyclotetramethylenetetranitramine, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized.											
RDX and HMX mixtures, wetted with not less than 15 percent water by mass or RDX and HMX mixtures, desensitized with not less than 10 percent phlegmatizer by mass.	1.1D	UN0391	II	1.1D		None	62	None	None	Forbidden	10
RDX and Octogen mixtures, wetted or desensitized see RDX and HMX mixtures, wetted or desensitized etc.											
RDX, see Cyclotrimethylene trinitramine, etc.											
Receptacles, small, containing gas or gas cartridges (flammable) without release device, not refillable and not exceeding 1 L capacity.	2.1	UN2037		2.1		306	304	None	None	1 kg	15 kg
											40

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage		
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
	Receptacles, small, containing gas or gas cartridges (non-flammable) without release device, not reliable and not exceeding 1 L capacity.	2.2	UN2037		2.2			306	304	None	1 kg	15 kg	B	40
	Receptacles, small, containing gas or gas cartridges (oxidizing) without release device, not reliable and not exceeding 1 L capacity.	2.2	UN2037		2.2, 5.1	A14		306	304	None	1 kg	15 kg	B	40
	Refrigerant gas R 404A	2.2	UN3337		2.2	T50		306	304	314, 315	75 kg	150 kg	A	
	Refrigerant gas R 407A	2.2	UN3338		2.2	T50		306	304	314, 315	75 kg	150 kg	A	
	Refrigerant gas R 407B	2.2	UN3339		2.2	T50		306	304	314, 315	75 kg	150 kg	A	
	Refrigerant gas R 407C	2.2	UN3340		2.2	T50		306	304	314, 315	75 kg	150 kg	A	
G	Refrigerant gases, n.o.s.	2.2	UN1078		2.2	T50		306	304	314, 315	75 kg	150 kg	A	
D	Refrigerant gases, n.o.s. or Dispersant gases, n.o.s.	2.1	NA1954		2.1	T50		306	304	314, 315	Forbidden	150 kg	D	40
	Refrigerating machines, containing flammable, non-toxic, liquefied gas.	2.1	UN3358		2.1			306, 307	306	306	Forbidden	Forbidden	D	40
	Refrigerating machines, containing non-flammable, non-toxic gases, or ammonia solutions (UN2672).	2.2	UN2857		2.2	A53		306, 307	306	306, 307	450 kg	450 kg	A	
	Regulated medical waste, n.o.s. or Clinical waste, unspecified, n.o.s. or (BIO) Medical waste, n.o.s., or Biomedical waste, n.o.s. or Medical waste, n.o.s.	6.2	UN3291	II	6.2	41, A13		134	197	197	No limit	No limit	B	40
	Release devices, explosive	1.4S	UN0173	II	1.4S	B52, T11, TP1, TP8, TP28		None	62	62	25 kg	100 kg	05	
	Resin solution, flammable	3	UN1866	I	3	149, B52, IB2, T4, TP1, TP8		150	201	243	1 L	30 L	E	
				II	3			150	173	242	5 L	60 L	B	

Proper shipping name	UN number	Class	Division	Subdivision	Special provisions	Quantity	Label	Placard	Other	Additional
Resorcinol	6.1 UN2876	III	3	6.1	B1, B52, IB3, T2, TP1 IB8, IP3, T1, TP33	150	173	242	200 kg	A
Rifle grenade, see Grenades, hand or rifle, etc.										
Rifle powder, see Powder, smokeless (UN 0160).										
Rivets, explosive	1.4S UN0174	II	1.4S			None	62	62	100 kg	05
Road asphalt or tar liquid, see Tars, liquid, etc.										
Rocket motors	1.3C UN0186	II	1.3C	109		None	62	62	220 kg	03
Rocket motors	1.1C UN0280	II	1.1C	109		None	62	62	Forbidden	03
Rocket motors	1.2C UN0281	II	1.2C	109		None	62	62	Forbidden	03
Rocket motors, liquid fueled	1.2J UN0395	II	1.2J	109		None	62	None	Forbidden	04
Rocket motors, liquid fueled	1.3J UN0396	II	1.3J	109		None	62	None	Forbidden	04
Rocket motors with hypergolic liquids with or without an expelling charge.	1.3L UN0250	II	1.3L	109		None	62	None	Forbidden	08
Rocket motors with hypergolic liquids with or without an expelling charge.	1.2L UN0322	II	1.2L	109		None	62	None	Forbidden	08
Rockets, line-throwing	1.2G UN0238	II	1.2G			None	62	None	Forbidden	07
Rockets, line-throwing	1.3G UN0240	II	1.3G			None	62	None	75 kg	07
Rockets, line-throwing	1.4G UN0453	II	1.4G			None	62	None	75 kg	06
Rockets, liquid fueled with bursting charge.	1.1J UN0397	II	1.1J			None	62	None	Forbidden	04
Rockets, liquid fueled with bursting charge.	1.2J UN0398	II	1.2J			None	62	None	Forbidden	04
Rockets, with bursting charge	1.1F UN0180	II	1.1F			None	62	None	Forbidden	08
Rockets, with bursting charge	1.1E UN0181	II	1.1E			None	62	62	Forbidden	03
Rockets, with bursting charge	1.2E UN0182	II	1.2E			None	62	62	Forbidden	03
Rockets, with bursting charge	1.2F UN0295	II	1.2F			None	62	62	Forbidden	08
Rockets, with expelling charge	1.2C UN0436	II	1.2C			None	62	62	Forbidden	03
Rockets, with expelling charge	1.3C UN0437	II	1.3C			None	62	62	Forbidden	03
Rockets, with expelling charge	1.4C UN0438	II	1.4C			None	62	62	75 kg	02
Rockets, with inert head	1.3C UN0183	II	1.3C			None	62	62	Forbidden	03
Rockets, with inert head	1.2C UN0502	II	1.2C			None	62	62	Forbidden	03
Rosin oil	3 UN1286	III	3			150	202	242	5 L	B
Rubber solution	3 UN1287	III	3			150	202	242	60 L	A
Rubber scrap or shoddy, powdered or granulated, not exceeding 840 microns and rubber contend exceeding 45%.	4.1 UN1345	III	4.1			151	212	240	220 L	A
Rubidium	4.3 UN1423	I	4.3			None	211	242	15 kg	D
Rubidium hydroxide	8 UN2678	II	8			154	212	240	50 kg	A
Rubidium hydroxide solution	8 UN2677	III	8			154	202	242	30 L	A
Safety fuse, see Fuse, safety.									60 L	A



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
G	Samples, explosive, other than initiating explosives. Sand acid, see Fluorosilicic acid. Seed cake, containing vegetable oil solvent extractions and expelled seeds, with not more than 10 percent of oil and when the amount of moisture is higher than 11 percent, with not more than 20 percent of oil and moisture combined.		UN0190	II	.....	113	None ...	62 .....	None	Forbidden	Forbidden	14	
	Seed cake with more than 1.5 percent oil and not more than 11 percent moisture.	4.2	UN1386	III	None	IB8, IP3, IP7, N7	None ...	213 ....	241 ....	Forbidden	Forbidden	A	13
I	Seed cake with more than 1.5 percent oil and not more than 11 percent moisture.	4.2	UN1386	III	None	IB8, IP3, IP7, N7	None ...	213 ....	241 ....	Forbidden	Forbidden	E	13
I	Seed cake with not more than 1.5 percent oil and not more than 11 percent moisture.	4.2	UN2217	III	None	IB8, IP3, IP7, N7	None ...	213 ....	241 ....	Forbidden	Forbidden	A	13
G	Selenates or Selenites .....	6.1	UN2630	I	6.1 .....	IB7, IP1, N34, T6, TP33	None ...	211 ....	242 ....	5 kg	50 kg	E	
G	Selenic acid .....	8	UN1905	I	8 .....	T14, TP2, TP27	None ...	211 ....	242 ....	Forbidden	25 kg	A	
G	Selenium compound, liquid, n.o.s. ....	6.1	UN3440	II	6.1 .....	IB2, T11, TP2, TP27	None ...	201 ....	243 ....	1 L	30 L	B	
G	Selenium compound, solid, n.o.s. ....	6.1	UN3283	III	6.1 .....	IB3, T7, TP1, TP28	153 .....	202 ....	243 ....	5 L	60 L	B	
	Selenium disulfide .....	6.1	UN2657	I	6.1 .....	IB7, IP1, T6, TP33	None ...	211 ....	242 ....	60 L	220 L	A	
	Selenium hexafluoride .....	2.3	UN2194	III	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 ....	242 ....	5 kg	50 kg	B	
	Selenium nitride .....	Forbidden		III	6.1 .....	IB8, IP3, T1, TP33	153 .....	213 ....	240 ....	25 kg	100 kg	B	
	Selenium oxychloride .....	8	UN2879	II	2.3, 8	IB8, IP2, IP4, T3, TP33	153 .....	212 ....	242 ....	100 kg	200 kg	A	
	Self-defense spray, aerosol, see Aerosols, etc.			I	8, 6.1	A3, A6, A7, N34, T10, TP2, TP13	None ...	302 ....	None	Forbidden	Forbidden	D	40
+ A	Self-defense spray, non-pressurized	9	NA3334	III	9 .....	A37	None ...	201 ....	243 ....	0.5 L	2.5 L	E	40
G	Self-heating liquid, corrosive, inorganic, n.o.s.	4.2	UN3188	II	4.2, 8	IB2	155 .....	203 ....	None	No limit	No limit	A	
G	Self-heating liquid, corrosive, organic, n.o.s.	4.2	UN3185	III	4.2, 8	IB2	None ...	202 ....	243 ....	1 L	5 L	C	
G	Self-heating liquid, corrosive, organic, n.o.s.	4.2	UN3185	II	4.2, 8	IB2	None ...	203 ....	241 ....	5 L	60 L	C	
				II	4.2, 8	IB2	None ...	202 ....	243 ....	1 L	5 L	C	

G	Self-heating liquid, inorganic, n.o.s.	4.2	UN3186	III	4.2, 8	IB2	None	203	241	5 L	60 L	C	
G	Self-heating liquid, organic, n.o.s.	4.2	UN3183	III	4.2	IB2	None	202	242	1 L	5 L	C	
G	Self-heating liquid, toxic, inorganic, n.o.s.	4.2	UN3187	III	4.2	IB2	None	203	241	5 L	60 L	C	
G	Self-heating liquid, toxic, inorganic, n.o.s.	4.2	UN3187	II	4.2, 6.1	IB2	None	202	243	1 L	5 L	C	
G	Self-heating liquid, toxic, organic, n.o.s.	4.2	UN3184	III	4.2, 6.1	IB2	None	203	241	5 L	60 L	C	
G	Self-heating liquid, toxic, organic, n.o.s.	4.2	UN3184	II	4.2, 6.1	IB2	None	202	243	1 L	5 L	C	
G	Self-heating solid, corrosive, inorganic, n.o.s.	4.2	UN3192	III	4.2, 8	IB5, IP2, T3, TP33	None	203	241	5 L	60 L	C	
G	Self-heating solid, corrosive, organic, n.o.s.	4.2	UN3126	III	4.2, 8	IB8, IP3, T1, TP33	None	213	242	25 kg	100 kg	C	
G	Self-heating solid, inorganic, n.o.s.	4.2	UN3190	III	4.2, 8	IB5, IP2, T3, TP33	None	212	242	15 kg	50 kg	C	
G	Self-heating solid, organic, n.o.s.	4.2	UN3088	III	4.2	IB8, IP3, T1, TP33	None	213	242	25 kg	100 kg	C	
G	Self-heating solid, organic, n.o.s.	4.2	UN3088	II	4.2	IB8, IP3, T1, TP33	None	212	241	15 kg	50 kg	C	
G	Self-heating solid, oxidizing, n.o.s.	4.2	UN3127	III	4.2, 5.1	IB8, IP3, T1, TP33	None	214	241	25 kg	100 kg	C	
G	Self-heating solid, toxic, inorganic, n.o.s.	4.2	UN3191	II	4.2, 6.1	IB5, IP2, T3, TP33	None	212	242	15 kg	50 kg	C	
G	Self-heating solid, toxic, organic, n.o.s.	4.2	UN3128	III	4.2, 6.1	IB8, IP3, T1, TP33	None	213	242	25 kg	100 kg	C	
G	Self-heating solid, toxic, organic, n.o.s.	4.2	UN3128	II	4.2, 6.1	IB5, IP2, T3, TP33	None	212	242	15 kg	50 kg	C	
G	Self-heating solid, toxic, organic, n.o.s.	4.2	UN3128	III	4.2, 6.1	IB8, IP3, T1, TP33	None	213	242	25 kg	100 kg	C	
	Self-propelled vehicle, see Engines or Batteries etc.												
G	Self-reactive liquid type B	4.1	UN3221	II	4.1	53	None	224	None	Forbidden	Forbidden	D	52, 53
G	Self-reactive liquid type B, temperature controlled.	4.1	UN3231	II	4.1	53	None	224	None	Forbidden	Forbidden	D	2, 52, 53
G	Self-reactive liquid type C	4.1	UN3223	II	4.1		None	224	None	5 L	10 L	D	52, 53
G	Self-reactive liquid type C, temperature controlled.	4.1	UN3233	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53
G	Self-reactive liquid type D	4.1	UN3225	II	4.1		None	224	None	5 L	10 L	D	52, 53
G	Self-reactive liquid type D, temperature controlled.	4.1	UN3235	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53
G	Self-reactive liquid type E	4.1	UN3227	II	4.1		None	224	None	10 L	25 L	D	52, 53
G	Self-reactive liquid type E, temperature controlled.	4.1	UN3237	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53
G	Self-reactive liquid type F	4.1	UN3229	II	4.1		None	224	None	10 L	25 L	D	52, 53
G	Self-reactive liquid type F, temperature controlled.	4.1	UN3239	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo air-craft only	Loca-tion	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)	
G	Self-reactive solid type B	4.1	UN3222	II	4.1	53	None	224	None	Forbidden	Forbidden	D	52, 53	
G	Self-reactive solid type B, temperature controlled.	4.1	UN3232	II	4.1	53	None	224	None	Forbidden	Forbidden	D	2, 52, 53	
G	Self-reactive solid type C	4.1	UN3224	II	4.1		None	224	None	5 kg	10 kg	D	52, 53	
G	Self-reactive solid type C, temperature controlled.	4.1	UN3234	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53	
G	Self-reactive solid type D	4.1	UN3226	II	4.1		None	224	None	5 kg	10 kg	D	52, 53	
G	Self-reactive solid type D, temperature controlled.	4.1	UN3236	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53	
G	Self-reactive solid type E	4.1	UN3228	II	4.1		None	224	None	10 kg	25 kg	D	52, 53	
G	Self-reactive solid type E, temperature controlled.	4.1	UN3238	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53	
G	Self-reactive solid type F	4.1	UN3230	II	4.1		None	224	None	10 kg	25 kg	D	52, 53	
G	Self-reactive solid type F, temperature controlled.	4.1	UN3240	II	4.1		None	224	None	Forbidden	Forbidden	D	2, 52, 53	
	Shale oil	3	UN1288	I 3 II 3 III 3	3	T11, TP1, TP8, TP27 IB2, T4, TP1, TP8 B1, IB3, T2, TP1	None	201	243	1 L	30 L	B		
	Shaped charges, see Charges, shaped, etc.						None	202	242	5 L	60 L	B		
	Signal devices, hand	1.4G	UN0191	II	1.4G		None	62	None	Forbidden	75 kg	06		
	Signal devices, hand	1.4S	UN0373	II	1.4S		None	62	None	25 kg	100 kg	05		
	Signals, distress, ship	1.1G	UN0194	II	1.1G		None	62	None	Forbidden	Forbidden	07		
	Signals, distress, ship	1.3G	UN0195	II	1.3G		None	62	None	Forbidden	75 kg	07		
	Signals, distress, ship	1.4G	UN0505	II	1.4G		None	62	None	Forbidden	75 kg	06		
	Signals, distress, ship	1.4S	UN0506	II	1.4S		None	62	None	25 kg	100 kg	05		
	Signals, highway, see Signal devices, hand.													
	Signals, railway track, explosive	1.1G	UN0192	II	1.1G		None	62	None	Forbidden	Forbidden	07		
	Signals, railway track, explosive	1.4S	UN0193	II	1.4S		None	62	None	25 kg	100 kg	05		
	Signals, railway track, explosive	1.3G	UN0492	II	1.3G		None	62	None	Forbidden	Forbidden	07		
	Signals, railway track, explosive	1.4G	UN0493	II	1.4G		None	62	None	Forbidden	75 kg	06		
	Signals, ship distress, water-activated, see Contrivances, water-activated, etc.													
	Signals, smoke	1.1G	UN0196	II	1.1G		None	62	None	Forbidden	Forbidden	07		
	Signals, smoke	1.4G	UN0197	II	1.4G		None	62	None	Forbidden	75 kg	06		
	Signals, smoke	1.2G	UN0313	II	1.2G		None	62	None	Forbidden	Forbidden	07		

Signal	UN number	Class	Subclass	Proper shipping name	Quantity	Label	Special provisions	Other	Notes
Signals, smoke	UN0487	1.3G	..	Smokeless powder for small arms	None	None	211	242	Forbiddn 100 kg
Signals, smoke	UN0507	1.4S	.....	Soda lime with more than 4 percent sodium hydroxide.	None	None	202	242	Forbiddn 25 kg
Silane	UN2203	2.1	.....	Silane	None	None	302	None	Forbiddn
Silicofluoric acid, see Fluorosilicic acid.									
Silicon chloride, see Silicon tetrachloride.									
Silicon powder, amorphous	UN1346	4.1	.....	Silicon powder, amorphous	None	None	213	240	100 kg
Silicon tetrachloride	UN1818	8	.....	Silicon tetrachloride	None	None	202	242	30 L
Silicon tetrafluoride	UN1859	2.3	8	Silicon tetrafluoride	None	None	302	None	Forbiddn
Silver acetylide (dry)	UN1683	6.1	.....	Silver acetylide (dry)	153	.....	212	242	100 kg
Silver arsenite	UN1684	6.1	.....	Silver arsenite	153	.....	212	242	25 kg
Silver azide (dry)	UN1493	5.1	.....	Silver azide (dry)	152	.....	212	242	5 kg
Silver cyanide	UN1347	4.1	.....	Silver cyanide	None	None	211	None	Forbiddn
Silver fulminate (dry)	UN1906	8	.....	Silver fulminate (dry)	None	None	202	242	30 L
Silver nitrate	NA3178	4.1	.....	Silver nitrate	None	None	171	None	7.3 kg
Silver oxalate (dry)	UN1907	8	.....	Silver oxalate (dry)	154	.....	213	240	100 kg
Silver picrate (dry)	UN1428	4.3	.....	Silver picrate (dry)	None	None	211	244	15 kg
Silver picrate, wetted with not less than 30 percent water, by mass.				Silver picrate, wetted with not less than 30 percent water, by mass.					
Smokeless powder for small arms (100 pounds or less).				Smokeless powder for small arms (100 pounds or less).					
Soda lime with more than 4 percent sodium hydroxide.				Soda lime with more than 4 percent sodium hydroxide.					
Sodium				Sodium					
Sodium aluminate, solid	UN2812	8	.....	Sodium aluminate, solid	154	.....	213	240	100 kg
Sodium aluminate, solution	UN1819	8	.....	Sodium aluminate, solution	154	.....	202	242	30 L
Sodium aluminum hydride	UN2835	4.3	.....	Sodium aluminum hydride	154	.....	203	241	60 L
Sodium ammonium vanadate	UN2863	6.1	.....	Sodium ammonium vanadate	153	.....	212	242	50 kg
Sodium arseniate	UN2473	6.1	.....	Sodium arseniate	153	.....	213	240	100 kg
Sodium arsenite	UN1685	6.1	.....	Sodium arsenite	153	.....	212	242	100 kg
Sodium arsenite, aqueous solutions	UN1686	6.1	.....	Sodium arsenite, aqueous solutions	153	.....	202	243	60 L
Sodium arsenite, solid	UN2027	6.1	.....	Sodium arsenite, solid	153	.....	203	241	220 L
Sodium azide	UN1687	6.1	.....	Sodium azide	153	.....	212	242	100 kg
Sodium bifluoride, see Sodium hydrogendifluoride.				Sodium bifluoride, see Sodium hydrogendifluoride.					
Sodium bisulfite, solution, see Bisulfites, aqueous solutions, n.o.s.				Sodium bisulfite, solution, see Bisulfites, aqueous solutions, n.o.s.					
Sodium borohydride	UN1426	4.3	.....	Sodium borohydride	None	N40	211	242	15 kg

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Sodium borohydride and sodium hydroxide solution, with not more than 12 percent sodium borohydride and not more than 40 percent sodium hydroxide by mass.	8	UN3320	II	8	B2, IB2, N34, T7, TP2	154	202	242	1 L	30 L	A	52
	Sodium bromate	5.1	UN1494	III	8	B2, IB3, N34, T4, TP2	154	203	241	5 L	60 L	A	52
	Sodium cacodylate	6.1	UN1688	II	5.1	IB8, IP2, IP4, T3, TP33	152	212	242	5 kg	25 kg	A	56, 58
	Sodium carbonate peroxyhydrate	5.1	UN3378	II	5.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	52
							152	212	240	5 kg	25 kg	A	13, 48, 75
						IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	A	13, 48, 75
	Sodium chlorate	5.1	UN1495	II	5.1	A9, IB8, IP2, IP4, N34, T3, TP33	152	212	240	5 kg	25 kg	A	56, 58
	Sodium chlorate, aqueous solution	5.1	UN2428	II	5.1	A2, IB2, T4, TP1	152	202	241	1 L	5 L	B	56, 58, 133
						A2, IB2, T4, TP1	152	203	241	2.5 L	30 L	B	56, 58, 69, 133
	Sodium chlorate mixed with dinitrotoluene, see Explosive blasting, type C.												
	Sodium chlorite	5.1	UN1496	II	5.1	A9, IB8, IP2, IP4, N34, T3, TP33	None	212	242	5 kg	25 kg	A	56, 58
	Sodium chloroacetate	6.1	UN2659	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	52
	Sodium cuprocyanide, solid	6.1	UN2316	I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	52
	Sodium cuprocyanide, solution	6.1	UN2317	I	6.1	T14, TP2, TP13	None	201	243	1 L	30 L	B	40, 52
	Sodium cyanide, solid	6.1	UN1689	I	6.1	B69, B77, IB7, N74, N75, T6, TP33	None	211	242	5 kg	50 kg	B	52
	Sodium cyanide solution	6.1	UN3414	I	6.1	B69, B77, N74, N75, T14, TP2, TP13	None	201	243	1 L	30 L	B	52
						B69, B77, IB2, N74, N75, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	52
						B69, B77, IB3, N74, N75, T7, TP2, TP13, TP28	153	203	241	60 L	220 L	A	52

Sodium dichloroocyanurate or Sodium dichloro-s-triazinetrione, see Dichloroocyanuric acid etc.	1.3C UN0234	II	1.3C ..				None ...	62 .....	None	Forbiddén	Forbiddén	10	5E
Sodium dimiitro-o-cresolate, dry or wetted with less than 15 percent water, by mass.	4.1 UN3369	I	4.1 .....	162, A8, A19, N41, N84	None ...	211 .....	None	None	0.5 kg	0.5 kg	E	E	36
Sodium diititro-o-cresolate, wetted with not less than 10% water, by mass.	4.1 UN1348	I	4.1, 6.1.	23, A8, A19, A20, N41	None ...	211 .....	None	None	1 kg	1 kg	E	E	28, 36
Sodium diititro-o-cresolate, wetted with not less than 15 percent water, by mass.	4.2 UN1384	II	4.2 .....	A19, A20, IB6, IP2, T3, TP33	None ...	212 .....	241 .....	241 .....	15 kg	15 kg	E	E	13
Sodium difluoride, solid	6.1 UN1690	III	6.1 .....	IB8, IP3, T1, TP33	153	213 .....	240 .....	240 .....	100 kg	100 kg	A	A	52
Sodium fluoride solution	6.1 UN3415	III	6.1 .....	IB3, T4, TP1	153	203 .....	241 .....	241 .....	60 L	220 L	A	A	52
Sodium fluoroacetate	6.1 UN2629	I	6.1 .....	IB7, IP1, T6, TP33	None ...	211 .....	242 .....	242 .....	5 kg	5 kg	E	E	52
Sodium fluosilicate	6.1 UN2674	III	6.1 .....	IB8, IP3, T1, TP33	153	213 .....	240 .....	240 .....	100 kg	200 kg	A	A	52
Sodium hydrate, see Sodium hydroxide, solid.													
Sodium hydride	4.3 UN1427	I	4.3 .....	A19, N40	None	211 .....	242 .....	242 .....	Forbiddén	Forbiddén	E	E	52
Sodium hydrogen difluoride	8 UN2439	II	8 .....	IB8, IP2, IP4, N3, N34, T3, TP33	154	212 .....	240 .....	240 .....	15 kg	15 kg	A	A	12, 25, 40, 52
Sodium hydrosulfide, with less than 25 percent water of crystallization.	4.2 UN2318	II	4.2 .....	A7, A19, A20, IB6, IP3, TP33	None ...	212 .....	241 .....	241 .....	15 kg	15 kg	A	A	52
Sodium hydrosulfide with not less than 25 percent water of crystallization.	8 UN2949	II	8 .....	A7, IB8, IP2, IP4, T7, TP2	154	212 .....	240 .....	240 .....	15 kg	15 kg	A	A	52
Sodium hydrosulfite, see Sodium dithionite.													
Sodium hydroxide, solid	8 UN1823	II	8 .....	IB8, IP2, IP4, T3, TP33	154	212 .....	240 .....	240 .....	15 kg	15 kg	A	A	52.
Sodium hydroxide solution	8 UN1824	III	8 .....	B2, IB2, N34, T7, TP2, IB3, N34, T4, TP1	154	202 .....	242 .....	242 .....	1 L	30 L	A	A	52.
Sodium hypochlorite, solution, see Hypochlorite solutions etc. Sodium metal, liquid alloy, see Alkali metal alloys, liquid, n.o.s.													
Sodium methyiate	4.2 UN1431	II	4.2, 8	A7, A19, IB5, IP2, T3, TP33	None ...	212 .....	242 .....	242 .....	15 kg	15 kg	B	B	52.
Sodium methyiate solutions in alcohol.	3 UN1289	II	3, 8 .....	IB2, T7, TP1, TP8	150	202 .....	243 .....	243 .....	1 L	5 L	B	B	52.
Sodium monoxide	8 UN1825	III	3, 8 .....	B1, IB3, T4, TP1	150	203 .....	242 .....	242 .....	5 L	60 L	A	A	52.
Sodium nitrate	5.1 UN1498	III	5.1 .....	IB8, IP2, IP4, T3, TP33	154	212 .....	240 .....	240 .....	15 kg	50 kg	A	A	52.
Sodium nitrate and potassium nitrate mixtures.	5.1 UN1499	III	5.1 .....	A1, A29, IB8, IP3, T1, TP33, W1	152	213 .....	240 .....	240 .....	25 kg	100 kg	A	A	52.
Sodium nitrite	5.1 UN1500	III	5.1, 6.1.	A1, A29, IB8, IP3, T1, TP33	152	213 .....	240 .....	240 .....	25 kg	100 kg	A	A	56, 58
Sodium pentachlorophenate	6.1 UN2567	II	6.1 .....	IB8, IP2, IP4, T3, TP33	153	212 .....	242 .....	242 .....	25 kg	100 kg	A	A	56, 58

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Sodium perborate monohydrate .....	5.1	UN3377	III	5.1 .....	IB8, IP3, T1, TP33	152 .....	213 .....	240 .....	25 kg	100 kg	A	13, 48, 75
	Sodium perchlorate .....	5.1	UN1502	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 .....	242 .....	5 kg	25 kg	A	56, 58
	Sodium permanganate .....	5.1	UN1503	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 .....	242 .....	5 kg	25 kg	D	56, 58, 138
	Sodium peroxide .....	5.1	UN1504	I	5.1 .....	A20, IB5, IP1, N34	None ..	211 .....	None	Forbidden	15 kg	B	13, 52, 66, 75
	Sodium peroxoborate, anhydrous .....	5.1	UN3247	II	5.1 .....	IB8, IP2, IP4, T3, TP33	152 .....	212 .....	240 .....	5 kg	25 kg	A	13, 25
	Sodium persulfate .....	5.1	UN1505	II	5.1 .....	A1, IB8, IP3, T1, TP33	152 .....	213 .....	240 .....	25 kg	100 kg	A	58, 145
	Sodium phosphide .....	4.3	UN1432	I	4.3, 6.1	A19, N40	None ..	211 .....	None	Forbidden	15 kg	E	40, 52, 85
	Sodium picramate, dry or wetted with less than 20 percent water, by mass.	1.3C	UN0235	II	1.3C ..		None ..	62 .....	None	Forbidden	Forbidden	10	5E
	Sodium picramate, wetted with not less than 20 percent water, by mass.	4.1	UN1349	I	4.1 .....	23, A8, A19, N41	None ..	211 .....	None	Forbidden	15 kg	E	28, 36
	Sodium peroxydisulfate .....	Forbidden											
	Sodium peroxyperoxide .....	Forbidden											
	Sodium persulfate, see Potassium sodium alloys.												
	Sodium selenate, see Selenates or Selenites.												
	Sodium sulfide, anhydrous or Sodium sulfide with less than 30 percent water of crystallization.	4.2	UN1385	II	4.2 .....	A19, A20, IB6, IP2, N34, T3, TP33	None ..	212 .....	241 .....	15 kg	50 kg	A	52
	Sodium sulfide, hydrated with not less than 30 percent water.	8	UN1849	II	8 .....	IB8, IP2, IP4, T3, TP33	154 .....	212 .....	240 .....	15 kg	50 kg	A	52
	Sodium superoxide .....	5.1	UN2547	I	5.1 .....	A20, IB6, IP1, N34	None ..	211 .....	None	Forbidden	15 kg	E	13, 52, 66, 75
G	Sodium tetranitride .....	Forbidden											
G	Solids containing corrosive liquid, n.o.s..	8	UN3244	II	8 .....	49, IB5, T3, TP33	154 .....	212 .....	240 .....	15 kg	50 kg	B	40
G	Solids containing flammable liquid, n.o.s..	4.1	UN3175	II	4.1 .....	47, IB6, IP2, T3, TP33	151 .....	212 .....	240 .....	15 kg	50 kg	B	
G	Solids containing toxic liquid, n.o.s. ..	6.1	UN3243	II	6.1 .....	48, IB2, T2, TP33	153 .....	212 .....	240 .....	25 kg	100 kg	B	40
	Sounding devices, explosive .....	1.2F	UN0204	II	1.2F ..		None ..	62 .....	62 .....	Forbidden	Forbidden	08	
	Sounding devices, explosive .....	1.1F	UN0296	II	1.1F ..		None ..	62 .....	62 .....	Forbidden	Forbidden	08	
	Sounding devices, explosive .....	1.1D	UN0374	II	1.1D ..		None ..	62 .....	62 .....	Forbidden	Forbidden	07	

	1.2D	UN0375	II	1.2D ..		None ...	62 .....	62 .....	Forbiddn	Forbiddn	07
Sounding devices, explosive .....											
Spirits of salt, see Hydrochloric acid.											
Squibs, see Igniters etc.											
Stannic chloride, anhydrous .....	8	UN1827	II	8 .....	B2, IB2, T7, TP2	154 .....	202 .....	242 .....	1 L	30 L	C
Stannic chloride pentahydrate .....	8	UN2440	III	8 .....	IB8, IP3, T1, TP33	154 .....	213 .....	240 .....	25 kg	100 kg	A
Stannic phosphide .....	4.3	UN1433	I	4.3, 6.1	A19, N40	None ...	211 .....	242 .....	Forbiddn	15 kg	E
Steel swarf, see Ferrous metal borings, etc.											40, 52, 85
Stibine .....	2.3	UN2676		2.3, 2.1	1	None ...	304 .....	None	Forbiddn	Forbiddn	D
Storage batteries, wet, see Batteries, wet etc.											
Strontium arsenite .....	6.1	UN1691	II	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 .....	242 .....	25 kg	100 kg	A
Strontium chlorate .....	5.1	UN1506	II	5.1 .....	A1, A9, IB8, IP2, IP4, N34, T3, TP33	152 .....	212 .....	242 .....	5 kg	25 kg	A
Strontium nitrate .....	5.1	UN1507	III	5.1 .....	A1, A29, IB8, IP3, T1, TP33	152 .....	213 .....	240 .....	25 kg	100 kg	A
Strontium perchlorate .....	5.1	UN1508	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 .....	242 .....	5 kg	25 kg	A
Strontium peroxide .....	5.1	UN1509	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 .....	242 .....	5 kg	25 kg	A
Strontium phosphide .....	4.3	UN2013	I	4.3, 6.1	A19, N40	None ...	211 .....	None	Forbiddn	15 kg	E
Strychnine or Strychnine salts .....	6.1	UN1692	I	6.1 .....	IB7, IP1, T6, TP33	None ...	211 .....	242 .....	5 kg	50 kg	A
Styphnic acid, see Trinitroresorcinol, etc.											
Styrene monomer, stabilized .....	3	UN2055	III	3 .....	B1, IB3, T2, TP1	150 .....	203 .....	242 .....	60 L	220 L	A
Substances, explosive, n.o.s .....	1.1L	UN0357	II	1.1L ...		None ...	62 .....	None	Forbiddn	Forbiddn	8E, 14E, 15E, 17E.
	1.2L	UN0358	II	1.2L ...		None ...	62 .....	None	Forbiddn	Forbiddn	8E, 14E, 15E, 17E.
	1.3L	UN0359	II	1.3L ...		None ...	62 .....	None	Forbiddn	Forbiddn	8E, 14E, 15E, 17E.
	1.1A	UN0473	II	1.1A ...	111	None ...	62 .....	None	Forbiddn	Forbiddn	12
	1.1C	UN0474	II	1.1C ...		None ...	62 .....	None	Forbiddn	Forbiddn	10
	1.1D	UN0475	II	1.1D ...		None ...	62 .....	None	Forbiddn	Forbiddn	10
	1.1G	UN0476	II	1.1G ...		None ...	62 .....	None	Forbiddn	Forbiddn	08
	1.3C	UN0477	II	1.3C ...		None ...	62 .....	None	Forbiddn	Forbiddn	10
	1.3G	UN0478	II	1.3G ...		None ...	62 .....	None	Forbiddn	Forbiddn	08
	1.4C	UN0479	II	1.4C ...		None ...	62 .....	None	Forbiddn	Forbiddn	75 kg 09
	1.4D	UN0480	II	1.4D ...		None ...	62 .....	None	Forbiddn	Forbiddn	75 kg 09
	1.4S	UN0481	II	1.4S ...		None ...	62 .....	None	Forbiddn	Forbiddn	75 kg 05
	1.4G	UN0485	II	1.4G ...		None ...	62 .....	None	Forbiddn	Forbiddn	75 kg 08



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Other (10B)	Loca-tion (10A)	
G	Substances, explosive, very insensi-tive, n.o.s. or Substances E, V, n.o.s.	1.5D	UN0482	II	1.5D ..		None ..	62 .....	None	Forbidden	Forbidden	10		
	Substituted nitrophenol pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	3	UN2780	I	3, 6.1	T14, TP2, TP13, TP27	None ..	201 .....	243 .....	Forbidden	Forbidden	30 L	B	40
	Substituted nitrophenol pesticides, liquid, toxic.	6.1	UN3014	II	3, 6.1	IB2, T11, TP2, TP13, TP27	150 .....	202 .....	243 .....	1 L	60 L	B	B	40
	Substituted nitrophenol pesticides, liquid, toxic.	6.1	UN3013	I	6.1 .....	T14, TP2, TP13, TP27	None ..	201 .....	243 .....	1 L	30 L	B	B	40
	Substituted nitrophenol pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	6.1	UN3013	III	6.1, 3	IB2, T11, TP2, TP13, TP27	153 .....	202 .....	243 .....	5 L	60 L	B	B	40
	Substituted nitrophenol pesticides, solid, toxic.	6.1	UN2779	I	6.1, 3	IB2, T11, TP2, TP13, TP27	153 .....	202 .....	243 .....	5 L	60 L	B	B	40
	Substituted nitrophenol pesticides, solid, toxic.	6.1	UN2779	III	6.1, 3	B1, IB3, T7, TP2, TP28	153 .....	203 .....	242 .....	60 L	220 L	A	A	40
	Substituted nitrophenol pesticides, solid, toxic.	6.1	UN2779	I	6.1 .....	IB7, IP1, T6, TP33	None ..	211 .....	242 .....	5 kg	50 kg	A	A	40
	Sucrose octanitrate (dry)	Forbidden		II	6.1 .....	IB8, IP2, IP4, T3, TP33	153 .....	212 .....	242 .....	25 kg	100 kg	A	A	40
	Sulfamic acid	8	UN2967	III	6.1 .....	IB8, IP3, T1, TP33	153 .....	213 .....	240 .....	100 kg	200 kg	A	A	40
D	Sulfur	9	NA1350	III	8 .....	IB8, IP3, T1, TP33	154 .....	213 .....	240 .....	25 kg	100 kg	A	A	19, 74
I	Sulfur	4.1	UN1350	III	9 .....	30, IB8, IP2	None ..	None ..	240 .....	No Limit	No Limit	A	A	19, 74
	Sulfur and chlorate, loose mixtures of	Forbidden		III	4.1 .....	30, IB8, IP3, T1, TP33	None ..	None ..	240 .....	25 kg	100 kg	A	A	19, 74
	Sulfur chlorides	8	UN1828	I	8 .....	5, A3, A7, A10, B10, B77, N34, T20, TP2	None ..	201 .....	243 .....	Forbidden	2.5 L	C	C	40
	Sulfur dichloride, see Sulfur chlorides.	2.3	UN1079	2, 3, 8	2, 3, 8	3, B14, T50, TP19	None ..	304 .....	314, 315.	Forbidden	Forbidden	D	D	40
	Sulfur dioxide	2.2	UN1080	2, 2	2.2 .....		306 .....	304 .....	314, 315.	75 kg	150 kg	A	A	61
D	Sulfur dioxide solution, see Sulfurous acid.	9	NA2448	III	9 .....	30, IB3, T1, TP3	None ..	213 .....	247 .....	Forbidden	Forbidden	C	C	61
	Sulfur hexafluoride	2.2	UN1080	III	9 .....		None ..	213 .....	247 .....	Forbidden	Forbidden	C	C	61

UN Number	Proper Shipping Name	Class	Division	Subdivision	Special Provisions	Quantity	Label	Other
4.1 UN2448	Sulfur, molten	III	4.1	.....	30, IB1, T1, TP3	None	213	Forbiddén
2.3 UN2418	Sulfur tetrafluoride	I	2.3, 8	.....	1	None	302	Forbiddén
8 UN1829	Sulfur trioxide, stabilized	I	8, 6.1	.....	2, B9, B14, B32, B49, B77, N34, T20, TP4, TP13, TP25, TP26, TP38, TP45	None	227	Forbiddén
8 UN1831	Sulfuretted hydrogen, see Hydrogen sulfide.	I	8	.....	A3, A7, N34, T20, TP2, TP13	None	201	Forbiddén
8 UN1831	Sulfuric acid, fuming with less than 30 percent free sulfur trioxide.	I	8, 6.1	.....	2, B9, B14, B32, B74, B77, B84, N34, T20, TP2, TP13	None	227	Forbiddén
8 UN1832	Sulfuric acid, fuming with 30 percent or more free sulfur trioxide.	II	8	.....	A3, A7, B2, B83, B84, IB2, N34, T8, TP2	None	202	Forbiddén
8 UN1830	Sulfuric acid with more than 51 percent acid.	II	8	.....	A3, A7, B3, B83, B84, IB2, N34, T8, TP2	154	202	30 L C
8 UN2796	Sulfuric acid with not more than 51% acid.	II	8	.....	A3, A7, B2, B15, IB2, N6, N34, T8, TP2	154	202	30 L B
8 UN1833	Sulfuric and hydrofluoric acid mixtures, see Hydrofluoric and sulfuric acid mixtures.	II	8	.....	B3, IB2, T7, TP2	154	202	30 L B
6.1 UN1834	Sulfurous acid	I	6.1, 8	.....	1, B6, B9, B10, B14, B30, B77, N34, T22, TP2, TP13, TP38, TP44	None	226	Forbiddén
2.3 UN2191	Sulfuryl fluoride	III	2.3	.....	4	None	304	Forbiddén
3 UN1999	Tars, liquid including road oils and cutback bitumens.	III	3	.....	149, B13, IB2, T3, TP3, TP29	150	202	60 L B
6.1 UN1700	Tear gas candles	III	6.1	.....	B1, B13, IB3, T1, TP3	150	203	220 L A
		II	6.1, 4.1	.....		None	340	50 kg D
6.1 NA1693	Tear gas cartridges, see Ammunition, tear-producing, etc.	I	6.1	.....		None	340	Forbiddén
	Tear gas devices with more than 2 percent tear gas substances, by mass.	II	6.1	.....		None	340	Forbiddén
	Tear gas devices, with not more than 2 percent tear gas substances, by mass, see Aerosols, etc.							
	Tear gas grenades, see Tear gas candles.							
6.1 UN1693	Tear gas substances, liquid, n.o.s.	I	6.1	.....	IB2	None	201	Forbiddén
6.1 UN3448	Tear gas substance, solid, n.o.s.	II	6.1	.....	T6, TP33	None	202	5 L D
		II	6.1	.....	IB8, IP2, IP4, T3, TP33	None	211	Forbiddén
		II	6.1	.....		None	212	25 kg D

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
G	Tellurium compound, n.o.s.	6.1	UN3284	I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	B		
	Tellurium hexafluoride	2.3	UN2195	III	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	B		
	Terpene hydrocarbons, n.o.s.	3	UN2319	III	2.3, 8	1	153	213	240	100 kg	200 kg	A		
	Terpinolene	3	UN2541	III	3	B1, IB3, T4, TP1, TP29	None	302	None	Forbidden	Forbidden	D	40	
	Tetraazido benzene quinone	Forbidden		III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Tetrahydroethane	6.1	UN2504	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A		
	1,1,2-Tetrachloroethane	6.1	UN1702	II	6.1	IB2, N36, T7, TP2	153	202	243	5 L	60 L	A	40	
	Tetrachloroethylene	6.1	UN1897	III	6.1	IB3, N36, T4, TP1	153	203	241	60 L	220 L	A	40	
	Tetraethyl dithiophosphate	6.1	UN1704	II	6.1	IB2, T7, TP2	153	212	242	25 kg	100 kg	D	40	
	Tetraethyl silicate	3	UN1292	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Tetraethylammonium perchlorate (dry)	Forbidden		III	3		150	203	242	60 L	220 L	A		
	Tetraethylenepentamine	8	UN2320	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	52	
	1,1,1,2-Tetrafluoroethane or Refrigerant gas R 134a	2.2	UN3159	II	2.2	T50	306	304	314, 315	75 kg	150 kg	A		
	Tetrafluoroethylene, stabilized	2.1	UN1081	2.1	2.1		306	304	None	Forbidden	150 kg	E	40	
	Tetrafluoroethane or Refrigerant gas R 14	2.2	UN1982	2.2	2.2		None	302	None	75 kg	150 kg	A		
	1,2,3,6-Tetrahydrobenzaldehyde	3	UN2498	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Tetrahydrofuran	3	UN2056	II	3	IB2, T4, TP1	None	202	242	5 L	60 L	B		
	Tetrahydrofurylamine	3	UN2943	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Tetrahydrophthalic anhydrides with more than 0.05 percent of maleic anhydride	8	UN2698	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A		
	1,2,3,6-Tetrahydropyridine	3	UN2410	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B		
	Tetrahydrothiophene	3	UN2412	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B		
	Tetramethylammonium hydroxide, solid	8	UN3423	II	8	B2, IB8, IP2, IP4, T3, TP33	154	213	240	15 kg	50 kg	A	52	
	Tetramethylammonium hydroxide solution	8	UN1835	II	8	B2, IB2, T7, TP2	154	202	242	1 L	30 L	A	52	
	Tetramethylene diperoxide dicarbamide	Forbidden		III	8	B2, IB3, T7, TP2	154	203	241	5 L	60 L	A	52	
	Tetramethylsilane	3	UN2749	I	3	A7, T14, TP2	None	201	243	Forbidden	30 L	D		
	Tetranitro diglycerin	Forbidden		II	1.1D		None	62	None	Forbidden	Forbidden		10	
	Tetranitroaniline	1.1D	UN0207	II	1.1D		None	62	None	Forbidden	Forbidden		10	

+	UN1510	I	6.1, 5.1	2, B32, T20, TP2, TP13, TP38, TP44	None ...	227 ...	None	Forbidden	Forbidden	D	40, 6
Tetranitromethane	6.1	III	3	B1, IB3, T4, TP1	150	203	242	60 L	220 L	A	
2,3,4,6-Tetranitrophenol	Forbidden										
2,3,4,6-Tetranitrophenyl methyl nitramine	Forbidden										
2,3,4,6-Tetranitrophenylnitramine	Forbidden										
Tetranitroacetone (dry)	Forbidden										
2,3,5,6-Tetranitroso-1,4-dinitrobenzene	Forbidden										
2,3,5,6-Tetranitroso nitrobenzene (dry)	3	III	3	B1, IB3, T4, TP1	150	203	242	60 L	220 L	A	
Tetrapropylorthoitanate	UN2413										
Tetrazene, see Guananyl nitrosamino-guanyltetrazene											
Tetrazine (dry)	Forbidden										
Tetrazol-1-acetic acid	1.4C	II	1.4C		None	62	None	Forbidden	75 kg	09	
1H-Tetrazole	1.1D	II	1.1D		None	62	None	Forbidden	Forbidden	B	1E, 5E
Tetrazolyl azide (dry)	Forbidden										
Teuryl, see Trinitrophenylmethylnitramine											
Textile waste, wet	UN1857	III	4.2		151	213	240	Forbidden	Forbidden	A	
Thallium chlorate	UN2573	II	5.1	IB6, IP2, T3, TP33	152	212	242	5 kg	25 kg	A	56, 58
Thallium compounds, n.o.s.	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	
Thallium nitrate	UN2727	II	6.1	IB6, IP2, T3, TP33	153	212	242	5 kg	25 kg	A	
4-Thiopenatal	UN2785	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	D	25, 49
Thioacetic acid	UN2496	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	
Thiocarbamate pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	3	I	3, 6.1	T14, TP2, TP13, TP27	None	201	243	Forbidden	30 L	B	40
Thiocarbamate pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	UN3005	II	3, 6.1	IB2, T11, TP13, TP27	150	202	243	1 L	60 L	B	40
	6.1	I	6.1, 3	T14, TP2, TP13	None	201	243	1 L	30 L	B	40
Thiocarbamate pesticide, liquid, toxic	UN3006	II	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
	6.1	III	6.1, 3	IB3, T7, TP2, TP28	153	203	242	60 L	220 L	A	40
	6.1	I	6.1	T14, TP2, TP13	None	201	243	1 L	30 L	B	40
	6.1	II	6.1	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40
	6.1	III	6.1	IB3, T7, TP2, TP28	153	203	241	60 L	220 L	A	40
	6.1	I	6.1	IB7, IP1, T6, TP33	None	211	242	5 kg	50 kg	A	40
	6.1	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A	40
	6.1	III	6.1	IB8, IP3, T1, TP33	153	213	240	100 kg	200 kg	A	40
Thiocarbonylchloride, see Thiophosgene											
Thioglycol	UN2966	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
	Thioglycolic acid .....	8	UN1940	II	8	A7, B2, IB2, N34, T7, TP2	154	202	242	1 L	30 L	A	
	Thioloactic acid .....	6.1	UN2936	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	
	Thionyl chloride .....	8	UN1836	I	8	B6, B10, N34, T10, TP2, TP13	None	201	243	Forbidden	Forbidden	C	40
	Thiophene .....	3	UN2414	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B	40
+	Thiophosgene .....	6.1	UN2474	I	6.1	2, B9, B14, B32, N33, N34, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40, 52
	Thiophosphoryl chloride .....	8	UN1837	II	8	A3, A7, B2, B8, B25, IB2, N34, T7, TP2	None	202	242	Forbidden	30 L	C	40
	Thiourea dioxide .....	4.2	UN3341	III	4.2	IB6, IP2, T3, TP33	None	212	241	15 kg	50 kg	D	
	<i>Tin chloride, fuming, see Stannic chloride, anhydrous.</i>				4.2	IB8, IP3, T1, TP33	None	213	241	25 kg	100 kg	D	
	<i>Tin perchloride or Tin tetrachloride, see Stannic chloride, anhydrous.</i>												
	<i>Tinctures, medicinal</i> .....												
	<i>Tinning flux, see Zinc chloride.</i>												
	Tires and tire assemblies, see Air, compressed or Nitrogen, com-pressed.												
	Titanium disulphide .....	4.2	UN3174	III	4.2	IB8, IP3, T1, TP33	None	213	241	25 kg	100 kg	A	
	Titanium hydride .....	4.1	UN1871	II	4.1	A19, A20, IB4, N34, T3, TP33	None	212	241	15 kg	50 kg	E	
	Titanium powder, dry .....	4.2	UN2546	I	4.2	A19, A20, IB6, IP2, N5, N34, T3, TP33	None	211	242	Forbidden	Forbidden	D	
	Titanium powder, wetted with not less than 25 percent water (a visi-ble excess of water must be present) (a) mechanically pro-duced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns.	4.1	UN1352	II	4.1	A19, A20, IB6, IP2, N34, T3, TP33	None	212	240	15 kg	50 kg	D	74



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identifi-cation Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
G	Toxic by inhalation liquid, flammable, corrosive, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50.	6.1	UN3489	I	6.1, 3, 8.	2, B9, B14, B32, B74, T20, TP2, TP13, TP27, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40, 125
G	Toxic by inhalation liquid, n.o.s. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50.	6.1	UN3381	I	6.1 .....	1, B9, B14, B30, T22, TP2, TP13, TP27, TP38, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40
G	Toxic by inhalation liquid, n.o.s. with an inhalation toxicity lower than or equal to 1000ml/m <sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50.	6.1	UN3382	I	6.1 .....	2, B9, B14, B32, T20, TP2, TP13, TP27, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40
G	Toxic by inhalation liquid, flammable, n.o.s. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50.	6.1	UN3383	I	6.1, 3	1, B9, B14, B30, T22, TP2, TP13, TP27, TP38, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40
G	Toxic by inhalation liquid, flammable, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapor concentration greater than or equal to 10 LC50.	6.1	UN3384	I	6.1, 3	2, B9, B14, B32, T20, TP2, TP13, TP27, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40
G	Toxic by inhalation liquid, water-reactive, n.o.s. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapor concentration greater than or equal to 500 LC50.	6.1	UN3385	I	6.1, 4.3.	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40

G	6.1	UN3386	I	6.1, 4.3.	2, B9, B14, B32, T20, TP2, TP13, TP38, TP44	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40
G	6.1	UN3490	I	6.1, 4.3, 3.	1, B9, B14, B30, B72, T22, TP2, TP13, TP27, TP38, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	21, 28, 40, 49
G	6.1	UN3491	I	6.1, 4.3, 3.	2, B9, B14, B32, B74, T20, TP2, TP13, TP27, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	21, 28, 40, 49
G	6.1	UN3387	I	6.1, 5.1.	1, B9, B14, B30, T22, TP2, TP13, TP38, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40
G	6.1	UN3388	I	6.1, 5.1.	2, B9, B14, B32, T20, TP2, TP13, TP38, TP44	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40
G	6.1	UN3389	I	6.1, 8	1, B9, B14, B30, T22, TP2, TP13, TP27, TP38, TP44	None ...	226 ...	244 ...	Forbidden	Forbidden	D	40
G	6.1	UN3390	I	6.1, 8	2, B9, B14, B32, T20, TP2, TP13, TP27, TP38, TP45	None ...	227 ...	244 ...	Forbidden	Forbidden	D	40
G	6.1	UN3289	I	6.1, 8	T14, TP2, TP13, TP27	None ...	201 ...	243 ...	0.5 L	2.5 L	A	
G	6.1	UN3287	II	6.1, 8	IB2, T11, TP2, TP27	153	202	243	1 L	30 L	A	
			I	6.1	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	A	
			II	6.1	IB2, T11, TP2, TP27	153	202	243	5 L	60 L	A	
			III	6.1	IB3, T7, TP1, TP28	153	203	241	60 L	220 L	A	
G	6.1	UN2927	I	6.1, 8	T14, TP2, TP13, TP27	None	201	243	0.5 L	2.5 L	B	40
G	6.1	UN2929	II	6.1, 8	IB2, T11, TP2, TP27	153	202	243	1 L	30 L	B	40
			I	6.1, 3	T14, TP2, TP13, TP27	None	201	243	1 L	30 L	B	40



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Other (10B)	Loca-tion (10A)	
G	..... Toxic liquids, organic, n.o.s. ....	6.1	UN2810	II	6.1, 3	IB2, T11, TP2, TP13, TP27	153	202	243	5 L	60 L	B	40	
G	..... Toxic liquids, oxidizing, n.o.s. ....	6.1	UN3122	III	6.1, 5.1	T14, TP2, TP13, TP27 IB2, T11, TP2, TP13, TP27 IB3, T7, TP1, TP28 A4	None	201	243	1 L	30 L	B	40	
G	..... Toxic liquids, water-reactive, n.o.s. ....	6.1	UN3123	II	6.1, 5.1, 4.3	IB2 A4	153	202	243	1 L	5 L	C	40	
G	..... Toxic solid, corrosive, inorganic, n.o.s. ....	6.1	UN3290	II	6.1, 4.3	IB2	None	202	243	1 L	5 L	E	40	
G	..... Toxic solid, inorganic, n.o.s. ....	6.1	UN3288	II	6.1, 8	IB7, T6, TP33	153	211	242	1 kg	25 kg	A	40	
G	..... Toxic solids, corrosive, organic, n.o.s. ....	6.1	UN2928	III	6.1, 8	IB6, IP2, T3, TP33 IB7, T6, TP33 IB8, IP2, IP4, T3, TP33 IB8, IP3, T1, TP33 IB7, T6, TP33	153	211	242	15 kg	50 kg	A	40	
G	..... Toxic solids, flammable, organic, n.o.s. ....	6.1	UN2930	II	6.1, 4.1	IB6, IP2, T3, TP33 IB6, T6, TP33	153	211	242	15 kg	50 kg	B	40	
G	..... Toxic solids, organic, n.o.s. ....	6.1	UN2811	II	6.1, 4.1	IB8, IP2, IP4, T3, TP33 IB7, T6, TP33	None	211	242	5 kg	50 kg	B	40	
G	..... Toxic solids, oxidizing, n.o.s. ....	6.1	UN3086	III	6.1, 5.1	IB8, IP2, T3, TP33 IB8, IP4, T3, TP33 IB8, IP3, T1, TP33 T6, TP33	153	213	240	25 kg	100 kg	B	40	
G	..... Toxic solids, self-heating, n.o.s. ....	6.1	UN3124	II	6.1, 4.2	IB6, IP2, T3, TP33	153	212	242	15 kg	50 kg	C	40	
	.....			II	6.1, 4.2	A5, T6, TP33	None	211	242	5 kg	15 kg	D	40	
	.....			II	6.1, 4.2	IB6, IP2, T3, TP33	None	212	242	15 kg	50 kg	D	40	

G	Toxic solids, water-reactive, n.o.s. ....	6.1	UN3125	I	6.1, 4.3.	A5, T6, TP33	None ...	211 ...	242 ...	5 kg	15 kg	D	40
G	.....	6.1	UN3172	II	6.1, 4.3.	IB6, IP2, T3, TP33	153 .....	212 ...	242 ...	15 kg	50 kg	D	40
G	Toxins, extracted from living sources, liquid, n.o.s.	6.1		I	6.1	141	None ...	201 ...	243 ...	1 L	30 L	B	40
G	.....	6.1	UN3462	II	6.1	141, IB2	None	202 ...	243 ...	5 L	60 L	B	40
G	Toxins, extracted from living sources, solid, n.o.s.	6.1		III	6.1	141, IB3	153 .....	203 ...	241 ...	60 L	220 L	B	40
G	.....	6.1		I	6.1	141, IB7, IP1, T6, TP33	None ...	211 ...	243 ...	5 kg	50 kg	B	40
D	Toxic solids, water-reactive, n.o.s. ....	6.1	UN3125	II	6.1	141, IB8, IP2, IP4, T3 TP33	None ...	212 ...	243 ...	25 kg	100 kg	B	40
D	.....	1.4S	NA0337	III	6.1	141, IB8, IP3, T1 TP33	153 .....	213 ...	241 ...	100 kg	200 kg	A	13
D	Tracers for ammunition	1.3G	UN0212	II	1.4S		None	62	None	25 kg	100 kg	05	40
D	Tracers for ammunition	1.4G	UN0306	II	1.4G		None	62	None	Forbidden	Forbidden	07	40
D	Tracers, see Vehicle, etc.	Forbidden		II	1.4G		None	62	None	Forbidden	75 kg	06	40
D	Tri-( <i>o</i> -nitroxyethyl) ammonium nitrate	6.1	UN2609	III	6.1	IB3	153 .....	203 ...	241 ...	60 L	220 L	A	13
D	Triallyl borate	3	UN2610	III	3, 8	B1, IB3, T4, TP1	None	203 ...	242 ...	5 L	60 L	A	40
D	Triallylamine	3	UN2764	I	3, 6.1	T14, TP2, TP13, TP27	None	201 ...	243 ...	Forbidden	30 L	B	40
D	Triazine pesticides, liquid, flammable, toxic, flash point less than 23 degrees C.	6.1	UN2997	III	6.1	IB2, T11, TP2, TP13, TP27	150 .....	202 ...	243 ...	1 L	60 L	B	40
D	.....	6.1	UN2998	I	6.1	T14, TP2, TP13, TP27	None	201 ...	243 ...	1 L	30 L	B	40
D	.....	6.1		II	6.1	IB2, T11, TP2, TP13, TP27	153 .....	202 ...	243 ...	5 L	60 L	B	40
D	Triazine pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C.	6.1	UN2997	III	6.1	IB3, T7, TP2, TP28	153 .....	203 ...	241 ...	60 L	220 L	A	40
D	.....	6.1		I	6.1, 3	T14, TP2, TP13, TP27	None	201 ...	243 ...	1 L	30 L	B	40
D	.....	6.1		II	6.1, 3	IB2, T11, TP2, TP13, TP27	153 .....	202 ...	243 ...	5 L	60 L	B	40
D	Triazine pesticides, solid, toxic	6.1	UN2763	III	6.1, 3	IB3, T7, TP2, TP28	153 .....	203 ...	242 ...	60 L	220 L	A	40
D	.....	6.1		I	6.1	IB7, IP1, T6, TP33	None	211 ...	242 ...	5 kg	50 kg	A	40
D	.....	6.1		III	6.1	IB8, IP2, IP4, T3, TP33	153 .....	212 ...	242 ...	25 kg	100 kg	A	40
D	.....	6.1		III	6.1	IB8, IP3, T1, TP33	153 .....	213 ...	240 ...	100 kg	200 kg	A	40
D	Tributylamine	4.2	UN2542	I	4.2	IB2, T7, TP2	153 .....	202 ...	243 ...	5 L	60 L	A	40
D	.....	4.2	UN3254	I	4.2	T21, TP7, TP33	None	211 ...	242 ...	Forbidden	Forbidden	D	136
D	Trichloro-s-triazinetrone dry, with more than 39 percent available chlorine, see Trichlorisocyanuric acid, dry.	8	UN1839	II	8	A7, IB8, IP2, IP4, N34, TP33	154 .....	212 ...	240 ...	15 kg	50 kg	A	40
D	Trichloroacetic acid	8	UN2564	II	8	A3, A6, A7, B2, IB2, N34, T7, TP2	154 .....	202 ...	242 ...	1 L	30 L	B	40
D	.....	8		III	8	A3, A6, A7, IB3, N34, T4, TP1	154 .....	203 ...	241 ...	5 L	60 L	B	8

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
+	Trichloroacetyl chloride	8	UN2442	II	8, 6.1	2, B9, B14, B32, N34, T20, TP2, TP36, TP45	None	227	244	Forbidden	Forbidden	D	40
	Trichlorobenzenes, liquid	6.1	UN2321	III	6.1	IB3, T4, TP1	153	203	241	60 L	220 L	A	25, 40
	Trichlorobutene	6.1	UN2322	III	6.1	IB2, T7, TP2	153	203	243	5 L	60 L	A	40
	1,1,1-Trichloroethane	6.1	UN2831	III	6.1	IB3, N36, T4, TP1	153	203	241	60 L	220 L	A	40
	Trichloroethylene	6.1	UN1710	III	6.1	IB3, N36, T4, TP1	153	203	241	60 L	220 L	A	40
	Trichloroacetic acid, dry	5.1	UN2468	II	5.1	IB8, IP2, IP4, T3, TP33	152	212	240	5 kg	25 kg	A	13
	Trichloromethyl perchlorate	Forbidden											
	Trichlorosilane	4.3	UN1295	I	4.3, 3, 8	N34, T14, TP2, TP7, TP13	None	201	244	Forbidden	Forbidden	D	21, 28, 40, 49, 100
	Tricresyl phosphate with more than 3 percent ortho isomer	6.1	UN2574	II	6.1	A3, IB2, N33, N34, T7, TP2	153	202	243	5 L	60 L	A	40
	Triethyl phosphite	3	UN2323	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40
	Triethylamine	3	UN1296	II	3, 8	IB2, T7, TP1	150	202	243	1 L	5 L	B	40, 52
	Triethylenetetramine	8	UN2259	I	8	B2, IB2, T7, TP2	154	202	242	1 L	30 L	B	12, 40
	Trifluoroacetic acid	8	UN2699	I	8	A3, A6, A7, B4, N3, N34, N36, T10, TP2	None	201	243	0.5 L	2.5 L	B	40
	Trifluoroacetyl chloride	2.3	UN3057		2.3, 8	2, B7, B9, B14, T50, TP21	None	304	314	Forbidden	Forbidden	D	40
	Trifluorochloroethylene, stabilized	2.3	UN1082		2.3	3, B14, T50	None	304	314	Forbidden	Forbidden	D	40
Trifluoromethane or Refrigerant gas R 23	2.2	UN1984		2.1		306	304	314	75 kg	150 kg	A		
Trifluoromethane, refrigerated liquid	2.2	UN3136		2.2	T75, TP5	306	None	314	50 kg	500 kg	D		
1,1,1-Trifluoroethane or Refrigerant gas, R 143a	2.1	UN2035		2.1	T50	306	304	314	Forbidden	150 kg	B	40	
2-Trifluoromethylaniline	6.1	UN2942	III	6.1	IB3	153	203	241	60 L	220 L	A	40	
3-Trifluoromethylaniline	6.1	UN2948	II	6.1	IB2, T7, TP2	153	202	243	5 L	60 L	A	40	
Trifluoromine trinitrate	Forbidden												
Trisobutylene	3	UN2324	III	3	B1, IB3, T4, TP1	150	203	242	60 L	220 L	A	40	
Triisopropyl borate	3	UN2616	III	3	B1, IB3, T2, TP1	150	203	242	5 L	60 L	A	40	
Trimethoxyisilane	6.1	NA9269	I	6.1, 3	2, B9, B14, B32, T20, TP4, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	E	40	
Trimethyl borate	3	UN2416	III	3	IB2, T7, TP1	150	202	242	5 L	60 L	B	40	
Trimethyl phosphite	3	UN2329	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A	40	

1,3,5-Trimethyl-2,4,6-trinitrobenzene	Forbiddén	UN2438	I	6.1, 8, 3	2, B3, B9, B14, B32, N34, T20, TP2, TP13, TP38, TP45, N87, T50	None	227	244	Forbiddén	Forbiddén	D	25, 40
Trimethylacetyl chloride	6.1											
Trimethylamine, anhydrous	2.1	UN1083	I	2.1	TP38, TP45, N87, T50	306	304	314, 315, 243	Forbiddén	150 kg	B	40
Trimethylamine, aqueous solutions with not more than 50 percent trimethylamine by mass.	3	UN1297	I	3, 8	T11, TP1	None	201	243	0.5 L	2.5 L	D	40, 135
Trimethylamine, aqueous solutions with not more than 50 percent trimethylamine by mass.												
1,3,5-Trimethylbenzene	3	UN2325	II	3, 8	B1, B2, T7, TP1	150	202	243	1 L	5 L	B	40, 41
Trimethylchlorosilane	3	UN1298	III	3, 8	B1, B3, T7, TP1	150	203	242	5 L	60 L	A	40, 41
Trimethylcyclohexylamine	8	UN2326	III	3, 8	B1, B3, T2, TP1	150	203	242	60 L	220 L	A	40, 41
Trimethylene glycol dipchloroacetate	6.1	UN2328	III	6.1	A3, A7, B77, N34, T10, TP2, TP7, TP13	None	206	243	1 L	5 L	E	40
Trimethylhexamethylenediamines	8	UN2327	III	8	IB3, T4, TP1	154	203	241	5 L	60 L	A	
Trimethyl nitromethane trinitrate	Forbiddén											
Tritro-m-cresol	1.1D	UN0216	II	1.1D	IB3, T4, TP2, TP13	153	203	241	60 L	220 L	B	
2,4,6-Trinitro-1,3-diazobenzene	Forbiddén											
2,4,6-Trinitro-1,3,5-triazido benzene (dry)	Forbiddén						62	None	Forbiddén	Forbiddén	10	5E
Tritroacetic acid	Forbiddén											
Tritroacetone	Forbiddén											
Tritroacetone trinitrate	Forbiddén											
Tritroamine cobalt	1.1D	UN0153	II	1.1D	162, A8, A19, N41, N84	None	62	None	Forbiddén	Forbiddén	10	
Tritroamine or Picramide	1.1D	UN0219	II	1.1D		None	62	None	Forbiddén	Forbiddén	10	
Tritroanisole	4.1	UN3367	I	4.1		None	211	None	0.5 kg	0.5 kg	E	36
Tritrobenzene, wetted, with not less than 10% water, by mass.	1.1D	UN0214	II	1.1D		None	62	None	Forbiddén	Forbiddén	10	
Tritrobenzene, dry or wetted with less than 30 percent water, by mass.	4.1	UN1354	I	4.1	23, A2, A8, A19, N41	None	211	None	0.5 kg	0.5 kg	E	28
Tritrobenzene, wetted with not less than 30 percent water, by mass.	1.1D	UN0386	II	1.1D		None	62	None	Forbiddén	Forbiddén	10	5E
Tritrobenzenesulfonic acid	1.1D	UN0215	II	1.1D		None	62	None	Forbiddén	Forbiddén	10	
Tritrobenzoic acid, dry or wetted with less than 30 percent water, by mass.	4.1	UN3368	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	36
Tritrobenzoic acid, wetted with not less than 10% water, by mass.	4.1	UN1355	I	4.1	23, A2, A8, A19, N41	None	211	None	0.5 kg	0.5 kg	E	28
Tritrobenzoic acid, wetted with not less than 30 percent water, by mass.	1.1D	UN0155	II	1.1D		None	62	None	Forbiddén	Forbiddén	10	
Tritrochlorobenzene or Picyl chloride.	4.1	UN3365	I	4.1	162, A8, A19, N41, N84	None	211	None	0.5 kg	0.5 kg	E	36
Tritrochlorobenzene (picyl chloride), wetted, with not less than 10% water by mass.	Forbiddén											
Tritroethanol	Forbiddén											

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
	<i>Trinitroethylnitrate</i> .....	Forbidden					None ...	62 .....	None	Forbidden	Forbidden	10		
	<i>Trinitrofluorenone</i> .....	1.1D ..	UN0387	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10		
	<i>Trinitromethane</i> .....	Forbidden					None ...	62 .....	None	Forbidden	Forbidden	10		
	<i>1,3,5-Trinitronaphthalene</i> .....	Forbidden					None ...	62 .....	None	Forbidden	Forbidden	10		
	<i>Trinitronaphthalene</i> .....	1.1D ..	UN0217	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10		
	<i>Trinitrophenetole</i> .....	1.1D ..	UN0218	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10		
	<i>Trinitrophenol (picric acid), wetted, with not less than 10 percent water by mass.</i> .....	4.1	UN3364	I	4.1 .....	162, A8, A19, N41, N84	None ...	211 .....	None	0.5 kg	0.5 kg	E	36	
	<i>Trinitrophenol or Picric acid, dry or wetted with less than 30 percent water, by mass.</i> .....	1.1D	UN0154	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10	5E	
	<i>Trinitrophenol, wetted or Picric acid, wetted, with not less than 30 percent water by mass.</i> .....	4.1	UN1344	I	4.1 .....	23, A8, A19, N41	None ...	211 .....	None	1 kg	15 kg	E	28, 36	
	<i>2,4,6-Trinitrophenyl guanidine (dry)</i> ..	Forbidden												
	<i>2,4,6-Trinitrophenyl nitramine</i> .....	Forbidden												
	<i>2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry).</i> .....	Forbidden												
	<i>Trinitrophenylmethylnitramine or Tet-yl.</i> .....	1.1D	UN0208	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10		
	<i>Trinitroresorcinol or Styphnic acid, dry or wetted with less than 20 percent water, or mixture of alcohol and water, by mass.</i> .....	1.1D	UN0219	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10	5E	
	<i>Trinitroresorcinol, wetted or Styphnic acid, wetted with not less than 20 percent water, or mixture of alcohol and water, by mass.</i> .....	1.1D	UN0394	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10	5E	
	<i>2,4,6-Trinitroso-3-methyl nitraminoanisole.</i> .....	Forbidden												
	<i>Trinitroethyltriamine cobalt nitrate</i> .....	Forbidden												
	<i>Trinitrotoluene and Trinitrobenzene mixtures or TNT and trinitrobenzene mixtures or TNT and hexanitrostilbene mixtures or Trinitrotoluene and hexanitrostilbene mixtures.</i> .....	1.1D	UN0388	II	1.1D ..		None ...	62 .....	None	Forbidden	Forbidden	10		

UN number	Proper shipping name	Class	Division	Subdivision	Special provisions	Quantity	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden
1.1D UN0389	Trinitroloeuene mixtures containing Trinitrobenzene	II	1.1D	..	None	62	None	None	Forbidden	Forbidden	Forbidden	Forbidden
1.1D UN0209	Hexanitrostilbene or TNT mixtures containing trinitrobenzene and hexanitrostilbene.	II	1.1D	..	None	62	None	None	Forbidden	Forbidden	Forbidden	Forbidden
4.1 UN3366	Trinitroloeuene or TNT, dry or wetted with less than 30 percent water, by mass.	I	4.1	.....	162, A8, A19, N41, N84	211	None	0.5 kg	0.5 kg	0.5 kg	0.5 kg	E 36
4.1 UN1356	Trinitroloeuene (TNT), wetted, with not less than 10 percent water by mass.	I	4.1	.....	23, A2, A8, A19, N41	211	None	0.5 kg	0.5 kg	0.5 kg	0.5 kg	E 28, 36
3 UN2260	Tripropylamine	III	3, 8	.....	B1, IB3, T4, TP1	203	242	5 L	60 L	60 L	60 L	A 40
3 UN2057	Tripropylene	III	3	.....	IB2, T4, TP1	150	242	5 L	60 L	60 L	220 L	A B
6.1 UN2501	Tris-(1-aziridinyl)phosphine oxide, solution.	III	6.1	.....	B1, IB3, T2, TP1	202	242	60 L	60 L	60 L	60 L	A A
Forbidden	Tris, bis-bifluoroamino diethoxy propane (TVOA).	III	6.1	.....	IB2, T7, TP2	153	243	5 L	60 L	220 L	220 L	A A
1.1D UN0390	Trifluralin	II	1.1D	..	IB3, T4, TP1	153	241	60 L	220 L	220 L	220 L	A A
2.3 UN2196	Tungsten hexafluoride	III	2, 3, 8	.....	None	62	None	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden
3 UN1299	Turpentine	III	3	.....	None	338	None	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden
3 UN1300	Turpentine substitute	I	3	.....	None	203	243	60 L	60 L	60 L	60 L	D A
3 UN2330	Undecane	III	3	.....	B1, IB3, T2, TP1	202	242	1 L	30 L	30 L	30 L	B B
5.1 UN1511	Urea hydrogen peroxide	III	5.1, 8	.....	IB2, T4, TP1	150	242	5 L	60 L	60 L	60 L	A A
1.1D UN0220	Urea nitrate, dry or wetted with less than 20 percent water, by mass.	II	1.1D	..	B1, IB3, T2, TP1	203	242	60 L	60 L	60 L	60 L	A A
4.1 UN3370	Urea nitrate, wetted, with not less than 10 percent water, by mass.	I	4.1	.....	B1, IB3, T2, TP1	203	242	60 L	60 L	60 L	60 L	A A
4.1 UN1357	Urea nitrate, wetted with not less than 20 percent water, by mass.	I	4.1	.....	A1, A7, A29, IB8, IP3, T1, TP33	213	240	25 kg	100 kg	100 kg	100 kg	A A
3 UN2058	Urea peroxide, see Urea hydrogen peroxide.	III	3	.....	None	62	None	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden
8 UN2502	Valeraldehyde	II	8	.....	162, A8, A19, N41, N84	211	None	0.5 kg	0.5 kg	0.5 kg	0.5 kg	E 36
6.1 UN3285	Valeric acid, see Corrosive liquids, n.o.s.	I	6.1	.....	23, 39, A8, A19, N41	211	None	1 kg	1 kg	1 kg	1 kg	E 28, 36
8 UN2443	Valeryl chloride	III	8	.....	None	211	242	5 L	60 L	60 L	60 L	B B
6.1 UN2862	Vanadium compound, n.o.s.	III	6.1	.....	IB2, T4, TP1	202	242	5 L	60 L	60 L	60 L	B B
6.1 UN2443	Vanadium oxytrichloride	III	6.1	.....	A3, A6, A7, B2, IB2, N34, T7, TP2	154	243	1 L	30 L	30 L	30 L	C C
6.1 UN2862	Vanadium pentoxide, non-fused form	III	6.1	.....	IB7, IP1, T6, TP33	211	242	5 kg	50 kg	50 kg	50 kg	B B
		III	6.1	.....	IB8, IP2, IP4, T3, TP33	212	242	25 kg	100 kg	100 kg	100 kg	B B
		III	6.1	.....	IB8, IP3, T1, TP33	153	240	100 kg	200 kg	200 kg	200 kg	C C
		III	6.1	.....	A3, A6, A7, B2, B16, IB2, N34, T7, TP2	154	242	Forbidden	Forbidden	Forbidden	Forbidden	C C
		III	6.1	.....	IB8, IP3, T1, TP33	153	240	100 kg	200 kg	200 kg	200 kg	A A

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§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)			(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)	
	Vanadium tetrachloride .....	8	UN2444	I	8	A3, A6, A7, B4, N34, T10, TP2	None	201	243	Forbidden	2.5 L	C	40	
	Vanadium trichloride .....	8	UN2475	III	8	IB8, IP3, T1, TP33	154	213	240	25 kg	100 kg	A	40	
	Vanadyli sulfate .....	6.1	UN2931	II	6.1	IB8, IP2, IP4, T3, TP33	153	212	242	Forbidden	100 kg	A		
	Vehicle, flammable gas powered or powered, fuel cell, flammable gas powered .....	9	UN3166	II	9	135	220	220	220	Forbidden	No limit	A		
	Vehicle, flammable liquid powered or powered, fuel cell, flammable liquid powered .....	9	UN3166	II	9	135	220	220	220	No limit	No limit	A		
	Very signal cartridge, see Cartridges, signal .....	3	UN1301	II	3	IB2, T4, TP1	150	202	242	5 L	60 L	B		
	Vinyl acetate, stabilized .....	2.1	UN1085	II	2.1	N86, T50	306	304	314	Forbidden	150 kg	B	40	
	Vinyl bromide, stabilized .....	2.1	UN1086	II	2.1	IB2, T4, TP1	150	202	242	5 L	60 L	B		
	Vinyl butyrate, stabilized .....	2.1	UN1086	II	2.1	21, B44, N86, T50	306	304	314	Forbidden	150 kg	B	40	
	Vinyl chloride, stabilized .....	2.1	UN1086	II	2.1	IB2, T7, TP2	153	202	243	5 L	60 L	A		
	Vinyl chloroacetate .....	6.1	UN2589	II	6.1, 3	A3, T11, TP2	None	201	243	1 L	30 L	D		
	Vinyl ethyl ether, stabilized .....	3	UN1302	I	3	N86	306	304	314	Forbidden	150 kg	E	40	
	Vinyl fluoride, stabilized .....	2.1	UN1860	II	2.1	IB2, T4, TP1	150	202	242	5 L	60 L	B		
	Vinyl isobutyl ether, stabilized .....	3	UN1304	II	3	B44, T50	306	304	314	Forbidden	150 kg	B	40	
	Vinyl methyl ether, stabilized .....	2.1	UN1087	II	2.1		306	304	315					
	Vinyl nitrate polymer .....	Forbidden												
	Vinylidene chloride, stabilized .....	3	UN1303	I	3	T12, TP2, TP7	150	201	243	1 L	30 L	E	40	
	Vinylpyridines, stabilized .....	6.1	UN3073	II	6.1, 3, 8	IB1, T7, TP2, TP13	153	202	243	1 L	30 L	B	21, 40, 52	
	Vinyltoluenes, stabilized .....	3	UN2618	III	3	B1, IB3, T2, TP1	150	203	242	60 L	220 L	A		
	Vinyltrichlorosilane, stabilized .....	3	UN1305	II	3, 8	A3, A7, B6, N34, T10, TP2, TP7, TP13	None	206	243	1 L	5 L	B	40	
	Warheads, rocket with burster or ex-pelling charge .....	1.4D	UN0370	II	1.4D		None	62	62	Forbidden	75 kg	02		
	Warheads, rocket with burster or ex-pelling charge .....	1.4F	UN0371	II	1.4F		None	62	62	Forbidden	Forbidden	08		
	Warheads, rocket with bursting charge .....	1.1D	UN0286	II	1.1D		None	62	62	Forbidden	Forbidden	03		

UN Number	Proper Shipping Name	1.2D	1.1F	1.1D	1.1E	1.1G	1.1H	1.1I	1.1J	1.1K	1.1L	1.1M	1.1N	1.1O	1.1P	1.1Q	1.1R	1.1S	1.1T	1.1U	1.1V	1.1W	1.1X	1.1Y	1.1Z
UN0287	Warheads, rocket with bursting charge.	II	1.1F	1.1D	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN0369	Warheads, rocket with bursting charge.	III	4.3.8	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN0221	Warheads, torpedo with bursting charge.	II	1.1D	1.1D	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3129	G Water-reactive liquid, corrosive, n.o.s.	I	4.3.8	4.3.8	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3148	G Water-reactive liquid, n.o.s.	III	4.3.8	4.3.8	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3130	G Water-reactive liquid, toxic, n.o.s.	III	4.3	4.3	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3131	G Water-reactive solid, corrosive, n.o.s.	III	4.3	4.3	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3132	G Water-reactive solid, flammable, n.o.s.	I	4.3.8	4.3.8	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN2813	G Water-reactive solid, n.o.s.	III	4.3	4.3	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3133	G Water-reactive, solid, oxidizing, n.o.s.	III	4.3	4.3	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3135	G Water-reactive solid, self-heating, n.o.s.	III	4.3	4.3	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
UN3134	G Water-reactive solid, toxic, n.o.s.	I	4.3	4.3	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
	Wheel chair, electric, see Battery powered vehicle or Battery powered equipment.	III	4.3	4.3	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None



§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identi-fication Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage								
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)							
I  A1 W	White acid, see Hydrofluoric acid.	9	UN2590	III	9	156, IB8, IP2, IP3, T1, TP33	155	216	240	200 kg	200 kg	A	34, 40							
	White asbestos ( <i>chrysotile, actinolite, anthophyllite, tremolite</i> ).																			
	Wood preservatives, liquid													149, IB2, T4, TP1, TP8	150	202	242	5 L	60 L	B
														B1, IB3, T2, TP1	150	203	242	60 L	220 L	A
															151	213	240	Forbidden	Forbidden	A
															None	212	241	15 kg	50 kg	D
															None	213	241	25 kg	100 kg	D
															306, 307	302	241	75 kg	150 kg	A
															320	None	None	500 kg	500 kg	D
															150	202	242	5 L	60 L	B
	Xylenes	3	UN1307	III	3	T75, TP5	320	None	None	50 kg	500 kg	D	40							
														IB2, T4, TP1	150	202	242	5 L	60 L	B
														B1, IB3, T2, TP1	150	203	242	60 L	220 L	A
														IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A
														IB2, T7, TP2	153	202	243	5 L	60 L	A
														IB2, T7, TP2	153	202	243	5 L	60 L	A
														IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A
														A3, A6, A7, IB2, N33, T7, TP2, TP13	None	340	None	Forbidden	60 L	D
														A3, A6, A7, IB8, IP2, IP4, N33, T3, TP33	None	340	None	100 kg	100 kg	B
															None	340	None	25 kg	100 kg	B
	<i>p</i> -Xylyl diazide	Forbidden	UN3417	II	6.1	A3, A6, A7, IB8, IP2, IP4, N33, T3, TP33	None	340	None	25 kg	100 kg	B	40							
	Zinc ammonium nitrite																			
	Zinc arsenate or Zinc arsenite or Zinc arsenate and zinc arsenite mixtures.																			
														IB8, IP4, T3, TP33	None	212	242	5 kg	25 kg	E
														IB8, IP2, IP4, T3, TP33	153	212	242	25 kg	100 kg	A
															151	213	241	25 kg	100 kg	A
														A1, A19, IB8, IP4, T1, TP33	151	213	241	25 kg	100 kg	A
															152	213	240	25 kg	100 kg	A
														A1, A29, IB8, IP3, T1, TP33	152	213	240	25 kg	100 kg	A
														A9, IB8, IP2, IP4, N34, T3, TP33	152	212	242	5 kg	25 kg	A
	Zinc chloride, anhydrous	8	UN2331	III	8	IB8, IP3, T1, TP33	None	213	240	25 kg	100 kg	A	56, 58							
	Zinc chloride, solution																			
														IB3, T4, TP1	154	203	241	5 L	60 L	A

Zinc cyanide .....	6.1	UN1713	I	6.1 .....	IB7, IP1, T6, TP33	None ...	211 ...	242 ...	5 kg	50 kg	A	52
Zinc dithionite or Zinc hydrosulfite .....	9	UN1931	III	None	IB8, IP3, T1, TP33	155 .....	204 ...	240 ...	100 kg	200 kg	A	49
Zinc ethyl, see Diethylzinc.												
Zinc fluorosulfate .....	6.1	UN2855	III	6.1 .....	IB8, IP3, T1, TP33	153 .....	213 ...	240 ...	100 kg	200 kg	A	52
Zinc hydrosulfite, see Zinc dithionite.												
Zinc muriate solution, see Zinc chloride, solution.												
Zinc nitrate .....	5.1	UN1514	II	5.1 .....	IB8, IP2, IP4, T3, TP33	152 .....	212 ...	240 ...	5 kg	25 kg	A	56, 58, 138
Zinc permanganate .....	5.1	UN1515	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 ...	242 ...	5 kg	25 kg	D	13, 52, 66, 75
Zinc peroxide .....	5.1	UN1516	II	5.1 .....	IB6, IP2, T3, TP33	152 .....	212 ...	242 ...	5 kg	25 kg	A	40, 52, 85
Zinc phosphide .....	4.3	UN1714	I	4.3, 6.1	A19, N40	None ...	211 ...	None	Forbidden	15 kg	E	52, 53
Zinc powder or Zinc dust .....	4.3	UN1436	I	4.3, 4.2	A19, IB4, IP1, N40	None ...	211 ...	242 ...	Forbidden	15 kg	A	52, 53
.....												
.....												
Zinc resinates .....	4.1	UN2714	III	4.1 .....	A19, IB7, IP2, T3, TP33	None ...	212 ...	242 ...	15 kg	50 kg	A	52, 53
Zinc selenate, see Selenates or Selenites.												
Zinc selenite, see Selenates or Selenites.												
Zinc silicofluoride, see Zinc fluorosulfate.												
Zirconium, dry, coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns).	4.1	UN2858	III	4.1 .....	A1	151 .....	213 ...	240 ...	25 kg	100 kg	A	52, 53
Zirconium, dry, finished sheets, strip or coiled wire.	4.2	UN2009	III	4.2 .....	A1, A19	None ...	213 ...	240 ...	25 kg	100 kg	D	
Zirconium hydride .....	4.1	UN1437	II	4.1 .....	A19, A20, IB4, N34, T3, TP33	None ...	212 ...	240 ...	15 kg	50 kg	E	
Zirconium nitrate .....	5.1	UN2728	III	5.1 .....	A1, A29, IB8, IP3, T1, TP33	152 .....	213 ...	240 ...	25 kg	100 kg	A	
Zirconium picramate, dry or wetted with less than 20 percent water, by mass.	1.3C	UN0236	II	1.3C ..		None ...	62 .....	None	Forbidden	Forbidden	10	5E
Zirconium picramate, wetted with not less than 20 percent water, by mass.	4.1	UN1517	I	4.1 .....	23, N41	None ...	211 ...	None	1 kg	15 kg	D	28, 36
Zirconium powder, dry .....	4.2	UN2008	I	4.2 .....	T21, TP7, TP33	None ...	211 ...	242 ...	Forbidden	Forbidden	D	
.....					A19, A20, IB6, IP2, N5, N34, T3, TP33	None ...	212 ...	241 ...	15 kg	50 kg	D	
.....					IB8, IP3, T1, TP33	None ...	213 ...	241 ...	25 kg	100 kg	D	

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

(1) Sym-bols	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class or Division	(4) Identifi-cation Numbers	(5) PG	(6) Label Codes	(7) Special provisions (§ 172.102)	(8) Packaging (§ 173.***)			(9) Quantity limitations (see §§ 173.27 and 175.75)		(10) Vessel stowage	
							Excep-tions (8A)	Non-bulk (8B)	Bulk (8C)	Passenger aircraft/rail (9A)	Cargo air-craft only (9B)	Loca-tion (10A)	Other (10B)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Zirconium powder, wetted with not less than 25 percent water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns.	4.1	UN1358	II	4.1 .....	A19, A20, IB6, IP2, N34, T3, TP33	None ...	212 ...	241 ...	15 kg	50 kg	E	74
	Zirconium scrap	4.2	UN1932	III	4.2 .....	IB8, IP3, N34, T1, TP33	None ...	213 ...	240 ...	Forbidden	Forbidden	D	
	Zirconium suspended in a liquid	3	UN1308	I 3	3 .....		None ...	201 ...	243 ...	Forbidden	Forbidden	B	
	Zirconium tetrachloride	8	UN2503	III 3	3 .....		None ...	202 ...	242 ...	5 L	60 L	B	
				III 8	8 .....		150 .....	203 ...	242 ...	60 L	220 L	B	
							154 .....	213 ...	240 ...	25 kg	100 kg	A	

APPENDIX A TO §172.101—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

1. This appendix lists materials and their corresponding reportable quantities (RQ's) that are listed or designated as "hazardous substances" under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601(14) (CERCLA; 42 U.S.C. 9601 *et seq.*). This listing fulfills the requirement of CERCLA, 42 U.S.C. 9656(a), that all "hazardous substances," as defined in 42 U.S.C. 9601(14), be listed and regulated as hazardous materials under 49 U.S.C. 5101-5127. That definition includes substances listed under sections 311(b)(2)(A) and 307(a) of the Federal Water Pollution Control Act, 33 U.S.C. 1321(b)(2)(A) and 1317(a), section 3001 of the Solid Waste Disposal Act, 42 U.S.C. 6921, and section 112 of the Clean Air Act, 42 U.S.C. 7412. In addition, this list contains materials that the Administrator of the Environmental Protection Agency has determined to be hazardous substances in accordance with section 102 of CERCLA, 42 U.S.C. 9602. It should be noted that 42 U.S.C. 9656(b) provides that common and contract carriers may be held liable under laws other than CERCLA for the release of a hazardous substance as defined in that Act, during transportation that commenced before the effective date of the listing and regulating of that substance as a hazardous material under 49 U.S.C. 5101-5127.

2. This appendix is divided into two TABLES which are entitled "TABLE 1—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES" and "TABLE 2—RADIONUCLIDES." A material listed in this appendix is regulated as a hazardous material and a hazardous substance under this subchapter if it meets the definition of a hazardous substance in §171.8 of this subchapter.

3. The procedure for selecting a proper shipping name for a hazardous substance is set forth in §172.101(c).

4. Column 1 of TABLE 1, entitled "*Hazardous substance*", contains the names of those elements and compounds that are hazardous substances. Following the listing of elements and compounds is a listing of waste streams. These waste streams appear on the list in numerical sequence and are referenced by the appropriate "D", "F", or "K" numbers. Column 2 of TABLE 1, entitled "*Reportable quantity (RQ)*", contains the report-

able quantity (RQ), in pounds and kilograms, for each hazardous substance listed in Column 1 of TABLE 1.

5. A series of notes is used throughout TABLE 1 and TABLE 2 to provide additional information concerning certain hazardous substances. These notes are explained at the end of each TABLE.

6. TABLE 2 lists radionuclides that are hazardous substances and their corresponding RQ's. The RQ's in table 2 for radionuclides are expressed in units of curies and terabecquerels, whereas those in table 1 are expressed in units of pounds and kilograms. If a material is listed in both table 1 and table 2, the lower RQ shall apply. Radionuclides are listed in alphabetical order. The RQ's for radionuclides are given in the radiological unit of measure of curie, abbreviated "Ci", followed, in parentheses, by an equivalent unit measured in terabecquerels, abbreviated "TBq".

7. For mixtures of radionuclides, the following requirements shall be used in determining if a package contains an RQ of a hazardous substance: (i) if the identity and quantity (in curies or terabecquerels) of each radionuclide in a mixture or solution is known, the ratio between the quantity per package (in curies or terabecquerels) and the RQ for the radionuclide must be determined for each radionuclide. A package contains an RQ of a hazardous substance when the sum of the ratios for the radionuclides in the mixture or solution is equal to or greater than one; (ii) if the identity of each radionuclide in a mixture or solution is known but the quantity per package (in curies or terabecquerels) of one or more of the radionuclides is unknown, an RQ of a hazardous substance is present in a package when the total quantity (in curies or terabecquerels) of the mixture or solution is equal to or greater than the lowest RQ of any individual radionuclide in the mixture or solution; and (iii) if the identity of one or more radionuclides in a mixture or solution is unknown (or if the identity of a radionuclide by itself is unknown), an RQ of a hazardous substance is present when the total quantity (in curies or terabecquerels) in a package is equal to or greater than either one curie or the lowest RQ of any known individual radionuclide in the mixture or solution, whichever is lower.

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
A2213 .....	5000 (2270)
Acenaphthene .....	100 (45.4)
Acenaphthylene .....	5000 (2270)
Acetaldehyde .....	1000 (454)
Acetaldehyde, chloro- .....	1000 (454)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Acetaldehyde, trichloro- .....	5000 (2270)
Acetamide .....	100 (45.4)
Acetamide, N-(aminothioxomethyl)- .....	1000 (454)
Acetamide, N-(4-ethoxyphenyl)- .....	100 (45.4)
Acetamide, N-9H-fluoren-2-yl- .....	1 (0.454)
Acetamide, 2-fluoro- .....	100 (45.4)
Acetic acid .....	5000 (2270)
Acetic acid, (2,4-dichlorophenoxy)-, salts & esters .....	100 (45.4)
Acetic acid, ethyl ester .....	5000 (2270)
Acetic acid, fluoro-, sodium salt .....	10 (4.54)
Acetic acid, lead(2+) salt .....	10 (4.54)
Acetic acid, thallium(1+) salt .....	100 (45.4)
Acetic acid, (2,4,5-trichlorophenoxy)- .....	1000 (454)
Acetic anhydride .....	5000 (2270)
Acetone .....	5000 (2270)
Acetone cyanohydrin .....	10 (4.54)
Acetonitrile .....	5000 (2270)
Acetophenone .....	5000 (2270)
2-Acetylaminofluorene .....	1 (0.454)
Acetyl bromide .....	5000 (2270)
Acetyl chloride .....	5000 (2270)
1-Acetyl-2-thiourea .....	1000 (454)
Acrolein .....	1 (0.454)
Acrylamide .....	5000 (2270)
Acrylic acid .....	5000 (2270)
Acrylonitrile .....	100 (45.4)
Adipic acid .....	5000 (2270)
Aldicarb .....	1 (0.454)
Aldicarb sulfone .....	100 (45.4)
Aldrin .....	1 (0.454)
Allyl alcohol .....	100 (45.4)
Allyl chloride .....	1000 (454)
Aluminum phosphide .....	100 (45.4)
Aluminum sulfate .....	5000 (2270)
4-Aminobiphenyl .....	1 (0.454)
5-(Aminomethyl)-3-isoxazolol .....	1000 (454)
4-Aminopyridine .....	1000 (454)
Amitrole .....	10 (4.54)
Ammonia .....	100 (45.4)
Ammonium acetate .....	5000 (2270)
Ammonium benzoate .....	5000 (2270)
Ammonium bicarbonate .....	5000 (2270)
Ammonium bichromate .....	10 (4.54)
Ammonium bifluoride .....	100 (45.4)
Ammonium bisulfite .....	5000 (2270)
Ammonium carbamate .....	5000 (2270)
Ammonium carbonate .....	5000 (2270)
Ammonium chloride .....	5000 (2270)
Ammonium chromate .....	10 (4.54)
Ammonium citrate, dibasic .....	5000 (2270)
Ammonium dichromate® .....	10 (4.54)
Ammonium fluoborate .....	5000 (2270)
Ammonium fluoride .....	100 (45.4)
Ammonium hydroxide .....	1000 (454)
Ammonium oxalate .....	5000 (2270)
Ammonium picrate .....	10 (4.54)
Ammonium silicofluoride .....	1000 (454)
Ammonium sulfamate .....	5000 (2270)
Ammonium sulfide .....	100 (45.4)
Ammonium sulfite .....	5000 (2270)
Ammonium tartrate .....	5000 (2270)
Ammonium thiocyanate .....	5000 (2270)
Ammonium vanadate .....	1000 (454)
Amyl acetate .....	5000 (2270)
iso-Amyl acetate.	
sec-Amyl acetate.	
tert-Amyl acetate.	
Aniline .....	5000 (2270)
o-Anisidine .....	100 (45.4)
Anthracene .....	5000 (2270)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Antimony $\epsilon$ .....	5000 (2270)
Antimony pentachloride .....	1000 (454)
Antimony potassium tartrate .....	100 (45.4)
Antimony tribromide .....	1000 (454)
Antimony trichloride .....	1000 (454)
Antimony trifluoride .....	1000 (454)
Antimony trioxide .....	1000 (454)
Argentate(1-), bis(cyano-C)-, potassium .....	1 (0.454)
Aroclor 1016 .....	1 (0.454)
Aroclor 1221 .....	1 (0.454)
Aroclor 1232 .....	1 (0.454)
Aroclor 1242 .....	1 (0.454)
Aroclor 1248 .....	1 (0.454)
Aroclor 1254 .....	1 (0.454)
Aroclor 1260 .....	1 (0.454)
Aroclors .....	1 (0.454)
Arsenic $\epsilon$ .....	1 (0.454)
Arsenic acid $H_3AsO_4$ .....	1 (0.454)
Arsenic disulfide .....	1 (0.454)
Arsenic oxide $As_2O_3$ .....	1 (0.454)
Arsenic oxide $As_2O_5$ .....	1 (0.454)
Arsenic pentoxide .....	1 (0.454)
Arsenic trichloride .....	1 (0.454)
Arsenic trioxide .....	1 (0.454)
Arsenic trisulfide .....	1 (0.454)
Arsine, diethyl- .....	1 (0.454)
Arsinic acid, dimethyl- .....	1 (0.454)
Arsonous dichloride, phenyl- .....	1 (0.454)
Asbestos $\epsilon\epsilon$ .....	1 (0.454)
Auramine .....	100 (45.4)
Azaserine .....	1 (0.454)
Aziridine .....	1 (0.454)
Aziridine, 2-methyl- .....	1 (0.454)
Azirino[2,3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8alpha, 8balpha)]- .....	10 (4.54)
Barban .....	10 (4.54)
Barium cyanide .....	10 (4.54)
Bendiocarb .....	100 (45.4)
Bendiocarb phenol .....	1000 (454)
Benomyl .....	10 (4.54)
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- .....	10 (4.54)
Benz[c]acridine .....	100 (45.4)
Benzal chloride .....	5000 (2270)
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- .....	5000 (2270)
Benz[a]anthracene .....	10 (4.54)
1,2-Benzanthracene .....	10 (4.54)
Benz[a]anthracene, 7,12-dimethyl- .....	1 (0.454)
Benzenamine .....	5000 (2270)
Benzenamine, 4,4'-carbonimidoylbis (N,N dimethyl- .....	100 (45.4)
Benzenamine, 4-chloro- .....	1000 (454)
Benzenamine, 4-chloro-2-methyl-, hydrochloride .....	100 (45.4)
Benzenamine, N,N-dimethyl-4-(phenylazo)- .....	10 (4.54)
Benzenamine, 2-methyl- .....	100 (45.4)
Benzenamine, 4-methyl- .....	100 (45.4)
Benzenamine, 4,4'-methylenebis[2-chloro- .....	10 (4.54)
Benzenamine, 2-methyl-, hydrochloride .....	100 (45.4)
Benzenamine, 2-methyl-5-nitro- .....	100 (45.4)
Benzenamine, 4-nitro- .....	5000 (2270)
Benzene .....	10 (4.54)
Benzenoacetic acid, 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -hydroxy-, ethyl ester .....	10 (4.54)
Benzene, 1-bromo-4-phenoxy- .....	100 (45.4)
Benzenobutanoic acid, 4-[bis(2-chloroethyl)amino]- .....	10 (4.54)
Benzene, chloro- .....	100 (45.4)
Benzene, (chloromethyl)- .....	100 (45.4)
Benzenediamine, ar-methyl- .....	10 (4.54)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester .....	100 (45.4)
1,2-Benzenedicarboxylic acid, dibutyl ester .....	10 (4.54)
1,2-Benzenedicarboxylic acid, diethyl ester .....	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester .....	5000 (2270)
1,2-Benzenedicarboxylic acid, dioctyl ester .....	5000 (2270)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Benzene, 1,2-dichloro-	100 (45.4)
Benzene, 1,3-dichloro-	100 (45.4)
Benzene, 1,4-dichloro-	100 (45.4)
Benzene, 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	1 (0.454)
Benzene, (dichloromethyl)-	5000 (2270)
Benzene, 1,3-diisocyanatomethyl-	100 (45.4)
Benzene, dimethyl-	100 (45.4)
1,3-Benzenediol	5000 (2270)
1,2-Benzenediol,4-[1-hydroxy-2-(methylamino) ethyl]-	1000 (454)
Benzeneethanamine, alpha,alpha-dimethyl-	5000 (2270)
Benzene, hexachloro-	10 (4.54)
Benzene, hexahydro-	1000 (454)
Benzene, methyl-	1000 (454)
Benzene, 1-methyl-2,4-dinitro-	10 (4.54)
Benzene, 2-methyl-1,3-dinitro-	100 (45.4)
Benzene, (1-methylethyl)-	5000 (2270)
Benzene, nitro-	1000 (454)
Benzene, pentachloro-	10 (4.54)
Benzene, pentachloronitro-	100 (45.4)
Benzenesulfonic acid chloride	100 (45.4)
Benzenesulfonyl chloride	100 (45.4)
Benzene,1,2,4,5-tetrachloro-	5000 (2270)
Benzenethiol	100 (45.4)
Benzene,1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-	1 (0.454)
Benzene,1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-	1 (0.454)
Benzene, (trichloromethyl)-	10 (4.54)
Benzene, 1,3,5-trinitro-	10 (4.54)
Benzidine	1 (0.454)
Benzo[a]anthracene	10 (4.54)
1,3-Benzodioxole, 5-(1-propenyl)-1	100 (45.4)
1,3-Benzodioxole, 5-(2-propenyl)-	100 (45.4)
1,3-Benzodioxole, 5-propyl-	10 (4.54)
1,3-Benzodioxol-4-ol, 2,2-dimethyl-	1000 (454)
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	100 (45.4)
Benzo[b]fluoranthene	1 (0.454)
Benzo[k]fluoranthene	5000 (2270)
7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	10 (4.54)
7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	10 (4.54)
Benzoic acid	5000 (2270)
Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1)	100 (45.4)
Benzonitrile	5000 (2270)
Benzo[rs]t]pentaphene	10 (4.54)
Benzo[ghi]perylene	5000 (2270)
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts	100 (45.4)
Benzo[a]pyrene	1 (0.454)
3,4-Benzopyrene	1 (0.454)
p-Benzoquinone	10 (4.54)
Benzotrichloride	10 (4.54)
Benzoyl chloride	1000 (454)
Benzyl chloride	100 (45.4)
Beryllium $\epsilon$	10 (4.54)
Beryllium chloride	1 (0.454)
Beryllium fluoride	1 (0.454)
Beryllium nitrate	1 (0.454)
Beryllium powder $\epsilon$	10 (4.54)
alpha-BHC	10 (4.54)
beta-BHC	1 (0.454)
delta-BHC	1 (0.454)
gamma-BHC	1 (0.454)
2,2'-Bioxirane	10 (4.54)
Biphenyl	100 (45.4)
[1,1'-Biphenyl]-4,4'-diamine	1 (0.454)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-	1 (0.454)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethoxy-	100 (45.4)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl-	10 (4.54)
Bis(2-chloroethoxy) methane	1000 (454)
Bis(2-chloroethyl) ether	10 (4.54)
Bis(chloromethyl) ether	10 (4.54)
Bis(2-ethylhexyl) phthalate	100 (45.4)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Bromoacetone	1000 (454)
Bromoform	100 (45.4)
Bromomethane	1000 (454)
4-Bromophenyl phenyl ether	100 (45.4)
Brucine	100 (45.4)
1,3-Butadiene	10 (4.54)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1 (0.454)
1-Butanamine, N-butyl-N-nitroso-	10 (4.54)
1-Butanol	5000 (2270)
2-Butanone	5000 (2270)
2-Butanone, 3,3-dimethyl-1(methylthio)-, O [(methylamino) carbonyl] oxime	100 (45.4)
2-Butanone peroxide	10 (4.54)
2-Butenal	100 (45.4)
2-Butene, 1,4-dichloro-	1 (0.454)
2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy] methyl]-2,3,5,7a-tetrahydro-1H-pyrrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*), 7aalpha]-	10 (4.54)
Butyl acetate	5000 (2270)
iso-Butyl acetate.	
sec-Butyl acetate.	
tert-Butyl acetate.	
n-Butyl alcohol	5000 (2270)
Butylamine	1000 (454)
iso-Butylamine.	
sec-Butylamine.	
tert-Butylamine.	
Butyl benzyl phthalate	100 (45.4)
n-Butyl phthalate	10 (4.54)
Butyric acid	5000 (2270)
iso-Butyric acid.	
Cacodylic acid	1 (0.454)
Cadmium	10 (4.54)
Cadmium acetate	10 (4.54)
Cadmium bromide	10 (4.54)
Cadmium chloride	10 (4.54)
Calcium arsenate	1 (0.454)
Calcium arsenite	1 (0.454)
Calcium carbide	10 (4.54)
Calcium chromate	10 (4.54)
Calcium cyanamide	1000 (454)
Calcium cyanide Ca(CN) <sub>2</sub>	10 (4.54)
Calcium dodecylbenzenesulfonate	1000 (454)
Calcium hypochlorite	10 (4.54)
Captan	10 (4.54)
Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10 (4.54)
Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester	10 (4.54)
Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	10 (4.54)
Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	1000 (454)
Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester	1 (0.454)
Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	100 (45.4)
Carbamic acid, ethyl ester	100 (45.4)
Carbamic acid, methyl-, 3-methylphenyl ester	1000 (454)
Carbamic acid, methylnitroso-, ethyl ester	1 (0.454)
Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)] bis-, dimethyl ester	10 (4.54)
Carbamic acid, phenyl-, 1-methylethyl ester	1000 (454)
Carbamic chloride, dimethyl-	1 (0.454)
Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters	5000 (2270)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	100 (45.4)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	100 (45.4)
Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	5000 (2270)
Carbaryl	100 (45.4)
Carbendazim	10 (4.54)
Carbofuran	10 (4.54)
Carbofuran phenol	10 (4.54)
Carbon disulfide	100 (45.4)
Carbonic acid, dithallium(1+) salt	100 (45.4)
Carbonic dichloride	10 (4.54)
Carbonic difluoride	1000 (454)
Carbonochloridic acid, methyl ester	1000 (454)
Carbon oxyfluoride	1000 (454)
Carbon tetrachloride	10 (4.54)



TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Carbonyl sulfide .....	100 (45.4)
Carbosulfan .....	1000 (454)
Catechol .....	100 (45.4)
Chloral .....	5000 (2270)
Chloramben .....	100 (45.4)
Chlorambucil .....	10 (4.54)
Chlordane .....	1 (0.454)
Chlordane, alpha & gamma isomers .....	1 (0.454)
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES) .....	1 (0.454)
Chlorinated camphene .....	1 (0.454)
Chlorine .....	10 (4.54)
Chlornaphazine .....	100 (45.4)
Chloroacetaldehyde .....	1000 (454)
Chloroacetic acid .....	100 (45.4)
2-Chloroacetophenone .....	100 (45.4)
p-Chloroaniline .....	1000 (454)
Chlorobenzene .....	100 (45.4)
Chlorobenzilate .....	10 (4.54)
p-Chloro-m-cresol .....	5000 (2270)
Chlorodibromomethane .....	100 (45.4)
1-Chloro-2,3-epoxypropane .....	100 (45.4)
Chloroethane .....	100 (45.4)
2-Chloroethyl vinyl ether .....	1000 (454)
Chloroform .....	10 (4.54)
Chloromethane .....	100 (45.4)
Chloromethyl methyl ether .....	10 (4.54)
beta-Chloronaphthalene .....	5000 (2270)
2-Chloronaphthalene .....	5000 (2270)
2-Chlorophenol .....	100 (45.4)
o-Chlorophenol .....	100 (45.4)
4-Chlorophenyl phenyl ether .....	5000 (2270)
1-(o-Chlorophenyl)thiourea .....	100 (45.4)
Chloroprene .....	100 (45.4)
3-Chloropropionitrile .....	1000 (454)
Chlorosulfonic acid .....	1000 (454)
4-Chloro-o-toluidine, hydrochloride .....	100 (45.4)
Chlorpyrifos .....	1 (0.454)
Chromic acetate .....	1000 (454)
Chromic acid .....	10 (4.54)
Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt .....	10 (4.54)
Chromic sulfate .....	1000 (454)
Chromium $\epsilon$ .....	5000 (2270)
Chromous chloride .....	1000 (454)
Chrysene .....	100 (45.4)
Cobaltous bromide .....	1000 (454)
Cobaltous formate .....	1000 (454)
Cobaltous sulfamate .....	1000 (454)
Coke Oven Emissions .....	1 (0.454)
Copper $\epsilon$ .....	5000 (2270)
Copper chloride $\epsilon$ .....	10 (4.54)
Copper cyanide Cu(CN) .....	10 (4.54)
Coumaphos .....	10 (4.54)
Creosote .....	1 (0.454)
Cresol (cresylic acid) .....	100 (45.4)
m-Cresol .....	100 (45.4)
o-Cresol .....	100 (45.4)
p-Cresol .....	100 (45.4)
Cresols (isomers and mixture) .....	100 (45.4)
Cresylic acid (isomers and mixture) .....	100 (45.4)
Crotonaldehyde .....	100 (45.4)
Cumene .....	5000 (2270)
m-Cumenyl methylcarbamate .....	10 (4.54)
Cupric acetate .....	100 (45.4)
Cupric acetoarsenite .....	1 (0.454)
Cupric chloride .....	10 (4.54)
Cupric nitrate .....	100 (45.4)
Cupric oxalate .....	100 (45.4)
Cupric sulfate .....	10 (4.54)
Cupric sulfate, ammoniated .....	100 (45.4)
Cupric tartrate .....	100 (45.4)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Cyanides (soluble salts and complexes) not otherwise specified .....	10 (4.54)
Cyanogen .....	100 (45.4)
Cyanogen bromide (CN)Br .....	1000 (454)
Cyanogen chloride (CN)Cl .....	10 (4.54)
2,5-Cyclohexadiene-1,4-dione .....	10 (4.54)
Cyclohexane .....	1000 (454)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ , 2 $\alpha$ , 3 $\beta$ -, 4 $\alpha$ , 5 $\alpha$ , 6 $\beta$ ) .....	1 (0.454)
Cyclohexanone .....	5000 (2270)
2-Cyclohexyl-4,6-dinitrophenol .....	100 (45.4)
1,3-Cyclopentadiene, 1,2,3,4,5-hexachloro- .....	10 (4.54)
Cyclophosphamide .....	10 (4.54)
2,4-D Acid .....	100 (45.4)
2,4-D Ester .....	100 (45.4)
2,4-D, salts and esters .....	100 (45.4)
Daunomycin .....	10 (4.54)
DDD .....	1 (0.454)
4,4'-DDD .....	1 (0.454)
DDE (72-55-9) # .....	1 (0.454)
DDE (3547-04-4) # .....	5000 (2270)
4,4'-DDE .....	1 (0.454)
DDT .....	1 (0.454)
4,4'-DDT .....	1 (0.454)
DEHP .....	100 (45.4)
Diallate .....	100 (45.4)
Diazinon .....	1 (0.454)
Diazomethane .....	100 (45.4)
Dibenz[a,h]anthracene .....	1 (0.454)
1,2,5,6-Dibenzanthracene .....	1 (0.454)
Dibenzo[a,h]anthracene .....	1 (0.454)
Dibenzofuran .....	100 (45.4)
Dibenzo[a,i]pyrene .....	10 (4.54)
1,2-Dibromo-3-chloropropane .....	1 (0.454)
Dibromoethane .....	1 (0.454)
Dibutyl phthalate .....	10 (4.54)
Di-n-butyl phthalate .....	10 (4.54)
Dicamba .....	1000 (454)
Dichlobenil .....	100 (45.4)
Dichlone .....	1 (0.454)
Dichlorobenzene .....	100 (45.4)
1,2-Dichlorobenzene .....	100 (45.4)
1,3-Dichlorobenzene .....	100 (45.4)
1,4-Dichlorobenzene .....	100 (45.4)
m-Dichlorobenzene .....	100 (45.4)
o-Dichlorobenzene .....	100 (45.4)
p-Dichlorobenzene .....	100 (45.4)
3,3'-Dichlorobenzidine .....	1 (0.454)
Dichlorobromomethane .....	5000 (2270)
1,4-Dichloro-2-butene .....	1 (0.454)
Dichlorodifluoromethane .....	5000 (2270)
1,1-Dichloroethane .....	1000 (454)
1,2-Dichloroethane .....	100 (45.4)
1,1-Dichloroethylene .....	100 (45.4)
1,2-Dichloroethylene .....	1000 (454)
Dichloroethyl ether .....	10 (4.54)
Dichloroisopropyl ether .....	1000 (454)
Dichloromethane .....	1000 (454)
Dichloromethoxyethane .....	1000 (454)
Dichloromethyl ether .....	10 (4.54)
2,4-Dichlorophenol .....	100 (45.4)
2,6-Dichlorophenol .....	100 (45.4)
Dichlorophenylarsine .....	1 (0.454)
Dichloropropane .....	1000 (454)
1,1-Dichloropropane .....	
1,3-Dichloropropane .....	
1,2-Dichloropropane .....	1000 (454)
Dichloropropane-Dichloropropene (mixture) .....	100 (45.4)
Dichloropropene .....	100 (45.4)
2,3-Dichloropropene .....	
1,3-Dichloropropene .....	100 (45.4)
2,2-Dichloropropionic acid .....	5000 (2270)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Dichlorvos .....	10 (4.54)
Dicofol .....	10 (4.54)
Dieldrin .....	1 (0.454)
1,2:3,4-Diepoxybutane .....	10 (4.54)
Diethanolamine .....	100 (45.4)
Diethylamine .....	100 (45.4)
N,N-Diethylaniline .....	1000 (454)
Diethylarsine .....	1 (0.454)
Diethylene glycol, dicarbamate .....	5000 (2270)
1,4-Diethyleneoxide .....	100 (45.4)
Diethylhexyl phthalate .....	100 (45.4)
N,N'-Diethylhydrazine .....	10 (4.54)
O,O-Diethyl S-methyl dithiophosphate .....	5000 (2270)
Diethyl-p-nitrophenyl phosphate .....	100 (45.4)
Diethyl phthalate .....	1000 (454)
O,O-Diethyl O-pyrazinyl phosphorothioate .....	100 (45.4)
Diethylstilbestrol .....	1 (0.454)
Diethyl sulfate .....	10 (4.54)
Dihydrosafrole .....	10 (4.54)
Diisopropylfluorophosphate (DFP) .....	100 (45.4)
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha, 4alpha, 4beta, 5alpha, 8alpha, 8beta)- .....	1 (0.454)
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha, 4alpha, 4beta, 5beta, 8beta, 8beta)-1 (0.454) .....	1 (0.454)
2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6alpha, 7beta, 7aalpha)- .....	1 (0.454)
2,7:3,6-Dimethanonaphth[2, 3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2beta, 3alpha, 6alpha, 6beta, 7beta, 7aalpha)-, & metabolites .....	1 (0.454)
Dimethoate .....	10 (4.54)
3,3'-Dimethoxybenzidine .....	100 (45.4)
Dimethylamine .....	1000 (454)
Dimethyl aminoazobenzene .....	10 (4.54)
p-Dimethylaminoazobenzene .....	10 (4.54)
N,N-Dimethylaniline .....	100 (45.4)
7,12-Dimethylbenz[a]anthracene .....	1 (0.454)
3,3'-Dimethylbenzidine .....	10 (4.54)
alpha, alpha-Dimethylbenzylhydroperoxide .....	10 (4.54)
Dimethylcarbomoyl chloride .....	1 (0.454)
Dimethylformamide .....	100 (45.4)
1,1-Dimethylhydrazine .....	10 (4.54)
1,2-Dimethylhydrazine .....	1 (0.454)
Dimethylhydrazine, unsymmetrical® .....	10 (4.54)
alpha, alpha-Dimethylphenethylamine .....	5000 (2270)
2,4-Dimethylphenol .....	100 (45.4)
Dimethyl phthalate .....	5000 (2270)
Dimethyl sulfate .....	100 (45.4)
Dimetilan .....	1 (0.454)
Dinitrobenzene (mixed) .....	100 (45.4)
m-Dinitrobenzene.	
o-Dinitrobenzene.	
p-Dinitrobenzene.	
4,6-Dinitro-o-cresol, and salts .....	10 (4.54)
Dinitrogen tetroxide® .....	10 (4.54)
Dinitrophenol .....	10 (4.54)
2,5-Dinitrophenol.	
2,6-Dinitrophenol.	
2,4-Dinitrophenol .....	10 (4.54)
Dinitrotoluene .....	10 (4.54)
3,4-Dinitrotoluene.	
2,4-Dinitrotoluene .....	10 (4.54)
2,6-Dinitrotoluene .....	100 (45.4)
Dinoseb .....	1000 (454)
Di-n-octyl phthalate .....	5000 (2270)
1,4-Dioxane .....	100 (45.4)
1,2-Diphenylhydrazine .....	10 (4.54)
Diphosphoramidate, octamethyl- .....	100 (45.4)
Diphosphoric acid, tetraethyl ester .....	10 (4.54)
Dipropylamine .....	5000 (2270)
Di-n-propylnitrosamine .....	10 (4.54)
Diquat .....	1000 (454)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Disulfoton .....	1 (0.454)
Dithiobiuret .....	100 (45.4)
1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime .....	100 (45.4)
Diuron .....	100 (45.4)
Dodecylbenzenesulfonic acid .....	1000 (454)
Endosulfan .....	1 (0.454)
alpha-Endosulfan .....	1 (0.454)
beta-Endosulfan .....	1 (0.454)
Endosulfan sulfate .....	1 (0.454)
Endothall .....	1000 (454)
Endrin .....	1 (0.454)
Endrin aldehyde .....	1 (0.454)
Endrin, & metabolites .....	1 (0.454)
Epichlorohydrin .....	100 (45.4)
Epinephrine .....	1000 (454)
1,2-Epoxybutane .....	100 (45.4)
Ethanal .....	1000 (454)
Ethanamine, N,N-diethyl- .....	5000 (2270)
Ethanamine, N-ethyl-N-nitroso- .....	1 (0.454)
1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- .....	5000 (2270)
Ethane, 1,2-dibromo- .....	1 (0.454)
Ethane, 1,1-dichloro- .....	1000 (454)
Ethane, 1,2-dichloro- .....	100 (45.4)
Ethanedinitrile .....	100 (45.4)
Ethane, hexachloro- .....	100 (45.4)
Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- .....	1000 (454)
Ethane, 1,1'-oxybis- .....	100 (45.4)
Ethane, 1,1'-oxybis[2-chloro- .....	10 (4.54)
Ethane, pentachloro- .....	10 (4.54)
Ethane, 1,1,1,2-tetrachloro- .....	100 (45.4)
Ethane, 1,1,2,2-tetrachloro- .....	100 (45.4)
Ethanethioamide .....	10 (4.54)
Ethane, 1,1,1-trichloro- .....	1000 (454)
Ethane, 1,1,2-trichloro- .....	100 (45.4)
Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester .....	5000 (2270)
Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester .....	100 (45.4)
Ethanimidothioic acid, N-[[[(methylamino) carbonyl]oxy]-, methyl ester .....	100 (45.4)
Ethanimidothioic acid, N,N'[thiobis[(methylimino)carbonyloxy]] bis-, dimethyl ester .....	100 (45.4)
Ethanol, 2-ethoxy- .....	1000 (454)
Ethanol, 2,2'-(nitrosoimino)bis- .....	1 (0.454)
Ethanol, 2,2'-oxybis-, dicarbamate .....	5000 (2270)
Ethanone, 1-phenyl- .....	5000 (2270)
Ethene, chloro- .....	1 (0.454)
Ethene, (2-chloroethoxy)- .....	1000 (454)
Ethene, 1,1-dichloro- .....	100 (45.4)
Ethene, 1,2-dichloro-(E) .....	1000 (454)
Ethene, tetrachloro- .....	100 (45.4)
Ethene, trichloro- .....	100 (45.4)
Ethion .....	10 (4.54)
Ethyl acetate .....	5000 (2270)
Ethyl acrylate .....	1000 (454)
Ethylbenzene .....	1000 (454)
Ethyl carbamate .....	100 (45.4)
Ethyl chloride .....	100 (45.4)
Ethyl cyanide .....	10 (4.54)
Ethylenedisithiocarbamic acid, salts & esters .....	5000 (2270)
Ethylenediamine .....	5000 (2270)
Ethylenediamine-tetraacetic acid (EDTA) .....	5000 (2270)
Ethylene dibromide .....	1 (0.454)
Ethylene dichloride .....	100 (45.4)
Ethylene glycol .....	5000 (2270)
Ethylene glycol monoethyl ether .....	1000 (454)
Ethylene oxide .....	10 (4.54)
Ethylenethiourea .....	10 (4.54)
Ethylenimine .....	1 (0.454)
Ethyl ether .....	100 (45.4)
Ethylidene dichloride .....	1000 (454)
Ethyl methacrylate .....	1000 (454)
Ethyl methanesulfonate .....	1 (0.454)
Ethyl methyl ketone® .....	5000 (2270)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Famphur	1000 (454)
Ferric ammonium citrate	1000 (454)
Ferric ammonium oxalate	1000 (454)
Ferric chloride	1000 (454)
Ferric fluoride	100 (45.4)
Ferric nitrate	1000 (454)
Ferric sulfate	1000 (454)
Ferrous ammonium sulfate	1000 (454)
Ferrous chloride	100 (45.4)
Ferrous sulfate	1000 (454)
Fluoranthene	100 (45.4)
Fluorene	5000 (2270)
Fluorine	10 (4.54)
Fluoroacetamide	100 (45.4)
Fluoroacetic acid, sodium salt	10 (4.54)
Formaldehyde	100 (45.4)
Formetanate hydrochloride	100 (45.4)
Formic acid	5000 (2270)
Formparanate	100 (45.4)
Fulminic acid, mercury(2+)salt	10 (4.54)
Fumaric acid	5000 (2270)
Furan	100 (45.4)
2-Furancarboxyaldehyde	5000 (2270)
2,5-Furandione	5000 (2270)
Furan, tetrahydro-	1000 (454)
Furfural	5000 (2270)
Furfuran	100 (45.4)
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-	1 (0.454)
D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]-	1 (0.454)
Glycidylaldehyde	10 (4.54)
Guanidine, N-methyl-N'-nitro-N-nitroso-	10 (4.54)
Guthion	1 (0.454)
Heptachlor	1 (0.454)
Heptachlor epoxide	1 (0.454)
Hexachlorobenzene	10 (4.54)
Hexachlorobutadiene	1 (0.454)
Hexachlorocyclopentadiene	10 (4.54)
Hexachloroethane	100 (45.4)
Hexachlorophene	100 (45.4)
Hexachloropropene	1000 (454)
Hexaethyl tetraphosphate	100 (45.4)
Hexamethylene-1,6-diisocyanate	100 (45.4)
Hexamethylphosphoramide	1 (0.454)
Hexane	5000 (2270)
Hexone	5000 (2270)
Hydrazine	1 (0.454)
Hydrazinecarbothioamide	100 (45.4)
Hydrazine, 1,2-diethyl-	10 (4.54)
Hydrazine, 1,1-dimethyl-	10 (4.54)
Hydrazine, 1,2-dimethyl-	1 (0.454)
Hydrazine, 1,2-diphenyl-	10 (4.54)
Hydrazine, methyl-	10 (4.54)
Hydrochloric acid	5000 (2270)
Hydrocyanic acid	10 (4.54)
Hydrofluoric acid	100 (45.4)
Hydrogen chloride	5000 (2270)
Hydrogen cyanide	10 (4.54)
Hydrogen fluoride	100 (45.4)
Hydrogen phosphide	100 (45.4)
Hydrogen sulfide H2S	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	10 (4.54)
Hydroquinone	100 (45.4)
2-Imidazolidinethione	10 (4.54)
Indeno(1,2,3-cd)pyrene	100 (45.4)
Iodomethane	100 (45.4)
1,3-Isobenzofurandione	5000 (2270)
Isobutyl alcohol	5000 (2270)
Isodrin	1 (0.454)
Isolan	100 (45.4)
Isophorone	5000 (2270)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Isoprene	100 (45.4)
Isopropanolamine dodecylbenzenesulfonate	1000 (454)
3-Isopropylphenyl N-methylcarbamate	10 (4.54)
Isosafrole	100 (45.4)
3(2H)-Isoxazolone, 5-(aminomethyl)-	1000 (454)
Kepona	1 (0.454)
Lasiocarpine	10 (4.54)
Lead	10 (4.54)
Lead acetate	10 (4.54)
Lead arsenate	1 (0.454)
Lead, bis(acetato-O)tetrahydroxytri-	10 (4.54)
Lead chloride	10 (4.54)
Lead fluoborate	10 (4.54)
Lead fluoride	10 (4.54)
Lead iodide	10 (4.54)
Lead nitrate	10 (4.54)
Lead phosphate	10 (4.54)
Lead stearate	10 (4.54)
Lead subacetate	10 (4.54)
Lead sulfate	10 (4.54)
Lead sulfide	10 (4.54)
Lead thiocyanate	10 (4.54)
Lindane	1 (0.454)
Lindane (all isomers)	1 (0.454)
Lithium chromate	10 (4.54)
Malathion	100 (45.4)
Maleic acid	5000 (2270)
Maleic anhydride	5000 (2270)
Maleic hydrazide	5000 (2270)
Malononitrile	1000 (454)
Manganese, bis(dimethylcarbamodithioato-S,S')	10 (4.54)
Manganese dimethylthiocarbamate	10 (4.54)
MDI	5000 (2270)
MEK	5000 (2270)
Melphalan	1 (0.454)
Mercaptodimethur	10 (4.54)
Mercuric cyanide	1 (0.454)
Mercuric nitrate	10 (4.54)
Mercuric sulfate	10 (4.54)
Mercuric thiocyanate	10 (4.54)
Mercurous nitrate	10 (4.54)
Mercury	1 (0.454)
Mercury, (acetato-O)phenyl-	100 (45.4)
Mercury fulminate	10 (4.54)
Methacrylonitrile	1000 (454)
Methanamine, N-methyl-	1000 (454)
Methanamine, N-methyl-N-nitroso-	10 (4.54)
Methane, bromo-	1000 (454)
Methane, chloro-	100 (45.4)
Methane, chloromethoxy-	10 (4.54)
Methane, dibromo-	1000 (454)
Methane, dichloro-	1000 (454)
Methane, dichlorodifluoro-	5000 (2270)
Methane, iodo-	100 (45.4)
Methane, isocyanato-	10 (4.54)
Methane, oxybis(chloro-	10 (4.54)
Methanesulfonyl chloride, trichloro-	100 (45.4)
Methanesulfonic acid, ethyl ester	1 (0.454)
Methane, tetrachloro-	10 (4.54)
Methane, tetranitro-	10 (4.54)
Methanethiol	100 (45.4)
Methane, tribromo-	100 (45.4)
Methane, trichloro-	10 (4.54)
Methane, trichlorofluoro-	5000 (2270)
Methanimidamide, N,N-dimethyl-N'-[3-[(methylamino) carbonyl] oxy]	
phenyl]-, monohydrochloride	100 (45.4)
Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[(methylamino)carbonyl] oxy]phenyl]-	100 (45.4)
6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	1 (0.454)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	1 (0.454)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	1 (0.454)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Methanol	5000 (2270)
Methapyrilene	5000 (2270)
1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	1 (0.454)
Methiocarb	10 (4.54)
Methomyl	100 (45.4)
Methoxychlor	1 (0.454)
Methyl alcohol	5000 (2270)
Methylamine ®	100 (45.4)
2-Methyl aziridine	1 (0.454)
Methyl bromide	1000 (454)
1-Methylbutadiene	100 (45.4)
Methyl chloride	100 (45.4)
Methyl chlorocarbonate	1000 (454)
Methyl chloroform	1000 (454)
Methyl chloroformate ®	1000 (454)
Methyl chloromethyl ether ®	10 (4.54)
3-Methylcholanthrene	10 (4.54)
4,4'-Methylenebis(2-chloroaniline)	10 (4.54)
Methylene bromide	1000 (454)
Methylene chloride	1000 (454)
4,4'-Methylenedianiline	10 (4.54)
Methylene diphenyl diisocyanate	5000 (2270)
Methyl ethyl ketone	5000 (2270)
Methyl ethyl ketone peroxide	10 (4.54)
Methyl hydrazine	10 (4.54)
Methyl iodide	100 (45.4)
Methyl isobutyl ketone	5000 (2270)
Methyl isocyanate	10 (4.54)
2-Methylacetonitrile	10 (4.54)
Methyl mercaptan	100 (45.4)
Methyl methacrylate	1000 (454)
Methyl parathion	100 (45.4)
4-Methyl-2-pentanone	5000 (2270)
Methyl tert-butyl ether	1000 (454)
Methylthiouracil	10 (4.54)
Metolcarb	1000 (454)
Mevinphos	10 (4.54)
Mexacarbate	1000 (454)
Mitomycin C	10 (4.54)
MNNG	10 (4.54)
Monoethylamine	100 (45.4)
Monomethylamine	100 (45.4)
Naled	10 (4.54)
5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	10 (4.54)
1-Naphthalenamine	100 (45.4)
2-Naphthalenamine	10 (4.54)
Naphthalenamine, N,N'-bis(2-chloroethyl)-	100 (45.4)
Naphthalene	100 (45.4)
Naphthalene, 2-chloro-	5000 (2270)
1,4-Naphthalenedione	5000 (2270)
2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	10 (4.54)
1-Naphthalenol, methylcarbamate	100 (45.4)
Naphthenic acid	100 (45.4)
1,4-Naphthoquinone	5000 (2270)
alpha-Naphthylamine	100 (45.4)
beta-Naphthylamine	10 (4.54)
alpha-Naphthylthiourea	100 (45.4)
Nickel ¢	100 (45.4)
Nickel ammonium sulfate	100 (45.4)
Nickel carbonyl Ni(CO)4, (T-4)	10 (4.54)
Nickel chloride	100 (45.4)
Nickel cyanide Ni(CN)2	10 (4.54)
Nickel hydroxide	10 (4.54)
Nickel nitrate	100 (45.4)
Nickel sulfate	100 (45.4)
Nicotine, & salts	100 (45.4)
Nitric acid	1000 (454)
Nitric acid, thallium (1+) salt	100 (45.4)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Nitric oxide .....	10 (4.54)
p-Nitroaniline .....	5000 (2270)
Nitrobenzene .....	1000 (454)
4-Nitrobiphenyl .....	10 (4.54)
Nitrogen dioxide .....	10 (4.54)
Nitrogen oxide NO .....	10 (4.54)
Nitrogen oxide NO <sub>2</sub> .....	10 (4.54)
Nitroglycerine .....	10 (4.54)
Nitrophenol (mixed) .....	100 (45.4)
m-Nitrophenol.	
o-Nitrophenol .....	100 (45.4)
p-Nitrophenol .....	100 (45.4)
2-Nitrophenol .....	100 (45.4)
4-Nitrophenol .....	100 (45.4)
2-Nitropropane .....	10 (4.54)
N-Nitrosodi-n-butylamine .....	10 (4.54)
N-Nitrosodiethanolamine .....	1 (0.454)
N-Nitrosodiethylamine .....	1 (0.454)
N-Nitrosodimethylamine .....	10 (4.54)
N-Nitrosodiphenylamine .....	100 (45.4)
N-Nitroso-N-ethylurea .....	1 (0.454)
N-Nitroso-N-methylurea .....	1 (0.454)
N-Nitroso-N-methylurethane .....	1 (0.454)
N-Nitrosomethylvinylamine .....	10 (4.54)
N-Nitrosomorpholine .....	1 (0.454)
N-Nitrosopiperidine .....	10 (4.54)
N-Nitrosopyrrolidine .....	1 (0.454)
Nitrotoluene .....	1000 (454)
m-Nitrotoluene.	
o-Nitrotoluene.	
p-Nitrotoluene.	
5-Nitro-o-toluidine .....	100 (45.4)
Octamethylpyrophosphoramidate .....	100 (45.4)
Osmium oxide OsO <sub>4</sub> , (T-4) .....	1000 (454)
Osmium tetroxide .....	1000 (454)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid .....	1000 (454)
Oxamyl .....	100 (45.4)
1,2-Oxathiolane, 2,2-dioxide .....	10 (4.54)
2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl) tetrahydro-, 2-oxide .....	10 (4.54)
Oxirane .....	10 (4.54)
Oxiranecarboxyaldehyde .....	10 (4.54)
Oxirane, (chloromethyl)- .....	100 (45.4)
Paraformaldehyde .....	1000 (454)
Paraldehyde .....	1000 (454)
Parathion .....	10 (4.54)
PCBs .....	1 (0.454)
PCNB .....	100 (45.4)
Pentachlorobenzene .....	10 (4.54)
Pentachloroethane .....	10 (4.54)
Pentachloronitrobenzene .....	100 (45.4)
Pentachlorophenol .....	10 (4.54)
1,3-Pentadiene .....	100 (45.4)
Perchloroethylene .....	100 (45.4)
Perchloromethyl mercaptan® .....	100 (45.4)
Phenacetin .....	100 (45.4)
Phenanthrene .....	5000 (2270)
Phenol .....	1000 (454)
Phenol, 2-chloro- .....	100 (45.4)
Phenol, 4-chloro-3-methyl- .....	5000 (2270)
Phenol, 2-cyclohexyl-4,6-dinitro- .....	100 (45.4)
Phenol, 2,4-dichloro- .....	100 (45.4)
Phenol, 2,6-dichloro- .....	100 (45.4)
Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E) .....	1 (0.454)
Phenol, 2,4-dimethyl- .....	100 (45.4)
Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) .....	1000 (454)
Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate .....	10 (4.54)
Phenol, 2,4-dinitro- .....	10 (4.54)
Phenol, methyl- .....	100 (45.4)
Phenol, 2-methyl-4,6-dinitro-, & salts .....	10 (4.54)
Phenol, 2,2'-methylenebis[3,4,6-trichloro- .....	100 (45.4)



TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Phenol, 2-(1-methylethoxy)-, methylcarbamate .....	100 (45.4)
Phenol, 3-(1-methylethyl)-, methyl carbamate .....	10 (4.54)
Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate .....	1000 (454)
Phenol, 2-(1-methylpropyl)-4,6-dinitro- .....	1000 (454)
Phenol, 4-nitro- .....	100 (45.4)
Phenol, pentachloro- .....	10 (4.54)
Phenol, 2,3,4,6-tetrachloro- .....	10 (4.54)
Phenol, 2,4,5-trichloro- .....	10 (4.54)
Phenol, 2,4,6-trichloro- .....	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt .....	10 (4.54)
L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- .....	1 (0.454)
p-Phenylenediamine .....	5000 (2270)
Phenyl mercaptan <sup>®</sup> .....	100 (45.4)
Phenylmercury acetate .....	100 (45.4)
Phenylthiourea .....	100 (45.4)
Phorate .....	10 (4.54)
Phosgene .....	10 (4.54)
Phosphine .....	100 (45.4)
Phosphoric acid .....	5000 (2270)
Phosphoric acid, diethyl 4-nitrophenyl ester .....	100 (45.4)
Phosphoric acid, lead(2+) salt (2:3) .....	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester .....	1 (0.454)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester .....	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester .....	5000 (2270)
Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester .....	10 (4.54)
Phosphorofluoric acid, bis(1-methylethyl) ester .....	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester .....	10 (4.54)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester .....	100 (45.4)
Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl] O,O-dimethyl ester .....	1000 (454)
Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester .....	100 (45.4)
Phosphorus .....	1 (0.454)
Phosphorus oxychloride .....	1000 (454)
Phosphorus pentasulfide .....	100 (45.4)
Phosphorus sulfide .....	100 (45.4)
Phosphorus trichloride .....	1000 (454)
Phthalic anhydride .....	5000 (2270)
Physostigmine .....	100 (45.4)
Physostigmine salicylate .....	100 (45.4)
2-Picoline .....	5000 (2270)
Piperidine, 1-nitroso- .....	10 (4.54)
Plumbane, tetraethyl- .....	10 (4.54)
POLYCHLORINATED BIPHENYLS .....	1 (0.454)
Potassium arsenate .....	1 (0.454)
Potassium arsenite .....	1 (0.454)
Potassium bichromate .....	10 (4.54)
Potassium chromate .....	10 (4.54)
Potassium cyanide K(CN) .....	10 (4.54)
Potassium hydroxide .....	1000 (454)
Potassium permanganate .....	100 (45.4)
Potassium silver cyanide .....	1 (0.454)
Promecarb .....	1000 (454)
Pronamide .....	5000 (2270)
Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime .....	100 (45.4)
Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl] oxime .....	1 (0.454)
1-Propanamine .....	5000 (2270)
1-Propanamine, N-propyl- .....	5000 (2270)
1-Propanamine, N-nitroso-N-propyl- .....	10 (4.54)
Propane, 1,2-dibromo-3-chloro- .....	1 (0.454)
Propane, 1,2-dichloro- .....	1000 (454)
Propanedinitrile .....	1000 (454)
Propanenitrile .....	10 (4.54)
Propanenitrile, 3-chloro- .....	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl- .....	10 (4.54)
Propane, 2-nitro- .....	10 (4.54)
Propane, 2,2'-oxybis[2-chloro- .....	1000 (454)
1,3-Propane sultone .....	10 (4.54)
1,2,3-Propanetriol, trinitrate .....	10 (4.54)
Propanoic acid, 2-(2,4,5-trichlorophenoxy)- .....	100 (45.4)
1-Propanol, 2,3-dibromo-, phosphate (3:1) .....	10 (4.54)
1-Propanol, 2-methyl- .....	5000 (2270)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
2-Propanone	5000 (2270)
2-Propanone, 1-bromo-	1000 (454)
Propargite	10 (4.54)
Propargyl alcohol	1000 (454)
2-Propenal	1 (0.454)
2-Propenamide	5000 (2270)
1-Propene, 1,3-dichloro-	100 (45.4)
1-Propene, 1,1,2,3,3,3-hexachloro-	1000 (454)
2-Propenenitrile	100 (45.4)
2-Propenenitrile, 2-methyl-	1000 (454)
2-Propenoic acid	5000 (2270)
2-Propenoic acid, ethyl ester	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	1000 (454)
2-Propen-1-ol	100 (45.4)
Propham	1000 (454)
beta-Propiolactone	10 (4.54)
Propionaldehyde	1000 (454)
Propionic acid	5000 (2270)
Propionic anhydride	5000 (2270)
Propoxur (Baygon)	100 (45.4)
n-Propylamine	5000 (2270)
Propylene dichloride	1000 (454)
Propylene oxide	100 (45.4)
1,2-Propylenimine	1 (0.454)
2-Propyn-1-ol	1000 (454)
Prosulfocarb	5000 (2270)
Pyrene	5000 (2270)
Pyrethrins	1 (0.454)
3,6-Pyridazinedione, 1,2-dihydro-	5000 (2270)
4-Pyridinamine	1000 (454)
Pyridine	1000 (454)
Pyridine, 2-methyl-	5000 (2270)
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts	100 (45.4)
2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	10 (4.54)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	10 (4.54)
Pyrrolidine, 1-nitroso-	1 (0.454)
Pyrrolo[2,3-b] indol-5-ol,1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	100 (45.4)
Quinoline	5000 (2270)
Quinone	10 (4.54)
Quintobenzene	100 (45.4)
RADIONUCLIDES	See Table 2
Reserpine	5000 (2270)
Resorcinol	5000 (2270)
Safrole	100 (45.4)
Selenious acid	10 (4.54)
Selenious acid, dithallium (1+) salt	1000 (454)
Selenium e	100 (45.4)
Selenium dioxide	10 (4.54)
Selenium oxide	10 (4.54)
Selenium sulfide SeS2	10 (4.54)
Selenourea	1000 (454)
L-Serine, diazoacetate (ester)	1 (0.454)
Silver e	1000 (454)
Silver cyanide Ag(CN)	1 (0.454)
Silver nitrate	1 (0.454)
Silvex (2,4,5-TP)	100 (45.4)
Sodium	10 (4.54)
Sodium arsenate	1 (0.454)
Sodium arsenite	1 (0.454)
Sodium azide	1000 (454)
Sodium bichromate	10 (4.54)
Sodium bifluoride	100 (45.4)
Sodium bisulfite	5000 (2270)
Sodium chromate	10 (4.54)
Sodium cyanide Na(CN)	10 (4.54)
Sodium dodecylbenzenesulfonate	1000 (454)
Sodium fluoride	1000 (454)
Sodium hydrosulfide	5000 (2270)
Sodium hydroxide	1000 (454)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Sodium hypochlorite .....	100 (45.4)
Sodium methylate .....	1000 (454)
Sodium nitrite .....	100 (45.4)
Sodium phosphate, dibasic .....	5000 (2270)
Sodium phosphate, tribasic .....	5000 (2270)
Sodium selenite .....	100 (45.4)
Streptozotocin .....	1 (0.454)
Strontium chromate .....	10 (4.54)
Strychnidin-10-one, & salts .....	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy- .....	100 (45.4)
Strychnine, & salts .....	10 (4.54)
Styrene .....	1000 (454)
Styrene oxide .....	100 (45.4)
Sulfur chlorides® .....	1000 (454)
Sulfuric acid .....	1000 (454)
Sulfuric acid, dimethyl ester .....	100 (45.4)
Sulfuric acid, dithallium (1+) salt .....	100 (45.4)
Sulfur monochloride .....	1000 (454)
Sulfur phosphide .....	100 (45.4)
2,4,5-T .....	1000 (454)
2,4,5-T acid .....	1000 (454)
2,4,5-T amines .....	5000 (2270)
2,4,5-T esters .....	1000 (454)
2,4,5-T salts .....	1000 (454)
TCDD .....	1 (0.454)
TDE .....	1 (0.454)
1,2,4,5-Tetrachlorobenzene .....	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin .....	1 (0.454)
1,1,1,2-Tetrachloroethane .....	100 (45.4)
1,1,2,2-Tetrachloroethane .....	100 (45.4)
Tetrachloroethylene .....	100 (45.4)
2,3,4,6-Tetrachlorophenol .....	10 (4.54)
Tetraethyl pyrophosphate .....	10 (4.54)
Tetraethyl lead .....	10 (4.54)
Tetraethyldithiopyrophosphate .....	100 (45.4)
Tetrahydrofuran .....	1000 (454)
Tetranitromethane .....	10 (4.54)
Tetraphosphoric acid, hexaethyl ester .....	100 (45.4)
Thallic oxide .....	100 (45.4)
Thallium e .....	1000 (454)
Thallium (I) acetate .....	100 (45.4)
Thallium (I) carbonate .....	100 (45.4)
Thallium chloride TlCl .....	100 (45.4)
Thallium (I) nitrate .....	100 (45.4)
Thallium oxide Tl <sub>2</sub> O <sub>3</sub> .....	100 (45.4)
Thallium (I) selenite .....	1000 (454)
Thallium (I) sulfate .....	100 (45.4)
Thioacetamide .....	10 (4.54)
Thiodicarb .....	100 (45.4)
Thiodiphosphoric acid, tetraethyl ester .....	100 (45.4)
Thiofanox .....	100 (45.4)
Thioimidodicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> NH .....	100 (45.4)
Thiomethanol .....	100 (45.4)
Thioperoxydicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> S <sub>2</sub> , tetramethyl- .....	10 (4.54)
Thiophanate-methyl .....	10 (4.54)
Thiophenol .....	100 (45.4)
Thiosemicarbazide .....	100 (45.4)
Thiourea .....	10 (4.54)
Thiourea, (2-chlorophenyl)- .....	100 (45.4)
Thiourea, 1-naphthalenyl- .....	100 (45.4)
Thiourea, phenyl- .....	100 (45.4)
Thiram .....	10 (4.54)
Tirpate .....	100 (45.4)
Titanium tetrachloride .....	1000 (454)
Toluene .....	1000 (454)
Toluenediamine .....	10 (4.54)
2,4-Toluene diamine .....	10 (4.54)
Toluene diisocyanate .....	100 (45.4)
2,4-Toluene diisocyanate .....	100 (45.4)
o-Toluidine .....	100 (45.4)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
p-Toluidine .....	100 (45.4)
o-Toluidine hydrochloride .....	100 (45.4)
Toxaphene .....	1 (0.454)
2,4,5-TP acid .....	100 (45.4)
2,4,5-TP esters .....	100 (45.4)
Triallate .....	100 (45.4)
1H-1,2,4-Triazol-3-amine .....	10 (4.54)
Trichlorfon .....	100 (45.4)
1,2,4-Trichlorobenzene .....	100 (45.4)
1,1,1-Trichloroethane .....	1000 (454)
1,1,2-Trichloroethane .....	100 (45.4)
Trichloroethylene .....	100 (45.4)
Trichloromethanesulfonyl chloride .....	100 (45.4)
Trichloromonofluoromethane .....	5000 (2270)
Trichlorophenol .....	10 (4.54)
2,3,4-Trichlorophenol .....	
2,3,5-Trichlorophenol .....	
2,3,6-Trichlorophenol .....	
3,4,5-Trichlorophenol .....	
2,4,5-Trichlorophenol .....	10 (4.54)
2,4,6-Trichlorophenol .....	10 (4.54)
Triethanolamine dodecylbenzenesulfonate .....	1000 (454)
Triethylamine .....	5000 (2270)
Trifluralin .....	10 (4.54)
Trimethylamine .....	100 (45.4)
2,2,4-Trimethylpentane .....	1000 (454)
1,3,5-Trinitrobenzene .....	10 (4.54)
1,3,5-Trioxane, 2,4,6-trimethyl- .....	1000 (454)
Tris(2,3-dibromopropyl) phosphate .....	10 (4.54)
Trypan blue .....	10 (4.54)
D002 Unlisted Hazardous Wastes Characteristic of Corrosivity .....	100 (45.4)
D001 Unlisted Hazardous Wastes Characteristic of Ignitability .....	100 (45.4)
D003 Unlisted Hazardous Wastes Characteristic of Reactivity .....	100 (45.4)
D004–D043 Unlisted Hazardous Wastes Characteristic of Toxicity:	
Arsenic (D004) .....	1 (0.454)
Barium (D005) .....	1000 (454)
Benzene (D018) .....	10 (4.54)
Cadmium (D006) .....	10 (4.54)
Carbon tetrachloride (D019) .....	10 (4.54)
Chlordane (D020) .....	1 (0.454)
Chlorobenzene (D021) .....	100 (45.4)
Chloroform (D022) .....	10 (4.54)
Chromium (D007) .....	10 (4.54)
o-Cresol (D023) .....	100 (45.4)
m-Cresol (D024) .....	100 (45.4)
p-Cresol (D025) .....	100 (45.4)
Cresol (D026) .....	100 (45.4)
2,4-D (D016) .....	100 (45.4)
1,4-Dichlorobenzene (D027) .....	100 (45.4)
1,2-Dichloroethane (D028) .....	100 (45.4)
1,1-Dichloroethylene (D029) .....	100 (45.4)
2,4-Dinitrotoluene (D030) .....	10 (4.54)
Endrin (D012) .....	1 (0.454)
Heptachlor (and epoxide) (D031) .....	1 (0.454)
Hexachlorobenzene (D032) .....	10 (4.54)
Hexachlorobutadiene (D033) .....	1 (0.454)
Hexachloroethane (D034) .....	100 (45.4)
Lead (D008) .....	10 (4.54)
Lindane (D013) .....	1 (0.454)
Mercury (D009) .....	1 (0.454)
Methoxychlor (D014) .....	1 (0.454)
Methyl ethyl ketone (D035) .....	5000 (2270)
Nitrobenzene (D036) .....	1000 (454)
Pentachlorophenol (D037) .....	10 (4.54)
Pyridine (D038) .....	1000 (454)
Selenium (D010) .....	10 (4.54)
Silver (D011) .....	1 (0.454)
Tetrachloroethylene (D039) .....	100 (45.4)
Toxaphene (D015) .....	1 (0.454)
Trichloroethylene (D040) .....	100 (45.4)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
2,4,5-Trichlorophenol (D041) .....	10 (4.54)
2,4,6-Trichlorophenol (D042) .....	10 (4.54)
2,4,5-TP (D017) .....	100 (45.4)
Vinyl chloride (D043) .....	1 (0.454)
Uracil mustard .....	10 (4.54)
Uranyl acetate .....	100 (45.4)
Uranyl nitrate .....	100 (45.4)
Urea, N-ethyl-N-nitroso- .....	1 (0.454)
Urea, N-methyl-N-nitroso- .....	1 (0.454)
Urethane .....	100 (45.4)
Vanadic acid, ammonium salt .....	1000 (454)
Vanadium oxide V <sub>2</sub> O <sub>5</sub> .....	1000 (454)
Vanadium pentoxide .....	1000 (454)
Vanadyl sulfate .....	1000 (454)
Vinyl acetate .....	5000 (2270)
Vinyl acetate monomer .....	5000 (2270)
Vinylamine, N-methyl-N-nitroso- .....	10 (4.54)
Vinyl bromide .....	100 (45.4)
Vinyl chloride .....	1 (0.454)
Vinylidene chloride .....	100 (45.4)
Warfarin, & salts .....	100 (45.4)
Xylene .....	100 (45.4)
m-Xylene .....	1000 (454)
o-Xylene .....	1000 (454)
p-Xylene .....	100 (45.4)
Xylene (mixed) .....	100 (45.4)
Xylenes (isomers and mixture) .....	100 (45.4)
Xylenol .....	1000 (454)
Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl) oxy]-, methyl ester (3beta,16beta,17alpha,18beta, 20alpha) .....	5000 (2270)
Zinc $\epsilon$ .....	1000 (454)
Zinc acetate .....	1000 (454)
Zinc ammonium chloride .....	1000 (454)
Zinc, bis(dimethylcarbamo-dithioato-S,S')- .....	10 (4.54)
Zinc borate .....	1000 (454)
Zinc bromide .....	1000 (454)
Zinc carbonate .....	1000 (454)
Zinc chloride .....	1000 (454)
Zinc cyanide Zn(CN) <sub>2</sub> .....	10 (4.54)
Zinc fluoride .....	1000 (454)
Zinc formate .....	1000 (454)
Zinc hydrosulfite .....	1000 (454)
Zinc nitrate .....	1000 (454)
Zinc phenolsulfonate .....	5000 (2270)
Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> .....	100 (45.4)
Zinc silicofluoride .....	5000 (2270)
Zinc sulfate .....	1000 (454)
Ziram .....	10 (4.54)
Zirconium nitrate .....	5000 (2270)
Zirconium potassium fluoride .....	1000 (454)
Zirconium sulfate .....	5000 (2270)
Zirconium tetrachloride .....	5000 (2270)
F001 .....	10 (4.54)
(a) Tetrachloroethylene .....	100 (45.4)
(b) Trichloroethylene .....	100 (45.4)
(c) Methylene chloride .....	1000 (454)
(d) 1,1,1-Trichloroethane .....	1000 (454)
(e) Carbon tetrachloride .....	10 (4.54)
(f) Chlorinated fluorocarbons .....	5000 (2270)
F002 .....	10 (4.54)
(a) Tetrachloroethylene .....	100 (45.4)
(b) Methylene chloride .....	1000 (454)
(c) Trichloroethylene .....	100 (45.4)
(d) 1,1,1-Trichloroethane .....	1000 (454)
(e) Chlorobenzene .....	100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane .....	5000 (2270)
(g) o-Dichlorobenzene .....	100 (45.4)
(h) Trichlorofluoromethane .....	5000 (2270)
(i) 1,1,2-Trichloroethane .....	100 (45.4)
F003 .....	100 (45.4)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
(a) Xylene .....	1000 (454)
(b) Acetone .....	5000 (2270)
(c) Ethyl acetate .....	5000 (2270)
(d) Ethylbenzene .....	1000 (454)
(e) Ethyl ether .....	100 (45.4)
(f) Methyl isobutyl ketone .....	5000 (2270)
(g) n-Butyl alcohol .....	5000 (2270)
(h) Cyclohexanone .....	5000 (2270)
(i) Methanol .....	5000 (2270)
F004 .....	100 (45.4)
(a) Cresols/Cresylic acid .....	100 (45.4)
(b) Nitrobenzene .....	1000 (454)
F005 .....	100 (45.4)
(a) Toluene .....	1000 (454)
(b) Methyl ethyl ketone .....	5000 (2270)
(c) Carbon disulfide .....	100 (45.4)
(d) Isobutanol .....	5000 (2270)
(e) Pyridine .....	1000 (454)
F006 .....	10 (4.54)
F007 .....	10 (4.54)
F008 .....	10 (4.54)
F009 .....	10 (4.54)
F010 .....	10 (4.54)
F011 .....	10 (4.54)
F012 .....	10 (4.54)
F019 .....	10 (4.54)
F020 .....	1 (0.454)
F021 .....	1 (0.454)
F022 .....	1 (0.454)
F023 .....	1 (0.454)
F024 .....	1 (0.454)
F025 .....	1 (0.454)
F026 .....	1 (0.454)
F027 .....	1 (0.454)
F028 .....	1 (0.454)
F032 .....	1 (0.454)
F034 .....	1 (0.454)
F035 .....	1 (0.454)
F037 .....	1 (0.454)
F038 .....	1 (0.454)
F039 .....	1 (0.454)
K001 .....	1 (0.454)
K002 .....	10 (4.54)
K003 .....	10 (4.54)
K004 .....	10 (4.54)
K005 .....	10 (4.54)
K006 .....	10 (4.54)
K007 .....	10 (4.54)
K008 .....	10 (4.54)
K009 .....	10 (4.54)
K010 .....	10 (4.54)
K011 .....	10 (4.54)
K013 .....	10 (4.54)
K014 .....	5000 (2270)
K015 .....	10 (4.54)
K016 .....	1 (0.454)
K017 .....	10 (4.54)
K018 .....	1 (0.454)
K019 .....	1 (0.454)
K020 .....	1 (0.454)
K021 .....	10 (4.54)
K022 .....	1 (0.454)
K023 .....	5000 (2270)
K024 .....	5000 (2270)
K025 .....	10 (4.54)
K026 .....	1000 (454)
K027 .....	10 (4.54)
K028 .....	1 (0.454)
K029 .....	1 (0.454)
K030 .....	1 (0.454)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
K031	1 (0.454)
K032	10 (4.54)
K033	10 (4.54)
K034	10 (4.54)
K035	1 (0.454)
K036	1 (0.454)
K037	1 (0.454)
K038	10 (4.54)
K039	10 (4.54)
K040	10 (4.54)
K041	1 (0.454)
K042	10 (4.54)
K043	10 (4.54)
K044	10 (4.54)
K045	10 (4.54)
K046	10 (4.54)
K047	10 (4.54)
K048	10 (4.54)
K049	10 (4.54)
K050	10 (4.54)
K051	10 (4.54)
K052	10 (4.54)
K060	1 (0.454)
K061	10 (4.54)
K062	10 (4.54)
K064	10 (4.54)
K065	10 (4.54)
K066	10 (4.54)
K069	10 (4.54)
K071	1 (0.454)
K073	10 (4.54)
K083	100 (45.4)
K084	1 (0.454)
K085	10 (4.54)
K086	10 (4.54)
K087	100 (45.4)
K088	10 (4.54)
K090	10 (4.54)
K091	10 (4.54)
K093	5000 (2270)
K094	5000 (2270)
K095	100 (45.4)
K096	100 (45.4)
K097	1 (0.454)
K098	1 (0.454)
K099	10 (4.54)
K100	10 (4.54)
K101	1 (0.454)
K102	1 (0.454)
K103	100 (45.4)
K104	10 (4.54)
K105	10 (4.54)
K106	1 (0.454)
K107	10 (4.54)
K108	10 (4.54)
K109	10 (4.54)
K110	10 (4.54)
K111	10 (4.54)
K112	10 (4.54)
K113	10 (4.54)
K114	10 (4.54)
K115	10 (4.54)
K116	10 (4.54)
K117	1 (0.454)
K118	1 (0.454)
K123	10 (4.54)
K124	10 (4.54)
K125	10 (4.54)
K126	10 (4.54)
K131	100 (45.4)

TABLE 1 TO APPENDIX A—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES—Continued

Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
K132	1000 (454)
K136	1 (0.454)
K141	1 (0.454)
K142	1 (0.454)
K143	1 (0.454)
K144	1 (0.454)
K145	1 (0.454)
K147	1 (0.454)
K148	1 (0.454)
K149	10 (4.54)
K150	10 (4.54)
K151	10 (4.54)
K156	10 (4.54)
K157	10 (4.54)
K158	10 (4.54)
K159	10 (4.54)
K161	1 (0.454)
K169	10 (4.54)
K170	1 (0.454)
K171	1 (0.454)
K172	1 (0.454)
K174	1 (0.454)
K175	1 (0.454)
K176	1 (0.454)
K177	5000 (2270)
K178	1000 (454)
K181	1 (0.454)

ε The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

ζ The RQ for asbestos is limited to friable forms only.

Ⓢ Indicates that the name was added by PHMSA because (1) the name is a synonym for a specific hazardous substance and (2) the name appears in the Hazardous Materials Table as a proper shipping name.

\* To provide consistency with EPA regulations, two entries with different CAS numbers are provided. Refer to the EPA Table 302.4—List of Hazardous Substances and Reportable Quantities for an explanation of the two entries.

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

TABLE 2 TO APPENDIX A—RADIONUCLIDES

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Actinium-224	89	100 (3.7)
Actinium-225	89	1 (.037)
Actinium-226	89	10 (.37)
Actinium-227	89	0.001 (.00037)
Actinium-228	89	10 (.37)
Aluminum-26	13	10 (.37)
Americium-237	95	1000 (37)
Americium-238	95	100 (3.7)
Americium-239	95	100 (3.7)
Americium-240	95	10 (.37)
Americium-241	95	0.01 (.00037)
Americium-242	95	100 (3.7)
Americium-242m	95	0.01 (.00037)
Americium-243	95	0.01 (.00037)
Americium-244	95	10 (.37)
Americium-244m	95	1000 (37)
Americium-245	95	1000 (37)
Americium-246	95	1000 (37)
Americium-246m	95	1000 (37)
Antimony-115	51	1000 (37)
Antimony-116	51	1000 (3.7)
Antimony-116m	51	100 (3.7)
Antimony-117	51	1000 (37)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Antimony-118m	51	10 (.37)
Antimony-119	51	1000 (37)
Antimony-120 (16 min)	51	1000 (37)
Antimony-120 (5.76 day)	51	10 (.37)
Antimony-122	51	10 (.37)
Antimony-124	51	10 (.37)
Antimony-124m	51	1000 (37)
Antimony-125	51	10 (.37)
Antimony-126	51	10 (.37)
Antimony-126m	51	1000 (37)
Antimony-127	51	10 (.37)
Antimony-128 (10.4 min)	51	1000 (37)
Antimony-128 (9.01 hr)	51	10 (.37)
Antimony-129	51	100 (3.7)
Antimony-130	51	100 (3.7)
Antimony-131	51	1000 (37)
Argon-39	18	1000 (37)
Argon-41	18	10 (.37)
Arsenic-69	33	1000 (37)
Arsenic-70	33	100 (3.7)
Arsenic-71	33	100 (3.7)
Arsenic-72	33	10 (.37)
Arsenic-73	33	100 (3.7)
Arsenic-74	33	10 (.37)
Arsenic-76	33	100 (3.7)



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TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Arsenic-77	33	1000 (37)
Arsenic-78	33	100 (3.7)
Astatine-207	85	100 (3.7)
Astatine-211	85	100 (3.7)
Barium-126	56	1000 (37)
Barium-128	56	10 (.37)
Barium-131	56	10 (.37)
Barium-131m	56	1000 (37)
Barium-133	56	10 (.37)
Barium-133m	56	100 (3.7)
Barium-135m	56	1000 (37)
Barium-139	56	1000 (37)
Barium-140	56	10 (.37)
Barium-141	56	1000 (37)
Barium-142	56	1000 (37)
Berkelium-245	97	100 (3.7)
Berkelium-246	97	10 (.37)
Berkelium-247	97	0.01 (.00037)
Berkelium-249	97	1 (.037)
Berkelium-250	97	100 (3.7)
Beryllium-10	4	1 (.037)
Beryllium-7	4	100 (3.7)
Bismuth-200	83	100 (3.7)
Bismuth-201	83	100 (3.7)
Bismuth-202	83	1000 (37)
Bismuth-203	83	10 (.37)
Bismuth-205	83	10 (.37)
Bismuth-206	83	10 (.37)
Bismuth-207	83	10 (.37)
Bismuth-210	83	10 (.37)
Bismuth-210m	83	0.1 (.0037)
Bismuth-212	83	100 (3.7)
Bismuth-213	83	100 (3.7)
Bismuth-214	83	100 (3.7)
Bromine-74	35	100 (3.7)
Bromine-74m	35	100 (3.7)
Bromine-75	35	100 (3.7)
Bromine-76	35	10 (.37)
Bromine-77	35	100 (3.7)
Bromine-80	35	1000 (37)
Bromine-80m	35	1000 (37)
Bromine-82	35	10 (.37)
Bromine-83	35	1000 (37)
Bromine-84	35	100 (3.7)
Cadmium-104	48	1000 (37)
Cadmium-107	48	1000 (37)
Cadmium-109	48	1 (.037)
Cadmium-113	48	0.1 (.0037)
Cadmium-113m	48	0.1 (.0037)
Cadmium-115	48	100 (3.7)
Cadmium-115m	48	10 (.37)
Cadmium-117	48	100 (3.7)
Cadmium-117m	48	10 (.37)
Calcium-41	20	10 (.37)
Calcium-45	20	10 (.37)
Calcium-47	20	10 (.37)
Californium-244	98	1000 (37)
Californium-246	98	10 (.37)
Californium-248	98	0.1 (.0037)
Californium-249	98	0.01 (.00037)
Californium-250	98	0.01 (.00037)
Californium-251	98	0.01 (.00037)
Californium-252	98	0.1 (.0037)
Californium-253	98	10 (.37)
Californium-254	98	0.1 (.0037)
Carbon-11	6	1000 (37)
Carbon-14	6	10 (.37)
Cerium-134	58	10 (.37)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Cerium-135	58	10 (.37)
Cerium-137	58	1000 (37)
Cerium-137m	58	100 (3.7)
Cerium-139	58	100 (3.7)
Cerium-141	58	10 (.37)
Cerium-143	58	100 (3.7)
Cerium-144	58	1 (.037)
Cesium-125	55	1000 (37)
Cesium-127	55	100 (3.7)
Cesium-129	55	100 (3.7)
Cesium-130	55	1000 (37)
Cesium-131	55	1000 (37)
Cesium-132	55	10 (.37)
Cesium-134	55	1 (.037)
Cesium-134m	55	1000 (37)
Cesium-135	55	10 (.37)
Cesium-135m	55	100 (3.7)
Cesium-136	55	10 (.37)
Cesium-137	55	1 (.037)
Cesium-138	55	100 (3.7)
Chlorine-36	17	10 (.37)
Chlorine-38	17	100 (3.7)
Chlorine-39	17	100 (3.7)
Chromium-48	24	100 (3.7)
Chromium-49	24	1000 (37)
Chromium-51	24	1000 (37)
Cobalt-55	27	10 (.37)
Cobalt-56	27	10 (.37)
Cobalt-57	27	100 (3.7)
Cobalt-58	27	10 (.37)
Cobalt-58m	27	1000 (37)
Cobalt-60	27	10 (.37)
Cobalt-60m	27	1000 (37)
Cobalt-61	27	1000 (37)
Cobalt-62m	27	1000 (37)
Copper-60	29	100 (3.7)
Copper-61	29	100 (3.7)
Copper-64	29	1000 (37)
Copper-67	29	100 (3.7)
Curium-238	96	1000 (37)
Curium-240	96	1 (.037)
Curium-241	96	10 (.37)
Curium-242	96	1 (.037)
Curium-243	96	0.01 (.00037)
Curium-244	96	0.01 (.00037)
Curium-245	96	0.01 (.00037)
Curium-246	96	0.01 (.00037)
Curium-247	96	0.01 (.00037)
Curium-248	96	0.001 (.000037)
Curium-249	96	1000 (37)
Dysprosium-155	66	100 (3.7)
Dysprosium-157	66	100 (3.7)
Dysprosium-159	66	100 (3.7)
Dysprosium-165	66	1000 (37)
Dysprosium-166	66	10 (.37)
Einsteinium-250	99	10 (.37)
Einsteinium-251	99	1000 (37)
Einsteinium-253	99	10 (.37)
Einsteinium-254	99	0.1 (.0037)
Einsteinium-254m	99	1 (.037)
Erbium-161	68	100 (3.7)
Erbium-165	68	1000 (37)
Erbium-169	68	100 (3.7)
Erbium-171	68	100 (3.7)
Erbium-172	68	10 (.37)
Europium-145	63	10 (.37)
Europium-146	63	10 (.37)
Europium-147	63	10 (.37)

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TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Europium-148	63	10 (.37)
Europium-149	63	100 (3.7)
Europium-150 (12.6 hr)	63	1000 (37)
Europium-150 (34.2 yr)	63	10 (.37)
Europium-152	63	10 (.37)
Europium-152m	63	100 (3.7)
Europium-154	63	10 (.37)
Europium-155	63	10 (.37)
Europium-156	63	10 (.37)
Europium-157	63	10 (.37)
Europium-158	63	1000 (37)
Fermium-252	100	10 (.37)
Fermium-253	100	10 (.37)
Fermium-254	100	100 (3.7)
Fermium-255	100	100 (3.7)
Fermium-257	100	1 (.037)
Fluorine-18	9	1000 (37)
Francium-222	87	100 (3.7)
Francium-223	87	100 (3.7)
Gadolinium-145	64	100 (3.7)
Gadolinium-146	64	10 (.37)
Gadolinium-147	64	10 (.37)
Gadolinium-148	64	0.001 (.000037)
Gadolinium-149	64	100 (3.7)
Gadolinium-151	64	100 (3.7)
Gadolinium-152	64	0.001 (.000037)
Gadolinium-153	64	10 (.37)
Gadolinium-159	64	1000 (37)
Gallium-65	31	1000 (37)
Gallium-66	31	10 (.37)
Gallium-67	31	100 (3.7)
Gallium-68	31	1000 (37)
Gallium-70	31	1000 (37)
Gallium-72	31	10 (.37)
Gallium-73	31	100 (3.7)
Germanium-66	32	100 (3.7)
Germanium-67	32	1000 (37)
Germanium-68	32	10 (.37)
Germanium-69	32	10 (.37)
Germanium-71	32	1000 (37)
Germanium-75	32	1000 (37)
Germanium-77	32	10 (.37)
Germanium-78	32	1000 (37)
Gold-193	79	100 (3.7)
Gold-194	79	10 (.37)
Gold-195	79	100 (3.7)
Gold-198	79	100 (3.7)
Gold-198m	79	10 (.37)
Gold-199	79	100 (3.7)
Gold-200	79	1000 (37)
Gold-200m	79	10 (.37)
Gold-201	79	1000 (37)
Hafnium-170	72	100 (3.7)
Hafnium-172	72	1 (.037)
Hafnium-173	72	100 (3.7)
Hafnium-175	72	100 (3.7)
Hafnium-177m	72	1000 (37)
Hafnium-178m	72	0.1 (.0037)
Hafnium-179m	72	100 (3.7)
Hafnium-180m	72	100 (3.7)
Hafnium-181	72	10 (.37)
Hafnium-182	72	0.1 (.0037)
Hafnium-182m	72	100 (3.7)
Hafnium-183	72	100 (3.7)
Hafnium-184	72	100 (3.7)
Holmium-155	67	1000 (37)
Holmium-157	67	1000 (37)
Holmium-159	67	1000 (37)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Holmium-161	67	1000 (37)
Holmium-162	67	1000 (37)
Holmium-162m	67	1000 (37)
Holmium-164	67	1000 (37)
Holmium-164m	67	1000 (37)
Holmium-166	67	100 (3.7)
Holmium-166m	67	1 (.037)
Holmium-167	67	100 (3.7)
Hydrogen-3	1	100 (3.7)
Indium-109	49	100 (3.7)
Indium-110 (4.9 hr)	49	10 (.37)
Indium-110 (69.1 min)	49	100 (3.7)
Indium-111	49	100 (3.7)
Indium-112	49	1000 (37)
Indium-113m	49	1000 (37)
Indium-114m	49	10 (.37)
Indium-115	49	0.1 (.0037)
Indium-115m	49	100 (3.7)
Indium-116m	49	100 (3.7)
Indium-117	49	1000 (37)
Indium-117m	49	100 (3.7)
Indium-119m	49	1000 (37)
Iodine-120	53	10 (.37)
Iodine-120m	53	100 (3.7)
Iodine-121	53	100 (3.7)
Iodine-123	53	10 (.37)
Iodine-124	53	0.1 (.0037)
Iodine-125	53	0.01 (.00037)
Iodine-126	53	0.01 (.00037)
Iodine-128	53	1000 (37)
Iodine-129	53	0.001 (.000037)
Iodine-130	53	1 (.037)
Iodine-131	53	0.01 (.00037)
Iodine-132	53	10 (.37)
Iodine-132m	53	10 (.37)
Iodine-133	53	0.1 (.0037)
Iodine-134	53	100 (3.7)
Iodine-135	53	10 (.37)
Iridium-182	77	1000 (37)
Iridium-184	77	100 (3.7)
Iridium-185	77	100 (3.7)
Iridium-186	77	10 (.37)
Iridium-187	77	100 (3.7)
Iridium-188	77	10 (.37)
Iridium-189	77	100 (3.7)
Iridium-190	77	10 (.37)
Iridium-190m	77	1000 (37)
Iridium-192	77	10 (.37)
Iridium-192m	77	100 (3.7)
Iridium-194	77	100 (3.7)
Iridium-194m	77	10 (.37)
Iridium-195	77	1000 (37)
Iridium-195m	77	100 (3.7)
Iron-52	26	100 (3.7)
Iron-55	26	100 (3.7)
Iron-59	26	10 (.37)
Iron-60	26	0.1 (.0037)
Krypton-74	36	10 (.37)
Krypton-76	36	10 (.37)
Krypton-77	36	10 (.37)
Krypton-79	36	100 (3.7)
Krypton-81	36	1000 (37)
Krypton-83m	36	1000 (37)
Krypton-85	36	1000 (37)
Krypton-85m	36	100 (3.7)
Krypton-87	36	10 (.37)
Krypton-88	36	10 (.37)
Lanthanum-131	57	1000 (37)

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TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Lanthanum-132	57	100 (3.7)
Lanthanum-135	57	1000 (37)
Lanthanum-137	57	10 (.37)
Lanthanum-138	57	1 (.037)
Lanthanum-140	57	10 (.37)
Lanthanum-141	57	1000 (37)
Lanthanum-142	57	100 (3.7)
Lanthanum-143	57	1000 (37)
Lead-195m	82	1000 (37)
Lead-198	82	100 (3.7)
Lead-199	82	100 (3.7)
Lead-200	82	100 (3.7)
Lead-201	82	100 (3.7)
Lead-202	82	1 (.037)
Lead-202m	82	10 (.37)
Lead-203	82	100 (3.7)
Lead-205	82	100 (3.7)
Lead-209	82	1000 (37)
Lead-210	82	0.01 (.00037)
Lead-211	82	100 (3.7)
Lead-212	82	10 (.37)
Lead-214	82	100 (3.7)
Lutetium-169	71	10 (.37)
Lutetium-170	71	10 (.37)
Lutetium-171	71	10 (.37)
Lutetium-172	71	10 (.37)
Lutetium-173	71	100 (3.7)
Lutetium-174	71	10 (.37)
Lutetium-174m	71	10 (.37)
Lutetium-176	71	1 (.037)
Lutetium-176m	71	1000 (37)
Lutetium-177	71	100 (3.7)
Lutetium-177m	71	10 (.37)
Lutetium-178	71	1000 (37)
Lutetium-178m	71	1000 (37)
Lutetium-179	71	1000 (37)
Magnesium-28	12	10 (.37)
Manganese-51	25	1000 (37)
Manganese-52	25	10 (.37)
Manganese-52m	25	1000 (37)
Manganese-53	25	1000 (37)
Manganese-54	25	10 (.37)
Manganese-56	25	100 (3.7)
Mendelevium-257	101	100 (3.7)
Mendelevium-258	101	1 (.037)
Mercury-193	80	100 (3.7)
Mercury-193m	80	10 (.37)
Mercury-194	80	0.1 (.0037)
Mercury-195	80	100 (3.7)
Mercury-195m	80	100 (3.7)
Mercury-197	80	1000 (37)
Mercury-197m	80	1000 (37)
Mercury-199m	80	1000 (37)
Mercury-203	80	10 (.37)
Molybdenum-101	42	1000 (37)
Molybdenum-90	42	100 (3.7)
Molybdenum-93	42	100 (3.7)
Molybdenum-93m	42	10 (.37)
Molybdenum-99	42	100 (3.7)
Neodymium-136	60	1000 (37)
Neodymium-138	60	1000 (37)
Neodymium-139	60	1000 (37)
Neodymium-139m	60	100 (3.7)
Neodymium-141	60	1000 (37)
Neodymium-147	60	10 (.37)
Neodymium-149	60	100 (3.7)
Neodymium-151	60	1000 (37)
Neptunium-232	93	1000 (37)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Neptunium-233	93	1000 (37)
Neptunium-234	93	10 (.37)
Neptunium-235	93	1000 (37)
Neptunium-236 (1.2 E 5 yr)	93	0.1 (.0037)
Neptunium-236 (22.5 hr)	93	100 (3.7)
Neptunium-237	93	0.01 (.00037)
Neptunium-238	93	10 (.37)
Neptunium-239	93	100 (3.7)
Neptunium-240	93	100 (3.7)
Nickel-56	28	10 (.37)
Nickel-57	28	10 (.37)
Nickel-59	28	100 (3.7)
Nickel-63	28	100 (3.7)
Nickel-65	28	100 (3.7)
Nickel-66	28	10 (.37)
Niobium-88	41	100 (3.7)
Niobium-89 (122 min)	41	100 (3.7)
Niobium-89 (66 min)	41	100 (3.7)
Niobium-90	41	10 (.37)
Niobium-93m	41	100 (3.7)
Niobium-94	41	10 (.37)
Niobium-95	41	10 (.37)
Niobium-95m	41	100 (3.7)
Niobium-96	41	10 (.37)
Niobium-97	41	100 (3.7)
Niobium-98	41	1000 (37)
Osmium-180	76	1000 (37)
Osmium-181	76	100 (3.7)
Osmium-182	76	100 (3.7)
Osmium-185	76	10 (.37)
Osmium-189m	76	1000 (37)
Osmium-191	76	100 (3.7)
Osmium-191m	76	1000 (37)
Osmium-193	76	100 (3.7)
Osmium-194	76	1 (.037)
Palladium-100	46	100 (3.7)
Palladium-101	46	100 (3.7)
Palladium-103	46	100 (3.7)
Palladium-107	46	100 (3.7)
Palladium-109	46	1000 (37)
Phosphorus-32	15	0.1 (.0037)
Phosphorus-33	15	1 (.037)
Platinum-186	78	100 (3.7)
Platinum-188	78	100 (3.7)
Platinum-189	78	100 (3.7)
Platinum-191	78	100 (3.7)
Platinum-193	78	1000 (37)
Platinum-193m	78	100 (3.7)
Platinum-195m	78	100 (3.7)
Platinum-197	78	1000 (37)
Platinum-197m	78	1000 (37)
Platinum-199	78	1000 (37)
Platinum-200	78	100 (3.7)
Plutonium-234	94	1000 (37)
Plutonium-235	94	1000 (37)
Plutonium-236	94	0.1 (.0037)
Plutonium-237	94	1000 (37)
Plutonium-238	94	0.01 (.00037)
Plutonium-239	94	0.01 (.00037)
Plutonium-240	94	0.01 (.00037)
Plutonium-241	94	1 (.037)
Plutonium-242	94	0.01 (.00037)
Plutonium-243	94	1000 (37)
Plutonium-244	94	0.01 (.00037)
Plutonium-245	94	100 (3.7)
Polonium-203	84	100 (3.7)
Polonium-205	84	100 (3.7)
Polonium-207	84	10 (.37)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Polonium-210	84	0.01 (.00037)
Potassium-40	19	1 (.037)
Potassium-42	19	100 (3.7)
Potassium-43	19	10 (.37)
Potassium-44	19	100 (3.7)
Potassium-45	19	1000 (37)
Praseodymium-136	59	1000 (37)
Praseodymium-137	59	1000 (37)
Praseodymium-138m	59	100 (3.7)
Praseodymium-139	59	1000 (37)
Praseodymium-142	59	100 (3.7)
Praseodymium-142m	59	1000 (37)
Praseodymium-143	59	10 (.37)
Praseodymium-144	59	1000 (37)
Praseodymium-145	59	1000 (37)
Praseodymium-147	59	1000 (37)
Promethium-141	61	1000 (37)
Promethium-143	61	100 (3.7)
Promethium-144	61	10 (.37)
Promethium-145	61	100 (3.7)
Promethium-146	61	10 (.37)
Promethium-147	61	10 (.37)
Promethium-148	61	10 (.37)
Promethium-148m	61	10 (.37)
Promethium-149	61	100 (3.7)
Promethium-150	61	100 (3.7)
Promethium-151	61	100 (3.7)
Protactinium-227	91	100 (3.7)
Protactinium-228	91	10 (.37)
Protactinium-230	91	10 (.37)
Protactinium-231	91	0.01 (.00037)
Protactinium-232	91	10 (.37)
Protactinium-233	91	100 (3.7)
Protactinium-234	91	10 (.37)
RADIONUCLIDES \$†		1 (.037)
Radium-223	88	1 (.037)
Radium-224	88	10 (.37)
Radium-225	88	1 (.037)
Radium-226 **	88	0.1 (.0037)
Radium-227	88	1000 (37)
Radium-228	88	0.1 (.0037)
Radon-220	86	0.1 (.0037)
Radon-222	86	0.1 (.0037)
Rhenium-177	75	1000 (37)
Rhenium-178	75	1000 (37)
Rhenium-181	75	100 (3.7)
Rhenium-182 (12.7 hr)	75	10 (.37)
Rhenium-182 (64.0 hr)	75	10 (.37)
Rhenium-184	75	10 (.37)
Rhenium-184m	75	10 (.37)
Rhenium-186	75	100 (3.7)
Rhenium-186m	75	10 (.37)
Rhenium-187	75	1000 (37)
Rhenium-188	75	1000 (37)
Rhenium-188m	75	1000 (37)
Rhenium-189	75	1000 (37)
Rhodium-100	45	10 (.37)
Rhodium-101	45	10 (.37)
Rhodium-101m	45	100 (3.7)
Rhodium-102	45	10 (.37)
Rhodium-102m	45	10 (.37)
Rhodium-103m	45	1000 (37)
Rhodium-105	45	100 (3.7)
Rhodium-106m	45	10 (.37)
Rhodium-107	45	1000 (37)
Rhodium-99	45	10 (.37)
Rhodium-99m	45	100 (3.7)
Rubidium-79	37	1000 (37)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Rubidium-81	37	100 (3.7)
Rubidium-81m	37	1000 (37)
Rubidium-82m	37	10 (.37)
Rubidium-83	37	10 (.37)
Rubidium-84	37	10 (.37)
Rubidium-86	37	10 (.37)
Rubidium-87	37	10 (.37)
Rubidium-88	37	1000 (37)
Rubidium-89	37	1000 (37)
Ruthenium-103	44	10 (.37)
Ruthenium-105	44	100 (3.7)
Ruthenium-106	44	1 (.037)
Ruthenium-94	44	1000 (37)
Ruthenium-97	44	100 (3.7)
Samarium-141	62	1000 (37)
Samarium-141m	62	1000 (37)
Samarium-142	62	1000 (37)
Samarium-145	62	100 (3.7)
Samarium-146	62	0.01 (.00037)
Samarium-147	62	0.01 (.00037)
Samarium-151	62	10 (.37)
Samarium-153	62	100 (3.7)
Samarium-155	62	1000 (37)
Samarium-156	62	100 (3.7)
Scandium-43	21	1000 (37)
Scandium-44	21	100 (3.7)
Scandium-44m	21	10 (.37)
Scandium-46	21	10 (.37)
Scandium-47	21	100 (3.7)
Scandium-48	21	10 (.37)
Scandium-49	21	1000 (37)
Selenium-70	34	1000 (37)
Selenium-73	34	10 (.37)
Selenium-73m	34	100 (3.7)
Selenium-75	34	10 (.37)
Selenium-79	34	10 (.37)
Selenium-81	34	1000 (37)
Selenium-81m	34	1000 (37)
Selenium-83	34	1000 (37)
Silicon-31	14	1000 (37)
Silicon-32	14	1 (.037)
Silver-102	47	100 (3.7)
Silver-103	47	1000 (37)
Silver-104	47	1000 (37)
Silver-104m	47	1000 (37)
Silver-105	47	10 (.37)
Silver-106	47	1000 (37)
Silver-106m	47	10 (.37)
Silver-108m	47	10 (.37)
Silver-110m	47	10 (.37)
Silver-111	47	10 (.37)
Silver-112	47	100 (3.7)
Silver-115	47	1000 (37)
Sodium-22	11	10 (.37)
Sodium-24	11	10 (.37)
Strontium-80	38	100 (3.7)
Strontium-81	38	1000 (37)
Strontium-83	38	100 (3.7)
Strontium-85	38	10 (.37)
Strontium-85m	38	1000 (37)
Strontium-87m	38	100 (3.7)
Strontium-89	38	10 (.37)
Strontium-90	38	0.1 (.0037)
Strontium-91	38	10 (.37)
Strontium-92	38	100 (3.7)
Sulfur-35	16	1 (.037)
Tantalum-172	73	100 (3.7)
Tantalum-173	73	100 (3.7)

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TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Tantalum-174	73	100 (3.7)
Tantalum-175	73	100 (3.7)
Tantalum-176	73	10 (.37)
Tantalum-177	73	1000 (37)
Tantalum-178	73	1000 (37)
Tantalum-179	73	1000 (37)
Tantalum-180	73	100 (3.7)
Tantalum-180m	73	1000 (37)
Tantalum-182	73	10 (.37)
Tantalum-182m	73	1000 (37)
Tantalum-183	73	100 (3.7)
Tantalum-184	73	10 (.37)
Tantalum-185	73	1000 (37)
Tantalum-186	73	1000 (37)
Technetium-101	43	1000 (37)
Technetium-104	43	1000 (37)
Technetium-93	43	100 (3.7)
Technetium-93m	43	1000 (37)
Technetium-94	43	10 (.37)
Technetium-94m	43	100 (3.7)
Technetium-96	43	10 (.37)
Technetium-96m	43	1000 (37)
Technetium-97	43	100 (3.7)
Technetium-97m	43	100 (3.7)
Technetium-98	43	10 (.37)
Technetium-99	43	10 (.37)
Technetium-99m	43	100 (3.7)
Tellurium-116	52	1000 (37)
Tellurium-121	52	10 (.37)
Tellurium-121m	52	10 (.37)
Tellurium-123	52	10 (.37)
Tellurium-123m	52	10 (.37)
Tellurium-125m	52	10 (.37)
Tellurium-127	52	1000 (37)
Tellurium-127m	52	10 (.37)
Tellurium-129	52	1000 (37)
Tellurium-129m	52	10 (.37)
Tellurium-131	52	1000 (37)
Tellurium-131m	52	10 (.37)
Tellurium-132	52	10 (.37)
Tellurium-133	52	1000 (37)
Tellurium-133m	52	1000 (37)
Tellurium-134	52	1000 (37)
Terbium-147	65	100 (3.7)
Terbium-149	65	100 (3.7)
Terbium-150	65	100 (3.7)
Terbium-151	65	10 (.37)
Terbium-153	65	100 (3.7)
Terbium-154	65	10 (.37)
Terbium-155	65	100 (3.7)
Terbium-156	65	10 (.37)
Terbium-156m (24.4 hr)	65	1000 (37)
Terbium-156m (5.0 hr)	65	1000 (37)
Terbium-157	65	100 (3.7)
Terbium-158	65	10 (.37)
Terbium-160	65	10 (.37)
Terbium-161	65	100 (3.7)
Thallium-194	81	1000 (37)
Thallium-194m	81	100 (3.7)
Thallium-195	81	100 (3.7)
Thallium-197	81	100 (3.7)
Thallium-198	81	10 (.37)
Thallium-198m	81	100 (3.7)
Thallium-199	81	100 (3.7)
Thallium-200	81	10 (.37)
Thallium-201	81	1000 (37)
Thallium-202	81	10 (.37)
Thallium-204	81	10 (.37)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Thorium (Irradiated)	90	***
Thorium (Natural)	90	**
Thorium-226	90	100 (3.7)
Thorium-227	90	1 (.037)
Thorium-228	90	0.01 (.00037)
Thorium-229	90	0.001 (.000037)
Thorium-230	90	0.01 (.00037)
Thorium-231	90	100 (3.7)
Thorium-232 **	90	0.001 (.000037)
Thorium-234	90	100 (3.7)
Thulium-162	69	1000 (37)
Thulium-166	69	10 (.37)
Thulium-167	69	100 (3.7)
Thulium-170	69	10 (.37)
Thulium-171	69	100 (3.7)
Thulium-172	69	100 (3.7)
Thulium-173	69	100 (3.7)
Thulium-175	69	1000 (37)
Tin-110	50	100 (3.7)
Tin-111	50	1000 (37)
Tin-113	50	10 (.37)
Tin-117m	50	100 (3.7)
Tin-119m	50	10 (.37)
Tin-121	50	1000 (37)
Tin-121m	50	10 (.37)
Tin-123	50	10 (.37)
Tin-123m	50	1000 (37)
Tin-125	50	10 (.37)
Tin-126	50	1 (.037)
Tin-127	50	100 (3.7)
Tin-128	50	1000 (37)
Titanium-44	22	1 (.037)
Titanium-45	22	1000 (37)
Tungsten-176	74	1000 (37)
Tungsten-177	74	100 (3.7)
Tungsten-178	74	100 (3.7)
Tungsten-179	74	1000 (37)
Tungsten-181	74	100 (3.7)
Tungsten-185	74	10 (.37)
Tungsten-187	74	100 (3.7)
Tungsten-188	74	10 (.37)
Uranium (Depleted)	92	***
Uranium (Irradiated)	92	***
Uranium (Natural)	92	**
Uranium Enriched 20% or greater	92	***
Uranium Enriched less than 20%	92	***
Uranium-230	92	1 (.037)
Uranium-231	92	1000 (37)
Uranium-232	92	0.01 (.00037)
Uranium-233	92	0.1 (.0037)
Uranium-234 **	92	0.1 (.0037)
Uranium-235 **	92	0.1 (.0037)
Uranium-236	92	0.1 (.0037)
Uranium-237	92	100 (3.7)
Uranium-238 **	92	0.1 (.0037)
Uranium-239	92	1000 (37)
Uranium-240	92	1000 (37)
Vanadium-47	23	1000 (37)
Vanadium-48	23	10 (.37)
Vanadium-49	23	1000 (37)
Xenon-120	54	100 (3.7)
Xenon-121	54	10 (.37)
Xenon-122	54	100 (3.7)
Xenon-123	54	10 (.37)
Xenon-125	54	100 (3.7)
Xenon-127	54	100 (3.7)

TABLE 2 TO APPENDIX A—RADIONUCLIDES—  
Continued

(1)—Radionuclide	(2)—Atomic Number	(3)—Reportable Quantity (RQ) Ci (TBq)
Xenon-129m	54	1000 (37)
Xenon-131m	54	1000 (37)
Xenon-133	54	1000 (37)
Xenon-133m	54	1000 (37)
Xenon-135	54	100 (3.7)
Xenon-135m	54	10 (3.7)
Xenon-138	54	10 (3.7)
Ytterbium-162	70	1000 (37)
Ytterbium-166	70	10 (3.7)
Ytterbium-167	70	1000 (37)
Ytterbium-169	70	10 (3.7)
Ytterbium-175	70	100 (3.7)
Ytterbium-177	70	1000 (37)
Ytterbium-178	70	1000 (37)
Yttrium-86	39	10 (3.7)
Yttrium-86m	39	1000 (37)
Yttrium-87	39	10 (3.7)
Yttrium-88	39	10 (3.7)
Yttrium-90	39	10 (3.7)
Yttrium-90m	39	100 (3.7)
Yttrium-91	39	10 (3.7)
Yttrium-91m	39	1000 (37)
Yttrium-92	39	100 (3.7)
Yttrium-93	39	100 (3.7)
Yttrium-94	39	1000 (37)
Yttrium-95	39	1000 (37)
Zinc-62	30	100 (3.7)
Zinc-63	30	1000 (37)
Zinc-65	30	10 (3.7)
Zinc-69	30	1000 (37)
Zinc-69m	30	100 (3.7)
Zinc-71m	30	100 (3.7)
Zinc-72	30	100 (3.7)
Zirconium-86	40	100 (3.7)
Zirconium-88	40	10 (3.7)
Zirconium-89	40	100 (3.7)
Zirconium-93	40	1 (.037)
Zirconium-95	40	10 (3.7)
Zirconium-97	40	10 (3.7)

\$The RQs for all radionuclides apply to chemical compounds containing the radionuclides and elemental forms regardless of the diameter of pieces of solid material.

†The RQ of one curie applies to all radionuclides not otherwise listed. Whenever the RQs in TABLE 1—HAZARDOUS SUBSTANCES OTHER THAN RADIONUCLIDES and this table conflict, the lowest RQ shall apply. For example, uranyl acetate and uranyl nitrate have RQs shown in TABLE 1 of 100 pounds, equivalent to about one-tenth the RQ level for uranium-238 in this table.

\*\*The method to determine the RQs for mixtures or solutions of radionuclides can be found in paragraph 7 of the note preceding TABLE 1 of this appendix. RQs for the following four common radionuclide mixtures are provided: radium-226 in secular equilibrium with its daughters (0.053 curie); natural uranium (0.1 curie); natural uranium in secular equilibrium with its daughters (0.052 curie); and natural thorium in secular equilibrium with its daughters (0.011 curie).

\*\*\*Indicates that the name was added by PHMSA because it appears in the list of radionuclides in 49 CFR 173.435. The reportable quantity (RQ), if not specifically listed elsewhere in this appendix, shall be determined in accordance with the procedures in paragraph 7 of this appendix.

APPENDIX B TO § 172.101—LIST OF MARINE POLLUTANTS

1. See §171.4 of this subchapter for applicability to marine pollutants. This appendix lists potential marine pollutants as defined in §171.8 of this subchapter.

2. Marine pollutants listed in this appendix are not necessarily listed by name in the §172.101 Table. If a marine pollutant not listed by name or by synonym in the §172.101 Table meets the definition of any hazard Class 1 through 8, then you must determine the class and division of the material in accordance with §173.2a of this subchapter. You must also select the most appropriate hazardous material description and proper shipping name. If a marine pollutant not listed by name or by synonym in the §172.101 Table does not meet the definition of any Class 1 through 8, then you must offer it for transportation under the most appropriate of the following two Class 9 entries: “Environmentally hazardous substances, liquid, n.o.s.” UN3082, or “Environmentally hazardous substances, solid, n.o.s.” UN3077.

3. This appendix contains two columns. The first column, entitled “S.M.P.” (for severe marine pollutants), identifies whether a material is a severe marine pollutant. If the letters “PP” appear in this column for a material, the material is a severe marine pollutant, otherwise it is not. The second column, entitled “Marine Pollutant”, lists the marine pollutants.

4. If a material is not listed in this appendix and meets the criteria for a marine pollutant as provided in Chapter 2.9 of the IMDG Code, (incorporated by reference; see §171.7 of this subchapter), the material may be transported as a marine pollutant in accordance with the applicable requirements of this subchapter.

5. If a material or a solution meeting the definition of a marine pollutant in §171.8 of this subchapter does not meet the criteria for a marine pollutant as provided in section 2.9.3.3 and 2.9.3.4 of the IMDG Code, (incorporated by reference; see §171.7 of this subchapter), it may be excepted from the requirements of this subchapter as a marine pollutant if that exception is approved by the Associate Administrator.

LIST OF MARINE POLLUTANTS

S.M.P. (1)	Marine pollutant (2)
	Acetone cyanohydrin, stabilized
	Acetylene tetrabromide
	Acetylene tetrachloride
	Acraldehyde, inhibited
	Acrolein, inhibited
	Acrolein, stabilized
	Acrylic aldehyde, inhibited
	Alcohol C-12 - C-16 poly(1-6) ethoxylate
	Alcohol C-6 - C-17 (secondary)poly(3-6) ethoxylate
	Aldicarb
PP	Aldrin
	Alkyl (c12-c14) dimethylamine
	Alkyl (c7-c9) nitrates
	Alkybenzenesulphonates, branched and straight chain (excluding C11–C13 straight chain or branched chain homologues)
	Allyl bromide
	ortho-Aminoanisole

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LIST OF MARINE POLLUTANTS—Continued

S.M.P. (1)	Marine pollutant (2)
	Aminocarb
	Ammonium dinitro-o-cresolate
PP	n-Amylbenzene
PP	Azinphos-ethyl
	Azinphos-methyl
	Barium cyanide
	Bendiocarb
	Benomyl
	Benquinox
	Benzyl chlorocarbonate
	Benzyl chloroformate
PP	Binapacryl
	<i>N,N-Bis</i> (2-hydroxyethyl) oleamide (LOA)
PP	Brodifacoum
	Bromine cyanide
	Bromoacetone
	Bromoallylene
	Bromobenzene
	ortho-Bromobenzyl cyanide
	Bromocycane
	Bromoform
PP	Bromophos-ethyl
	3-Bromopropene
	Bromoxynil
	Butanedione
	2-Butenal, stabilized
	Butyl benzyl phthalate
	<i>N-tert</i> -butyl- <i>N</i> -cyclopropyl-6-methylthio-1,3,5-triazine-2,4-diamine
PP	2,4-Di- <i>tert</i> -butylphenol
	2, 6-Di- <i>tert</i> -Butylphenol
PP	<i>para</i> -tertiary-butyltoluene
	Cadmium compounds
	Cadmium sulphide
	Calcium arsenate
	Calcium arsenate and calcium arsenite, mixtures, solid
PP	Calcium cyanide
	Camphchlor
	Carbaryl
	Carbendazim
	Carbofuran
	Carbon tetrabromide
	Carbon tetrachloride
PP	Carbophenothion
	Cartap hydrochloride
PP	Chlordane
	Chlorfenvinphos
PP	Chlorinated paraffins (C-10 - C-13)
PP	Chlorinated paraffins (C14–C17), with more than 1% shorter chain length
	Chlorine
	Chlorine cyanide, inhibited
	Chlormephos
	Chloroacetone, stabilized
	1-Chloro-2,3-Epoxypropane
	2-Chloro-6-nitrotoluene
	4-Chloro-2-nitrotoluene
	Chloro-ortho-nitrotoluene
	2-Chloro-5-trifluoromethylnitrobenzene
	<i>para</i> -Chlorobenzyl chloride, liquid or solid
	Chlorodinitrobenzenes, liquid or solid
	1-Chloroheptane
	1-Chlorohexane
	Chloronitroanilines
	Chloronitrotoluenes, <i>liquid</i>
	Chloronitrotoluenes, <i>solid</i>
	1-Chlorooctane
PP	Chlorophenolates, liquid
PP	Chlorophenolates, solid
	Chlorophenyltrichlorosilane

LIST OF MARINE POLLUTANTS—Continued

S.M.P. (1)	Marine pollutant (2)
	Chloropicrin
	alpha-Chloropropylene
	Chlorotoluenes (meta-;para-)
PP	Chlorpyrifos
PP	Chlorthiophos
	Cocculus
	Coconitrile
	Copper acetoarsenite
	Copper arsenite
PP	Copper chloride
PP	Copper chloride solution
PP	Copper cyanide
PP	Copper metal powder
PP	Copper sulphate, anhydrous, hydrates
	Coumachlor
PP	Coumaphos
PP	Cresyl diphenyl phosphate
	Crotonaldehyde, stabilized
	Crotonic aldehyde, stabilized
	Crotoxyphos
	Cupric arsenite
PP	Cupric chloride
PP	Cupric cyanide
PP	Cupric sulfate
	Cupriethylenediamine solution
PP	Cuprous chloride
	Cyanide mixtures
	Cyanide solutions
	Cyanides, inorganic, n.o.s.
	Cyanogen bromide
	Cyanogen chloride, inhibited
	Cyanogen chloride, stabilized
	Cyanophos
PP	1,5,9-Cyclododecatriene
PP	Cyhexatin
PP	Cyrenes (o-;m-;p-)
PP	Cypermethrin
	Decyl acrylate
PP	DDT
	Decyloxyltetrahydrothiophene dioxide
	DEF
	Desmedipham
	Di-allate
	Di-n-Butyl phthalate
PP	Dialifos
	4,4'-Diaminodiphenylmethane
PP	Diazinon
	1,3-Dibromobenzene
PP	Dichlofenthion
	Dichloroanilines
	1,3-Dichlorobenzene
	1,4-Dichlorobenzene
	Dichlorobenzene (meta-; para-)
	2,2-Dichlorodiethyl ether
	Dichlorodimethyl ether, symmetrical
	Di-(2-chloroethyl) ether
	1,1-Dichloroethylene, inhibited
	1,6-Dichlorohexane
	Dichlorophenyltrichlorosilane
PP	Dichlorvos
PP	Diclofop-methyl
	Dicrotophos
PP	Dieldrin
	Diisopropylbenzenes
	Diisopropylthalenes, mixed isomers
PP	Dimethoate
PP	<i>N,N</i> -Dimethyl-dodecylamine
	Dimethylhydrazine, symmetrical
	Dimethylhydrazine, unsymmetrical
	Dinitro-o-cresol, <i>solid</i>
	Dinitro-o-cresol, <i>solution</i>

LIST OF MARINE POLLUTANTS—Continued		LIST OF MARINE POLLUTANTS—Continued	
S.M.P. (1)	Marine pollutant (2)	S.M.P. (1)	Marine pollutant (2)
	Dinitrochlorobenzenes, liquid or solid	PP	Hexachlorobutadiene
	Dinitrophenol, <i>dry or wetted with less than 15 per cent water, by mass</i>	PP	1,3-Hexachlorobutadiene
	Dinitrophenol solutions		Hexaethyl tetraphosphate <i>liquid</i>
	Dinitrophenol, <i>wetted with not less than 15 per cent water, by mass</i>		Hexaethyl tetraphosphate, <i>solid</i>
	Dinitrophenolates <i>alkali metals, dry or wetted with less than 15 per cent water, by mass</i>		normal-Hexyl chloride
	Dinitrophenolates, <i>wetted with not less than 15 per cent water, by mass</i>		n-Hexylbenzene
	Dinobuton		Hydrocyanic acid, anhydrous, stabilized, containing less than 3% water
	Dinoseb		Hydrocyanic acid, anhydrous, stabilized, containing less than 3% water and absorbed in a porous inert material
	Dinoseb acetate		Hydrocyanic acid, aqueous solutions <i>not more than 20% hydrocyanic acid</i>
	Dioxacarb		Hydrogen cyanide solution in alcohol, <i>with not more than 45% hydrogen cyanide</i>
	Dioxathion		Hydrogen cyanide, stabilized <i>with less than 3% water</i>
	Dipentene		Hydrogen cyanide, stabilized <i>with less than 3% water and absorbed in a porous inert material</i>
	Diphacinone		Hydroxydimethylbenzenes, liquid or solid
	Diphenyl		Ioxynil
PP	Diphenylamine chloroarsine		Isobenzan
PP	Diphenylchloroarsine, solid or liquid		Isobutyl butyrate
	Disulfoton		Isobutylbenzene
	1,4-Di-tert-butylbenzene		Isodecyl acrylate
	DNOC		Isodecyl diphenyl phosphate
	DNOC (pesticide)		Isofenphos
	Dodecyl diphenyl oxide disulphonate		Isooctyl nitrate
PP	Dodecyl hydroxypropyl sulfide		Isoproc carb
	1-Dodecylamine		Isotetramethylbenzene
PP	Dodecylphenol		Isoxathion
	Drazoxolon	PP	Lead acetate
	Edifenphos		Lead arsenates
PP	Endosulfan		Lead arsenites
PP	Endrin		Lead compounds, soluble, n.o.s.
	Epibromohydrin		Lead cyanide
	Epichlorohydrin		Lead nitrate
PP	EPN		Lead perchlorate, solid or solution
PP	Esfenvalerate		Lead tetraethyl
PP	Ethion		Lead tetramethyl
	Ethoprophos		Lindane
	Ethyl fluid		Linuron
	Ethyl mercaptan		London Purple
	2-Ethylhexyl nitrate	PP	Magnesium arsenate
	2-Ethyl-3-propylacrolein		Malathion
	Ethyl tetraphosphate		Mancozeb (ISO)
	Ethylchloroarsine		Maneb
	Ethylene dibromide and methyl bromide mixtures, liquid		Maneb preparations <i>with not less than 60% maneb</i>
	2-Ethylhexaldehyde		Maneb preparation, stabilized against self-heating
	Fenamiphos		Maneb stabilized or Maneb preparations, stabilized <i>against self-heating</i>
PP	Fenbutatin oxide		Manganese ethylene-1,2-bis dithiocarbamate
PP	Fenchlorazole-ethyl		Manganese ethylene-1,2-bis-dithiocarbamate, stabilized against self-heating
PP	Fenitrothion		Mecarbam
PP	Fenoxapro-ethyl		Mephosfolan
PP	Fenoxaprop-P-ethyl		Mercaptodimethur
PP	Fenpropathrin		Mercuric acetate
	Fensulfothion		Mercuric ammonium chloride
	Fenthion		Mercuric arsenate
PP	Fentin acetate	PP	Mercuric benzoate
PP	Fentin hydroxide	PP	Mercuric bisulphate
	Ferric arsenate		Mercuric bromide
	Ferric arsenite		Mercuric chloride
	Ferrous arsenate		Mercuric cyanide
PP	Fonofos		Mercuric gluconate
	Formetanate		Mercuric iodide
PP	Furathiocarb (ISO)		Mercuric nitrate
PP	gamma-BHC		Mercuric oleate
	Gasoline, leaded		Mercuric oxide
PP	Heptachlor		Mercuric oxycyanide, desensitized
	Heptenophos		
	n-Heptaldehyde		
	n-Heptylbenzene		
	normal-Heptyl chloride		



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LIST OF MARINE POLLUTANTS—Continued

S.M.P. (1)	Marine pollutant (2)
PP	Mercuric potassium cyanide
PP	Mercuric Sulphate
PP	Mercuric thiocyanate
PP	Mercuriol
PP	Mercurous acetate
PP	Mercurous bisulphate
PP	Mercurous bromide
PP	Mercurous chloride
PP	Mercurous nitrate
PP	Mercurous salicylate
PP	Mercurous sulphate
PP	Mercury acetates
PP	Mercury ammonium chloride
PP	Mercury based pesticide, liquid, flammable, toxic
PP	Mercury based pesticides, liquid, toxic, flammable
PP	Mercury based pesticides, liquid, toxic
PP	Mercury based pesticides, solid, toxic
PP	Mercury benzoate
PP	Mercury bichloride
PP	Mercury bisulphates
PP	Mercury bromides
PP	Mercury compounds, liquid, n.o.s.
PP	Mercury compounds, solid, n.o.s.
PP	Mercury cyanide
PP	Mercury gluconate
PP	Mercury (I) (mercurous) compounds (pesticides)
PP	Mercury (II) (mercuric) compounds (pesticides)
PP	Mercury iodide
PP	Mercury nucleate
PP	Mercury oleate
PP	Mercury oxide
PP	Mercury oxycyanide, desensitized
PP	Mercury potassium cyanide
PP	Mercury potassium iodide
PP	Mercury salicylate
PP	Mercury sulfates
PP	Mercury thiocyanate
	Metam-sodium
	Methamidophos
	Methanethiol
	Methidathion
	Methomyl
	ortho-Methoxyaniline
	Methyl bromide and ethylene dibromide mixtures, liquid
	Methyl mercaptan
	3-Methylacroleine, stabilized
	Methylchlorobenzenes
	Methylnitrophenols
	3-Methylpyradine
	Methyltrithion
	Methylvinylbenzenes, inhibited
PP	Mevinphos
	Mexacarbate
	Mirex
	Monocrotophos
	Motor fuel anti-knock mixtures
	Motor fuel anti-knock mixtures or compounds
	Nabam
	Naled
PP	Nickel carbonyl
PP	Nickel cyanide
PP	Nickel tetracarbonyl
	3-Nitro-4-chlorobenzotrifluoride
	Nitrobenzene
	Nitrobenzotrifluorides, liquid or solid
	Nonylphenol
	normal-Octaldehyde
	Oleylamine
PP	Organotin compounds, liquid, n.o.s.
PP	Organotin compounds (pesticides)

LIST OF MARINE POLLUTANTS—Continued

S.M.P. (1)	Marine pollutant (2)
PP	Organotin compounds, solid, n.o.s.
PP	Organotin pesticides, liquid, flammable, toxic, n.o.s., <i>flash point less than 23deg C</i>
PP	Organotin pesticides, liquid, toxic, flammable, n.o.s.
PP	Organotin pesticides, liquid, toxic, n.o.s.
PP	Organotin pesticides, solid, toxic, n.o.s.
	Orthoarsenic acid
PP	Osmium tetroxide
	Oxamyl
	Oxydisulfoton
	Paraoxon
PP	Parathion
PP	Parathion-methyl
PP	PCBs.
	Pentachloroethane
PP	Pentachlorophenol
	Pentalin
	n-Pentylbenzene
	Perchloroethylene
	Perchloromethylmercaptan
	Petrol, leaded
PP	Phenarsazine chloride
	d-Phenothrin
PP	Phenthoate
	1-Phenylbutane
	2-Phenylbutane
	Phenylcyclohexane
PP	Phenylmercuric acetate
PP	Phenylmercuric compounds, n.o.s.
PP	Phenylmercuric hydroxide
PP	Phenylmercuric nitrate
PP	Phorate
PP	Phosalone
	Phosmet
PP	Phosphamidon
PP	Phosphorus, white, molten
PP	Phosphorus, white <i>or yellow dry or under water or in solution</i>
PP	Phosphorus white, or yellow, molten
PP	Phosphorus, yellow, molten
	Pindone (and salts of)
	Pirimicarb
PP	Pirimiphos-ethyl
PP	Polychlorinated biphenyls
PP	Polyhalogenated biphenyls, liquid <i>or Terphenyls liquid</i>
PP	Polyhalogenated biphenyls, solid <i>or Terphenyls, solid</i>
	Potassium cuprocyanide
	Potassium cyanide, solid
	Potassium cyanide, solution
PP	Potassium cyanocuprate (I)
PP	Potassium cyanomercurate
PP	Potassium mercuric iodide
	Promecarb
	Propachlor
	Propaphos
	Propenal, inhibited
	Propoxur
	Prothoate
	Prussic acid, anhydrous, stabilized
	Prussic acid, anhydrous, stabilized, absorbed in a porous inert material
PP	Pyrazophos
	Quinalphos
PP	Quizalofop
PP	Quizalofop-p-ethyl
	Rotenone
	Salithion
PP	Silafluofen
	Silver arsenite

LIST OF MARINE POLLUTANTS—Continued

S.M.P. (1)	Marine pollutant (2)
	Silver cyanide
	Silver orthoarsenite
PP	Sodium copper cyanide, solid
PP	Sodium copper cyanide solution
PP	Sodium cuprocyanide, solid
PP	Sodium cuprocyanide, solution
	Sodium cyanide, solid
	Sodium cyanide, solution
	Sodium dinitro-o-cresolate, dry or wetted with less than 15 per cent water, by mass
	Sodium dinitro-ortho-cresolate, wetted with not less than 15 per cent water, by mass
PP	Sodium pentachlorophenate
	Strychnine or Strychnine salts
PP	Sulfotep
	Sulprophos
	Tallow nitrile
	Temephos
	TEPP
PP	Terbufos
	Tetrabromoethane
	Tetrabromomethane
	1,1,2,2-Tetrachloroethane
	Tetrachloroethylene
	Tetrachloromethane
	Tetraethyl dithiopyrophosphate
PP	Tetraethyl lead, liquid
	Tetramethrin
	Tetramethyllead
	Thallium chlorate
	Thallium compounds, n.o.s.
	Thallium compounds (pesticides)
	Thallium nitrate
	Thallium sulfate
	Thallos chlorate
	Thiocarbonyl tetrachloride
	Triaryl phosphates, isopropylated
PP	Triaryl phosphates, n.o.s.
	Triazophos
	Tribromomethane
PP	Tributyltin compounds
	Trichlorfon
PP	1,2,3-Trichlorobenzene
	Trichlorobenzenes, liquid
	Trichlorobutene
	Trichlorobutylene
	Trichloromethane sulphuryl chloride
	Trichloromethyl sulphochloride
	Trichloronat
	Tricresyl phosphate (less than 1% ortho-isomer)
PP	Tricresyl phosphate, not less than 1% ortho-isomer but not more than 3% orthoisomer
PP	Tricresyl phosphate with more than 3 per cent ortho isomer
	Triethylbenzene
	Triisopropylated phenyl phosphates
	Trimethylene dichloride
PP	Triphenylphosphate
	Triphenyl phosphate/tert-butylated triphenyl phosphates mixtures containing 5% to 10% triphenyl phosphates
PP	Triphenyl phosphate/tert-butylated triphenyl phosphates mixtures containing 10% to 48% triphenyl phosphates
PP	Triphenyltin compounds
	Tritolyl phosphate (less than 1% ortho-isomer)
PP	Tritolyl phosphate (not less than 1% ortho-isomer)
	Trixylenyl phosphate
	Vinylidene chloride, stabilized
	Warfarin (and salts of)
PP	White phosphorus, dry

LIST OF MARINE POLLUTANTS—Continued

S.M.P. (1)	Marine pollutant (2)
PP	White phosphorus, wet
	White spirit, low (15-20%) aromatic
PP	Yellow phosphorus, dry
PP	Yellow phosphorus, wet
	Zinc bromide
	Zinc cyanide

[Amdt. 172-173, 55 FR 52474, Dec. 21, 1990]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 172.101, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

§ 172.102 Special provisions.

(a) *General.* When column 7 of the § 172.101 table refers to a special provision for a hazardous material, the meaning and requirements of that provision are as set forth in this section. When a special provision specifies packaging or packaging requirements—

(1) The special provision is in addition to the standard requirements for all packagings prescribed in § 173.24 of this subchapter and any other applicable packaging requirements in subparts A and B of part 173 of this subchapter; and

(2) To the extent a special provision imposes limitations or additional requirements on the packaging provisions set forth in column 8 of the § 172.101 table, packagings must conform to the requirements of the special provision.

(b) *Description of codes for special provisions.* Special provisions contain packaging provisions, prohibitions, exceptions from requirements for particular quantities or forms of materials and requirements or prohibitions applicable to specific modes of transportation, as follows:

(1) A code consisting only of numbers (for example, “11”) is multi-modal in application and may apply to bulk and non-bulk packagings.

(2) A code containing the letter “A” refers to a special provision which applies only to transportation by aircraft.

(3) A code containing the letter “B” refers to a special provision that applies only to bulk packaging requirements. Unless otherwise provided in this subchapter, these special provisions do not apply to UN, IM Specification portable tanks or IBCs.

(4) A code containing the letters “IB” or “IP” refers to a special provision that applies only to transportation in IBCs.

(5) A code containing the letter “N” refers to a special provision which applies only to non-bulk packaging requirements.

(6) A code containing the letter “R” refers to a special provision which applies only to transportation by rail.

(7) A code containing the letter “T” refers to a special provision which applies only to transportation in UN or IM Specification portable tanks.

(8) A code containing the letters “TP” refers to a portable tank special provision for UN or IM Specification portable tanks that is in addition to those provided by the portable tank instructions or the requirements in part 178 of this subchapter.

(9) A code containing the letter “W” refers to a special provision that applies only to transportation by water.

(c) *Tables of special provisions.* The following tables list, and set forth the requirements of, the special provisions referred to in column 7 of the §172.101 table.

(1) *Numeric provisions.* These provisions are multi-modal and apply to bulk and non-bulk packagings:

*Code/Special Provisions*

- 1 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone A (see §173.116(a) or §173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.
- 2 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone B (see §173.116(a) or §173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.
- 3 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard Zone C (see §173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.
- 4 This material is poisonous by inhalation (see §171.8 of this subchapter) in Hazard

Zone D (see §173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.

- 5 If this material meets the definition for a material poisonous by inhalation (see §171.8 of this subchapter), a shipping name must be selected which identifies the inhalation hazard, in Division 2.3 or Division 6.1, as appropriate.
- 6 This material is poisonous-by-inhalation and must be described as an inhalation hazard under the provisions of this subchapter.
- 8 A hazardous substance that is not a hazardous waste may be shipped under the shipping description “Other regulated substances, liquid *or* solid, n.o.s.”, as appropriate. In addition, for solid materials, special provision B54 applies.
- 9 Packaging for certain PCBs for disposal and storage is prescribed by EPA in 40 CFR 761.60 and 761.65.
- 11 The hazardous material must be packaged as either a liquid or a solid, as appropriate, depending on its physical form at 55 °C (131 °F) at atmospheric pressure.
- 12 In concentrations greater than 40 percent, this material has strong oxidizing properties and is capable of starting fires in contact with combustible materials. If appropriate, a package containing this material must conform to the additional labeling requirements of §172.402 of this subchapter.
- 13 The words “Inhalation Hazard” shall be entered on each shipping paper in association with the shipping description, shall be marked on each non-bulk package in association with the proper shipping name and identification number, and shall be marked on two opposing sides of each bulk package. Size of marking on bulk package must conform to §172.302(b) of this subchapter. The requirements of §§172.203(m) and 172.505 of this subchapter do not apply.
- 14 Motor fuel antiknock mixtures are:
  - a. Mixtures of one or more organic lead mixtures (such as tetraethyl lead, triethylmethyl lead, diethyldimethyl lead, ethyltrimethyl lead, and tetramethyl lead) with one or more halogen compounds (such as ethylene dibromide and ethylene dichloride), hydrocarbon solvents or other equally efficient stabilizers; or
  - b. tetraethyl lead.
- 15 This entry applies to “Chemical kits” and “First aid kits” containing one or more compatible items of hazardous materials in boxes, cases, *etc.* that, for example, are used for medical, analytical, diagnostic, testing, or repair purposes. Kits that are carried on board transport vehicles for first aid or operating purposes are not subject to the requirements of this subchapter.

- 16 This description applies to smokeless powder and other solid propellants that are used as powder for small arms and have been classed as Division 1.3 and 4.1 in accordance with §173.56 of this subchapter.
- 18 This description is authorized only for fire extinguishers listed in §173.309(b) of this subchapter meeting the following conditions:
- Each fire extinguisher may only have extinguishing contents that are nonflammable, non-poisonous, non-corrosive and commercially free from corroding components.
  - Each fire extinguisher must be charged with a nonflammable, non-poisonous, dry gas that has a dew-point at or below minus 46.7 °C (minus 52 °F) at 101 kPa (1 atmosphere) and is free of corroding components, to not more than the service pressure of the cylinder.
  - A fire extinguisher may not contain more than 30% carbon dioxide by volume or any other corrosive extinguishing agent.
  - Each fire extinguisher must be protected externally by suitable corrosion-resisting coating.
- 19 For domestic transportation only, the identification number "UN1075" may be used in place of the identification number specified in column (4) of the §172.101 table. The identification number used must be consistent on package markings, shipping papers and emergency response information.
- 21 This material must be stabilized by appropriate means (e.g., addition of chemical inhibitor, purging to remove oxygen) to prevent dangerous polymerization (see §173.21(f) of this subchapter).
- 22 If the hazardous material is in dispersion in organic liquid, the organic liquid must have a flash point above 50 °C (122 °F).
- 23 This material may be transported under the provisions of Division 4.1 only if it is so packed that the percentage of diluent will not fall below that stated in the shipping description at any time during transport. Quantities of not more than 500 g per package with not less than 10 percent water by mass may also be classed in Division 4.1, provided a negative test result is obtained when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).
- 24 Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.
- 26 This entry does not include ammonium permanganate, the transport of which is prohibited except when approved by the Associate Administrator.
- 28 The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the requirements of this subchapter.
- 29 For transportation by motor vehicle, rail car or vessel, production runs (exceptions for prototypes can be found in §173.185(e)) of not more than 100 lithium cells or batteries are excepted from the testing requirements of §173.185(a)(1) if—
- For a lithium metal cell or battery, the lithium content is not more than 1.0 g per cell and the aggregate lithium content is not more than 2.0 g per battery, and, for a lithium-ion cell or battery, the equivalent lithium content is not more than 1.5 g per cell and the aggregate equivalent lithium content is not more than 8 g per battery;
  - The cells and batteries are transported in an outer packaging that is a metal, plastic or plywood drum or metal, plastic or wooden box that meets the criteria for Packing Group I packagings; and
  - Each cell and battery is individually packed in an inner packaging inside an outer packaging and is surrounded by cushioning material that is non-combustible, and non-conductive.
- 30 Sulfur is not subject to the requirements of this subchapter if transported in a non-bulk packaging or if formed to a specific shape (for example, prills, granules, pellets, pastilles, or flakes). A bulk packaging containing sulfur is not subject to the placarding requirements of subpart F of this part, if it is marked with the appropriate identification number as required by subpart D of this part. Molten sulfur must be marked as required by §172.325 of this subchapter.
- 31 Materials which have undergone sufficient heat treatment to render them non-hazardous are not subject to the requirements of this subchapter.
- 32 Polymeric beads and molding compounds may be made from polystyrene, poly(methyl methacrylate) or other polymeric material.
- 33 Ammonium nitrites and mixtures of an inorganic nitrite with an ammonium salt are prohibited.
- 34 The commercial grade of calcium nitrate fertilizer, when consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 percent ammonium nitrate and at least 12 percent water of crystallization, is not subject to the requirements of this subchapter.
- 35 Antimony sulphides and oxides which do not contain more than 0.5 percent of arsenic calculated on the total mass do not meet the definition of Division 6.1.
- 37 Unless it can be demonstrated by testing that the sensitivity of the substance in its frozen state is no greater than in its liquid state, the substance must remain liquid during normal transport conditions. It

- must not freeze at temperatures above  $-15^{\circ}\text{C}$  ( $5^{\circ}\text{F}$ ).
- 38 If this material shows a violent effect in laboratory tests involving heating under confinement, the labeling requirements of Special Provision 53 apply, and the material must be packaged in accordance with packing method OP6 in §173.225 of this subchapter. If the SADT of the technically pure substance is higher than  $75^{\circ}\text{C}$ , the technically pure substance and formulations derived from it are not self-reactive materials and, if not meeting any other hazard class, are not subject to the requirements of this subchapter.
- 39 This substance may be carried under provisions other than those of Class 1 only if it is so packed that the percentage of water will not fall below that stated at any time during transport. When phlegmatized with water and inorganic inert material, the content of urea nitrate must not exceed 75 percent by mass and the mixture should not be capable of being detonated by test 1(a)(i) or test 1(a)(ii) in the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).
- 40 Polyester resin kits consist of two components: A base material (Class 3, Packing Group II or III) and an activator (organic peroxide), each separately packed in an inner packaging. The organic peroxide must be type D, E, or F, not requiring temperature control. The components may be placed in the same outer packaging provided they will not interact dangerously in the event of leakage. The Packing Group assigned will be II or III, according to the classification criteria for Class 3, applied to the base material. Additionally, unless otherwise excepted in this subchapter, polyester resin kits must be packaged in specification combination packagings based on the performance level of the base material contained within the kit.
- 41 This material at the Packing Group II hazard criteria level may be transported in Large Packagings.
- 43 The membrane filters, including paper separators and coating or backing materials, that are present in transport, must not be able to propagate a detonation as tested by one of the tests described in the UN Manual of Tests and Criteria, Part I, Test series 1(a) (IBR, see §171.7 of this subchapter). On the basis of the results of suitable burning rate tests, and taking into account the standard tests in the UN Manual of Tests and Criteria, Part III, subsection 33.2.1 (IBR, see §171.7 of this subchapter), nitrocellulose membrane filters in the form in which they are to be transported that do not meet the criteria for a Division 4.1 material are not subject to the requirements of this subchapter. Packagings must be so constructed that explosion is not possible by reason of increased internal pressure. Nitrocellulose membrane filters covered by this entry, each with a mass not exceeding 0.5 g, are not subject to the requirements of this subchapter when contained individually in an article or a sealed packet.
- 44 The formulation must be prepared so that it remains homogenous and does not separate during transport. Formulations with low nitrocellulose contents and neither showing dangerous properties when tested for their ability to detonate, deflagrate or explode when heated under defined confinement by the appropriate test methods and criteria in the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter), nor classed as a Division 4.1 (flammable solid) when tested in accordance with the procedures specified in §173.124 of this subchapter (chips, if necessary, crushed and sieved to a particle size of less than 1.25 mm), are not subject to the requirements of this subchapter.
- 45 Temperature should be maintained between  $18^{\circ}\text{C}$  ( $64.4^{\circ}\text{F}$ ) and  $40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ). Tanks containing solidified methacrylic acid must not be reheated during transport.
- 46 This material must be packed in accordance with packing method OP6 (see §173.225 of this subchapter). During transport, it must be protected from direct sunshine and stored (or kept) in a cool and well-ventilated place, away from all sources of heat.
- 47 Mixtures of solids that are not subject to this subchapter and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Except when the liquids are fully absorbed in solid material contained in sealed bags, each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level. Small inner packagings consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to this subchapter provided there is no free liquid in the packet or article.
- 48 Mixtures of solids which are not subject to this subchapter and toxic liquids may be transported under this entry without first applying the classification criteria of Division 6.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level. This entry may not be used for solids containing a Packing Group I liquid.

- 49 Mixtures of solids which are not subject to this subchapter and corrosive liquids may be transported under this entry without first applying the classification criteria of Class 8, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level.
- 50 Cases, cartridge, empty with primer which are made of metallic or plastic casings and meeting the classification criteria of Division 1.4 are not regulated for domestic transportation.
- 51 This description applies to items previously described as "Toy propellant devices, Class C" and includes reloadable kits. Model rocket motors containing 30 grams or less propellant are classed as Division 1.4S and items containing more than 30 grams of propellant but not more than 62.5 grams of propellant are classed as Division 1.4C.
- 52 This entry may only be used for substances that do not exhibit explosive properties of Class 1 (explosive) when tested in accordance with Test Series 1 and 2 of Class 1 (explosive) in the UN Manual of Tests and Criteria, Part I (incorporated by reference; see §171.7 of this subchapter).
- 53 Packages of these materials must bear the subsidiary risk label, "EXPLOSIVE", and the subsidiary hazard class/division must be entered in parentheses immediately following the primary hazard class in the shipping description, unless otherwise provided in this subchapter or through an approval issued by the Associate Administrator, or the competent authority of the country of origin. A copy of the approval shall accompany the shipping papers.
- 54 Maneb or maneb preparations not meeting the definition of Division 4.3 or any other hazard class are not subject to the requirements of this subchapter when transported by motor vehicle, rail car, or aircraft.
- 55 This device must be approved in accordance with §173.56 of this subchapter by the Associate Administrator.
- 56 A means to interrupt and prevent detonation of the detonator from initiating the detonating cord must be installed between each electric detonator and the detonating cord ends of the jet perforating guns before the charged jet perforating guns are offered for transportation.
- 57 Maneb or maneb preparations stabilized against self-heating need not be classified in Division 4.2 when it can be demonstrated by testing that a volume of 1 m<sup>3</sup> of substance does not self-ignite and that the temperature at the center of the sample does not exceed 200 °C, when the sample is maintained at a temperature of not less than 75 °C ±2 °C for a period of 24 hours, in accordance with procedures set forth for testing self-heating materials in the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).
- 58 Aqueous solutions of Division 5.1 inorganic solid nitrate substances are considered as not meeting the criteria of Division 5.1 if the concentration of the substances in solution at the minimum temperature encountered in transport is not greater than 80% of the saturation limit.
- 59 Ferrocium, stabilized against corrosion, with a minimum iron content of 10 percent is not subject to the requirements of this subchapter.
- 61 A chemical oxygen generator is spent if its means of ignition and all or a part of its chemical contents have been expended.
- 62 Oxygen generators (see §171.8 of this subchapter) are not authorized for transportation under this entry.
- 64 The group of alkali metals includes lithium, sodium, potassium, rubidium, and caesium.
- 65 The group of alkaline earth metals includes magnesium, calcium, strontium, and barium.
- 66 Formulations of these substances containing not less than 30 percent non-volatile, non-flammable phlegmatizer are not subject to this subchapter.
- 70 Black powder that has been classed in accordance with the requirements of §173.56 of this subchapter may be reclassified and offered for domestic transportation as a Division 4.1 material if it is offered for transportation and transported in accordance with the limitations and packaging requirements of §173.170 of this subchapter.
- 74 During transport, this material must be protected from direct sunshine and stored or kept in a cool and well-ventilated place, away from all sources of heat.
- 78 This entry may not be used to describe compressed air which contains more than 23.5 percent oxygen. Compressed air containing greater than 23.5 percent oxygen must be shipped using the description "Compressed gas, oxidizing, n.o.s., UN3156."
- 79 This entry may not be used for mixtures that meet the definition for oxidizing gas.
- 81 Polychlorinated biphenyl items, as defined in 40 CFR 761.3, for which specification packagings are impractical, may be packaged in non-specification packagings meeting the general packaging requirements of subparts A and B of part 173 of this subchapter. Alternatively, the item itself may be used as a packaging if it meets the general packaging requirements of subparts A and B of part 173 of this subchapter.

- 102 The ends of the detonating cord must be tied fast so that the explosive cannot escape. The articles may be transported as in Division 1.4 Compatibility Group D (1.4D) if all of the conditions specified in §173.63(a) of this subchapter are met.
- 103 Detonators which will not mass detonate and undergo only limited propagation in the shipping package may be assigned to 1.4B classification code. Mass detonate means that more than 90 percent of the devices tested in a package explode practically simultaneously. Limited propagation means that if one detonator near the center of a shipping package is exploded, the aggregate weight of explosives, excluding ignition and delay charges, in this and all additional detonators in the outside packaging that explode may not exceed 25 grams.
- 105 The word “Agents” may be used instead of “Explosives” when approved by the Associate Administrator.
- 106 The recognized name of the particular explosive may be specified in addition to the type.
- 107 The classification of the substance is expected to vary especially with the particle size and packaging but the border lines have not been experimentally determined; appropriate classifications should be verified following the test procedures in §§173.57 and 173.58 of this subchapter.
- 108 Fireworks must be so constructed and packaged that loose pyrotechnic composition will not be present in packages during transportation.
- 109 Rocket motors must be nonpropulsive in transportation unless approved in accordance with §173.56 of this subchapter. A rocket motor to be considered “nonpropulsive” must be capable of unrestrained burning and must not appreciably move in any direction when ignited by any means.
- 110 Fire extinguishers transported under UN1044 and oxygen cylinders transported for emergency use under UN1072 may include installed actuating cartridges (cartridges, power device of Division 1.4C or 1.4S), without changing the classification of Division 2.2, provided the aggregate quantity of deflagrating (propellant) explosives does not exceed 3.2 grams per cylinder. Oxygen cylinders with installed actuating cartridges as prepared for transportation must have an effective means of preventing inadvertent activation.
- 111 Explosive substances of Division 1.1 Compatibility Group A (1.1A) are forbidden for transportation if dry or not desensitized, unless incorporated in a device.
- 113 The sample must be given a tentative approval by an agency or laboratory in accordance with §173.56 of this subchapter.
- 114 Jet perforating guns, charged, oil well, without detonator may be reclassified to Division 1.4 Compatibility Group D (1.4D) if the following conditions are met:
- The total weight of the explosive contents of the shaped charges assembled in the guns does not exceed 90.5 kg (200 pounds) per vehicle; and
  - The guns are packaged in accordance with Packing Method US 1 as specified in §173.62 of this subchapter.
- 115 Boosters with detonator, detonator assemblies and boosters with detonators in which the total explosive charge per unit does not exceed 25 g, and which will not mass detonate and undergo only limited propagation in the shipping package may be assigned to 1.4B classification code. Mass detonate means more than 90 percent of the devices tested in a package explode practically simultaneously. Limited propagation means that if one booster near the center of the package is exploded, the aggregate weight of explosives, excluding ignition and delay charges, in this and all additional boosters in the outside packaging that explode may not exceed 25 g.
- 116 Fuzes, detonating may be classed in Division 1.4 if the fuzes do not contain more than 25 g of explosive per fuze and are made and packaged so that they will not cause functioning of other fuzes, explosives or other explosive devices if one of the fuzes detonates in a shipping packaging or in adjacent packages.
- 117 If shipment of the explosive substance is to take place at a time that freezing weather is anticipated, the water contained in the explosive substance must be mixed with denatured alcohol so that freezing will not occur.
- 118 This substance may not be transported under the provisions of Division 4.1 unless specifically authorized by the Associate Administrator.
- 119 This substance, when in quantities of not more than 11.5 kg (25.3 pounds), with not less than 10 percent water, by mass, also may be classed as Division 4.1, provided a negative test result is obtained when tested in accordance with test series 6(c) of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter).
- 120 The phlegmatized substance must be significantly less sensitive than dry PETN.
- 121 This substance, when containing less alcohol, water or phlegmatizer than specified, may not be transported unless approved by the Associate Administrator.
- 123 Any explosives, blasting, type C containing chlorates must be segregated from explosives containing ammonium nitrate or other ammonium salts.
- 125 Lactose or glucose or similar materials may be used as a phlegmatizer provided that the substance contains not less than 90%, by mass, of phlegmatizer. These mixtures may be classified in Division 4.1 when tested in accordance with test series 6(c) of

the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) and approved by the Associate Administrator. Testing must be conducted on at least three packages as prepared for transport. Mixtures containing at least 98%, by mass, of phlegmatizer are not subject to the requirements of this subchapter. Packages containing mixtures with not less than 90% by mass, of phlegmatizer need not bear a POISON subsidiary risk label.

127 Mixtures containing oxidizing and organic materials transported under this entry may not meet the definition and criteria of a Class 1 material. (See §173.50 of this subchapter.)

128 Regardless of the provisions of §172.101(c)(12), aluminum smelting by-products and aluminum remelting by-products described under this entry, meeting the definition of Class 8, Packing Group II and III may be classed as a Division 4.3 material and transported under this entry. The presence of a Class 8 hazard must be communicated as required by this Part for subsidiary hazards.

129 These materials may not be classified and transported unless authorized by the Associate Administrator on the basis of results from Series 2 Test and a Series 6(c) Test from the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) on packages as prepared for transport. The packing group assignment and packaging must be approved by the Associate Administrator for Hazardous Materials Safety on the basis of the criteria in §173.21 of this subchapter and the package type used for the Series 6(c) test.

130 "Batteries, dry, sealed, n.o.s.," commonly referred to as dry batteries, are hermetically sealed and generally utilize metals (other than lead) and/or carbon as electrodes. These batteries are typically used for portable power applications. The rechargeable (and some non-rechargeable) types have gelled alkaline electrolytes (rather than acidic) making it difficult for them to generate hydrogen or oxygen when overcharged and therefore, differentiating them from non-spillable batteries. Dry batteries specifically covered by another entry in the §172.101 Table must be transported in accordance with the requirements applicable to that entry. For example, nickel-metal hydride batteries transported by vessel in certain quantities are covered by another entry (see Batteries, nickel-metal hydride, UN3496). Dry batteries not specifically covered by another entry in the §172.101 Table are covered by this entry (*i.e.*, Batteries, dry, sealed, n.o.s.) and are not subject to requirements of this subchapter except for the following:

(a) *Incident reporting.* For transportation by aircraft, a telephone report in accordance with §171.15(a) is required if a fire, violent

rupture, explosion or dangerous evolution of heat (*i.e.*, an amount of heat sufficient to be dangerous to packaging or personal safety to include charring of packaging, melting of packaging, scorching of packaging, or other evidence) occurs as a direct result of a dry battery. For all modes of transportation, a written report submitted, retained, and updated in accordance with §171.16 is required if a fire, violent rupture, explosion or dangerous evolution of heat occurs as a direct result of a dry battery or battery-powered device.

(b) *Preparation for transport.* Batteries and battery-powered device(s) containing batteries must be prepared and packaged for transport in a manner to prevent:

(1) A dangerous evolution of heat;

(2) Short circuits, including but not limited to the following methods:

(i) Packaging each battery or each battery-powered device when practicable, in fully enclosed inner packagings made of non-conductive material;

(ii) Separating or packaging batteries in a manner to prevent contact with other batteries, devices or conductive materials (*e.g.*, metal) in the packagings; or

(iii) Ensuring exposed terminals or connectors are protected with non-conductive caps, non-conductive tape, or by other appropriate means; and

(3) Damage to terminals. If not impact resistant, the outer packaging should not be used as the sole means of protecting the battery terminals from damage or short circuiting. Batteries must be securely cushioned and packed to prevent shifting which could loosen terminal caps or reorient the terminals to produce short circuits. Batteries contained in devices must be securely installed. Terminal protection methods include but are not limited to the following:

(i) Securely attaching covers of sufficient strength to protect the terminals;

(ii) Packaging the battery in a rigid plastic packaging; or

(iii) Constructing the battery with terminals that are recessed or otherwise protected so that the terminals will not be subjected to damage if the package is dropped.

(c) *Additional air transport requirements.* For a battery whose voltage (electrical potential) exceeds 9 volts—

(1) When contained in a device, the device must be packaged in a manner that prevents unintentional activation or must have an independent means of preventing unintentional activation (*e.g.*, packaging restricts access to activation switch, switch caps or locks, recessed switches, trigger locks, temperature sensitive circuit breakers, *etc.*); and



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(2) An indication of compliance with this special provision must be provided by marking each package with the words “not restricted” or by including the words “not restricted” on a transport document such as an air waybill accompanying the shipment.

(d) *Used or spent battery exception.* Used or spent dry batteries of both non-rechargeable and rechargeable designs, with a marked rating up to 9-volt that are combined in the same package and transported by highway or rail for recycling, reconditioning, or disposal are not subject to this special provision or any other requirement of the HMR. Note that batteries utilizing different chemistries (*i.e.*, those battery chemistries specifically covered by another entry in the §172.101 Table) as well as dry batteries with a marked rating greater than 9-volt may not be combined with used or spent batteries in the same package. Note also that this exception does not apply to batteries that have been reconditioned for reuse.

131 This material may not be offered for transportation unless approved by the Associate Administrator.

132 This entry may only be used for uniform, ammonium nitrate based fertilizer mixtures, containing nitrogen, phosphate or potash, meeting the following criteria: (1) Contains not more than 70% ammonium nitrate and not more than 0.4% total combustible, organic material calculated as carbon or (2) Contains not more than 45% ammonium nitrate and unrestricted combustible material.

134 This entry only applies to vehicles, machinery and equipment powered by wet batteries, sodium batteries, or lithium batteries that are transported with these batteries installed. Examples of such items are electrically-powered cars, lawn mowers, wheelchairs, and other mobility aids. Self-propelled vehicles or equipment that also contain an internal combustion engine must be consigned under the entry “Engine, internal combustion, flammable gas powered” or “Engine, internal combustion, flammable liquid powered” or “Vehicle, flammable gas powered” or “Vehicle, flammable liquid powered,” as appropriate. These entries include hybrid electric vehicles powered by both an internal combustion engine and batteries. Additionally, self-propelled vehicles or equipment that contain a fuel cell engine must be consigned under the entries “Engine, fuel cell, flammable gas powered” or “Engine, fuel cell, flammable liquid powered” or “Vehicle, fuel cell, flammable gas powered” or “Vehicle, fuel cell, flammable liquid powered,” as appropriate. These entries include hybrid electric vehicles powered by a fuel cell engine, an internal combustion engine, and batteries.

135 Internal combustion engines installed in a vehicle must be consigned under the en-

tries “Vehicle, flammable gas powered” or “Vehicle, flammable liquid powered,” as appropriate. These entries include hybrid electric vehicles powered by both an internal combustion engine and wet, sodium or lithium batteries installed. If a fuel cell engine is installed in a vehicle, the vehicle must be consigned using the entries “Vehicle, fuel cell, flammable gas powered” or “Vehicle, fuel cell, flammable liquid powered,” as appropriate. These entries include hybrid electric vehicles powered by a fuel cell, an internal combustion engine, and wet, sodium or lithium batteries installed.

136 This entry only applies to machinery and apparatus containing hazardous materials as in integral element of the machinery or apparatus. It may not be used to describe machinery or apparatus for which a proper shipping name exists in the §172.101 Table. Except when approved by the Associate Administrator, machinery or apparatus may only contain hazardous materials for which exceptions are referenced in Column (8) of the §172.101 Table and are provided in part 173, subpart D, of this subchapter. Hazardous materials shipped under this entry are excepted from the labeling requirements of this subchapter unless offered for transportation or transported by aircraft and are not subject to the placarding requirements of part 172, subpart F, of this subchapter. Orientation markings as described in §172.312 (a)(2) are required when liquid hazardous materials may escape due to incorrect orientation. The machinery or apparatus, if unpackaged, or the packaging in which it is contained shall be marked “Dangerous goods in machinery” or “Dangerous goods in apparatus”, as appropriate, with the identification number UN3363. For transportation by aircraft, machinery or apparatus may not contain any material forbidden for transportation by passenger or cargo aircraft. The Associate Administrator may except from the requirements of this subchapter, equipment, machinery and apparatus provided:

- a. It is shown that it does not pose a significant risk in transportation;
- b. The quantities of hazardous materials do not exceed those specified in §173.4a of this subchapter; and
- c. The equipment, machinery or apparatus conforms with §173.222 of this subchapter.

137 Cotton, dry; flax, dry; sisal, dry; and tampico fiber, dry are not subject to the requirements of this subchapter when they are baled in accordance with ISO 8115, “Cotton Bales—Dimensions and Density” (IBR, see §171.7 of this subchapter) to a density of not less than 360 kg/m<sup>3</sup> (22.1 lb/ft<sup>3</sup>) for cotton, 400 kg/m<sup>3</sup> (24.97 lb/ft<sup>3</sup>) for flax, 620 kg/m<sup>3</sup> (38.71 lb/ft<sup>3</sup>) for sisal and 360

- kg/m<sup>3</sup> (22.1 lb/ft<sup>3</sup>) for tampico fiber and transported in a freight container or closed transport vehicle.
- 138 Lead compounds which, when mixed in a ratio of 1:1,000 with 0.07 M (Molar concentration) hydrochloric acid and stirred for one hour at a temperature of 23 °C ±2 °C, exhibit a solubility of 5% or less are considered insoluble and are not subject to the requirements of this subchapter unless they meet criteria as another hazard class or division.
- 139 Use of the "special arrangement" proper shipping names for international shipments must be made under an IAEA Certificate of Competent Authority issued by the Associate Administrator in accordance with the requirements in §173.471, §173.472, or §173.473 of this subchapter. Use of these proper shipping names for domestic shipments may be made only under a DOT special permit, as defined in, and in accordance with the requirements of subpart B of part 107 of this subchapter.
- 140 This material is regulated only when it meets the defining criteria for a hazardous substance or a marine pollutant. In addition, the column 5 reference is modified to read "III" on those occasions when this material is offered for transportation or transported by highway or rail.
- 141 A toxin obtained from a plant, animal, or bacterial source containing an infectious substance, or a toxin contained in an infectious substance, must be classed as Division 6.2, described as an infectious substance, and assigned to UN 2814 or UN 2900, as appropriate.
- 142 These hazardous materials may not be classified and transported unless authorized by the Associate Administrator. The Associate Administrator will base the authorization on results from Series 2 tests and a Series 6(c) test from the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter) on packages as prepared for transport in accordance with the requirements of this subchapter.
- 144 If transported as a residue in an underground storage tank (UST), as defined in 40 CFR 280.12, that has been cleaned and purged or rendered inert according to the American Petroleum Institute (API) Standard 1604 (IBR, see §171.7 of this subchapter), then the tank and this material are not subject to any other requirements of this subchapter. However, sediments remaining in the tank that meet the definition for a hazardous material are subject to the applicable regulations of this subchapter.
- 145 This entry applies to formulations that neither detonate in the cavitated state nor deflagrate in laboratory testing, show no effect when heated under confinement, exhibit no explosive power, and are thermally stable (self-accelerating decomposition temperature (SADT) at 60 °C (140 °F) or higher for a 50 kg (110.2 lbs.) package). Formulations not meeting these criteria must be transported under the provisions applicable to the appropriate entry in the Organic Peroxide Table in §173.225 of this subchapter.
- 146 This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in §171.8 of this subchapter, or any hazard class, as defined in part 173 of this subchapter, if it is designated as environmentally hazardous by another Competent Authority. This provision may be used for both domestic and international shipments.
- 147 This entry applies to non-sensitized emulsions, suspensions, and gels consisting primarily of a mixture of ammonium nitrate and fuel, intended to produce a Type E blasting explosive only after further processing prior to use. The mixture for emulsions typically has the following composition: 60–85% ammonium nitrate; 5–30% water; 2–8% fuel; 0.5–4% emulsifier or thickening agent; 0–10% soluble flame suppressants; and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. The mixture for suspensions and gels typically has the following composition: 60–85% ammonium nitrate; 0–5% sodium or potassium perchlorate; 0–17% hexamine nitrate or monomethylamine nitrate; 5–30% water; 2–15% fuel; 0.5–4% thickening agent; 0–10% soluble flame suppressants; and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. These substances must satisfactorily pass Test Series 8 of the UN Manual of Tests and Criteria, Part I, Section 18 (IBR, see §171.7 of this subchapter), and may not be classified and transported unless approved by the Associate Administrator.
- 149 Except for transportation by aircraft, when transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons).
- 149 When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons).
- 150 This description may be used only for uniform mixtures of fertilizers containing ammonium nitrate as the main ingredient within the following composition limits:
- Not less than 90% ammonium nitrate with not more than 0.2% total combustible, organic material calculated as carbon, and with added matter, if any, that is inorganic and inert when in contact with ammonium nitrate; or

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b. Less than 90% but more than 70% ammonium nitrate with other inorganic materials, or more than 80% but less than 90% ammonium nitrate mixed with calcium carbonate and/or dolomite and/or mineral calcium sulphate, and not more than 0.4% total combustible, organic material calculated as carbon; or

c. Ammonium nitrate-based fertilizers containing mixtures of ammonium nitrate and ammonium sulphate with more than 45% but less than 70% ammonium nitrate, and not more than 0.4% total combustible, organic material calculated as carbon such that the sum of the percentage of compositions of ammonium nitrate and ammonium sulphate exceeds 70%.

151 If this material meets the definition of a flammable liquid in §173.120 of this subchapter, a FLAMMABLE LIQUID label is also required and the basic description on the shipping paper must indicate the Class 3 subsidiary hazard.

155 Fish meal or fish scrap may not be transported if the temperature at the time of loading either exceeds 35 °C (95 °F), or exceeds 5 °C (41 °F) above the ambient temperature, whichever is higher.

156 Asbestos that is immersed or fixed in a natural or artificial binder material, such as cement, plastic, asphalt, resins or mineral ore, or contained in manufactured products is not subject to the requirements of this subchapter.

159 This material must be protected from direct sunshine and kept in a cool, well-ventilated place away from sources of heat.

160 This entry applies to articles that are used as life-saving vehicle air bag inflators, air bag modules or seat-belt pretensioners containing Class 1 (explosive) materials or materials of other hazard classes. Air bag inflators and modules must be tested in accordance with Test series 6(c) of Part I of the UN Manual of Tests and Criteria (incorporated by reference; see §171.7 of this subchapter), with no explosion of the device, no fragmentation of device casing or pressure vessel, and no projection hazard or thermal effect that would significantly hinder fire-fighting or other emergency response efforts in the immediate vicinity. If the air bag inflator unit satisfactorily passes the series 6(c) test, it is not necessary to repeat the test on the air bag module.

161 For domestic transport, air bag inflators, air bag modules or seat belt pretensioners that meet the criteria for a Division 1.4G explosive must be transported using the description, "Articles, pyrotechnic for technical purposes," UN0431.

162 This material may be transported under the provisions of Division 4.1 only if it is packed so that at no time during transport will the percentage of diluent fall below

the percentage that is stated in the shipping description.

163 Substances must satisfactorily pass Test Series 8 of the UN Manual of Tests and Criteria, Part I, Section 18 (IBR, see §171.7 of this subchapter).

164 Substances must not be transported under this entry unless approved by the Associate Administrator on the basis of the results of appropriate tests according to Part I of the UN Manual of Tests and Criteria (IBR, see §171.7 of this subchapter). The material must be packaged so that the percentage of diluent does not fall below that stated in the approval at any time during transportation.

165 These substances are susceptible to exothermic decomposition at elevated temperatures. Decomposition can be initiated by heat, moisture or by impurities (e.g., powdered metals (iron, manganese, cobalt, magnesium)). During the course of transportation, these substances must be shaded from direct sunlight and all sources of heat and be placed in adequately ventilated areas.

166 When transported in non-friable tablet form, calcium hypochlorite, dry, may be transported as a Packing Group III material.

167 These storage systems must always be considered as containing hydrogen. A metal hydride storage system installed in or intended to be installed in a vehicle or equipment or in vehicle or equipment components must be approved for transport by the Associate Administrator. A copy of the approval must accompany each shipment.

168 For lighters containing a Division 2.1 gas (see §171.8 of this subchapter), representative samples of each new lighter design must be examined and successfully tested as specified in §173.308(b)(3). For criteria in determining what is a new lighter design, see §173.308(b)(1). For transportation of new lighter design samples for examination and testing, see §173.308(b)(2). The examination and testing of each lighter design must be performed by a person authorized by the Associate Administrator under the provisions of subpart E of part 107 of this chapter, as specified in §173.308(a)(4). For continued use of approvals dated prior to January 1, 2012, see §173.308(b)(5).

For non-pressurized lighters containing a Class 3 (flammable liquid) material, its design, description, and packaging must be approved by the Associate Administrator prior to being offered for transportation or transported in commerce. In addition, a lighter design intended to contain a non-pressurized Class 3 material is excepted from the examination and testing criteria specified in §173.308(b)(3). An unused lighter or a lighter

that is cleaned of residue and purged of vapors is not subject to the requirements of this subchapter.

169 This entry applies to lighter refills (*see* §171.8 of this subchapter) that contain a Division 2.1 (flammable) gas but do not contain an ignition device. Lighter refills offered for transportation under this entry may not exceed 4 fluid ounces capacity (7.22 cubic inches) or contain more than 65 grams of fuel. A lighter refill exceeding 4 fluid ounces capacity (7.22 cubic inches) or containing more than 65 grams of fuel must be classed as a Division 2.1 material, described with the proper shipping name appropriate for the material, and packaged in the packaging specified in part 173 of this subchapter for the flammable gas contained therein. In addition, a container exceeding 4 fluid ounces volumetric capacity (7.22 cubic inches) or containing more than 65 grams of fuel may not be connected or manifolded to a lighter or similar device and must also be described and packaged according to the fuel contained therein. For transportation by passenger-carrying aircraft, the net mass of lighter refills may not exceed 1 kg per package, and, for cargo-only aircraft, the net mass of lighter refills may not exceed 15 kg per package. See §173.306(h) of this subchapter.

170 Air must be eliminated from the vapor space by nitrogen or other means.

171 This entry may only be used when the material is transported in non-friable tablet form or for granular or powdered mixtures that have been shown to meet the PG III criteria in §173.127.

172 This entry includes alcohol mixtures containing up to 5% petroleum products.

173 For adhesives, printing inks, printing ink-related materials, paints, paint-related materials, and resin solutions which are assigned to UN3082, and do not meet the definition of another hazard class, metal or plastic packaging for substances of packing groups II and III in quantities of 5 L (1.3 gallons) or less per packaging are not required to meet the UN performance package testing when transported:

a. Except for transportation by aircraft, in palletized loads, a pallet box or unit load device (*e.g.* individual packaging placed or stacked and secured by strapping, shrink or stretch-wrapping or other suitable means to a pallet). For vessel transport, the palletized loads, pallet boxes or unit load devices must be firmly packed and secured in closed cargo transport units; or

b. Except for transportation by aircraft, as an inner packaging of a combination packaging with a maximum net mass of 40 kg (88 pounds). For transportation by aircraft, as an inner packaging of a combination packaging with a maximum gross mass of 30 kg when packaged as a limited quantity in accordance with §173.27(f).

175 This substance must be stabilized when in concentrations of not more than 99%.

176 This entry must be used for formaldehyde solutions containing methanol as a stabilizer. Formaldehyde solutions not containing methanol and not meeting the Class 3 flammable liquid criteria must be described using a different proper shipping name.

177 Gasoline, or, ethanol and gasoline mixtures, for use in internal combustion engines (*e.g.*, in automobiles, stationary engines and other engines) must be assigned to Packing Group II regardless of variations in volatility.

188 *Small lithium cells and batteries.* Lithium cells or batteries, including cells or batteries packed with or contained in equipment, are not subject to any other requirements of this subchapter if they meet all of the following:

a. *Primary lithium batteries and cells.*

(1) Primary lithium batteries and cells are forbidden for transport aboard passenger-carrying aircraft. The outside of each package that contains primary (nonrechargeable) lithium batteries or cells must be marked "PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" or "LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" on a background of contrasting color. The letters in the marking must be:

(i) At least 12 mm (0.5 inch) in height on packages having a gross weight of more than 30 kg (66 pounds); or

(ii) At least 6 mm (0.25 inch) on packages having a gross weight of 30 kg (66 pounds) or less, except that smaller font may be used as necessary to fit package dimensions; and

(2) The provisions of paragraph (a)(1) do not apply to packages that contain 5 kg (11 pounds) net weight or less of primary lithium batteries or cells that are contained in or packed with equipment and the package contains no more than the number of lithium batteries or cells necessary to power the piece of equipment;

b. For a lithium metal or lithium alloy cell, the lithium content is not more than 1.0 g. For a lithium-ion cell, the equivalent lithium content is not more than 1.5 g;

c. For a lithium metal or lithium alloy battery, the aggregate lithium content is not more than 2.0 g. For a lithium-ion battery, the aggregate equivalent lithium content is not more than 8 g;

d. Effective October 1, 2009, the cell or battery must be of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria (IBR; *see* §171.7 of this subchapter);

e. Cells or batteries are separated or packaged in a manner to prevent short circuits and are packed in a strong outer packaging or are contained in equipment;

f. Effective October 1, 2008, except when contained in equipment, each package containing more than 24 lithium cells or 12 lithium batteries must be:

(1) Marked to indicate that it contains lithium batteries, and special procedures should be followed if the package is damaged;

(2) Accompanied by a document indicating that the package contains lithium batteries and special procedures should be followed if the package is damaged;

(3) Capable of withstanding a 1.2 meter drop test in any orientation without damage to cells or batteries contained in the package, without shifting of the contents that would allow short circuiting and without release of package contents; and

(4) Gross weight of the package may not exceed 30 kg (66 pounds). This requirement does not apply to lithium cells or batteries packed with equipment;

g. Electrical devices must conform to §173.21;

h. For transportation by aircraft, a telephone report in accordance with §171.15(a) is required if a fire, violent rupture, explosion or dangerous evolution of heat (*i.e.*, an amount of heat sufficient to be dangerous to packaging or personal safety to include charring of packaging, melting of packaging, scorching of packaging, or other evidence) occurs as a direct result of a lithium battery. For all modes of transportation, a written report submitted, retained, and updated in accordance with §171.16 is required if a fire, violent rupture, explosion or dangerous evolution of heat occurs as a direct result of a lithium battery or battery-powered device; and

i. Lithium batteries or cells are not authorized aboard an aircraft in checked or carry-on luggage except as provided in §175.10.

189 *Medium lithium cells and batteries.* Effective October 1, 2008, when transported by motor vehicle or rail car, lithium cells or batteries, including cells or batteries packed with or contained in equipment, are not subject to any other requirements of this subchapter if they meet all of the following:

a. The lithium content anode of each cell, when fully charged, is not more than 5 grams.

b. The aggregate lithium content of the anode of each battery, when fully charged, is not more than 25 grams.

c. The cells or batteries are of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria (IBR; see §171.7 of this subchapter). A cell or battery and equipment containing a cell or battery that was first transported prior to January 1, 2006 and is of a type proven to meet the criteria of Class 9 by testing in accordance with the tests in the UN Manual of

Tests and Criteria, Third revised edition, 1999, need not be retested.

d. Cells or batteries are separated or packaged in a manner to prevent short circuits and are packed in a strong outer packaging or are contained in equipment.

e. The outside of each package must be marked "LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD AIRCRAFT AND VESSEL" on a background of contrasting color, in letters:

(1) At least 12 mm (0.5 inch) in height on packages having a gross weight of more than 30 kg (66 pounds); or

(2) At least 6 mm (0.25 inch) on packages having a gross weight of 30 kg (66 pounds) or less, except that smaller font may be used as necessary to fit package dimensions.

f. Except when contained in equipment, each package containing more than 24 lithium cells or 12 lithium batteries must be:

(1) Marked to indicate that it contains lithium batteries, and special procedures should be followed if the package is damaged;

(2) Accompanied by a document indicating that the package contains lithium batteries and special procedures should be followed if the package is damaged;

(3) Capable of withstanding a 1.2 meter drop test in any orientation without damage to cells or batteries contained in the package, without shifting of the contents that would allow short circuiting and without release of package contents; and

(4) Gross weight of the package may not exceed 30 kg (66 pounds). This requirement does not apply to lithium cells or batteries packed with equipment.

g. Electrical devices must conform to §173.21 of this subchapter; and

h. A written report submitted, retained, and updated in accordance with §171.16 is required if a fire, violent rupture, explosion or dangerous evolution of heat (*i.e.*, an amount of heat sufficient to be dangerous to packaging or personal safety to include charring of packaging, melting of packaging, scorching of packaging, or other evidence) occurs as a direct result of a lithium battery or battery-powered device.

190 Until the effective date of the standards set forth in Special Provision 189, medium lithium cells or batteries, including cells or batteries packed with or contained in equipment, are not subject to any other requirements of this subchapter if they meet all of the following:

a. *Primary lithium batteries and cells.* (1) Primary lithium batteries and cells are forbidden for transport aboard passenger-carrying aircraft. The outside of each package that contains primary (nonrechargeable) lithium batteries or cells must be marked "PRIMARY LITHIUM BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER

AIRCRAFT” or “LITHIUM METAL BATTERIES—FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT” on a background of contrasting color. The letters in the marking must be:

(i) At least 12 mm (0.5 inch) in height on packages having a gross weight of more than 30 kg (66 pounds); or

(ii) At least 6 mm (0.25 inch) on packages having a gross weight of 30 kg (66 pounds) or less, except that smaller font may be used as necessary to fit package dimensions; and

(2) The provisions of paragraph (a)(1) do not apply to packages that contain 5 kg (11 pounds) net weight or less of primary lithium batteries or cells that are contained in or packed with equipment and the package contains no more than the number of lithium batteries or cells necessary to power the piece of equipment.

b. The lithium content of each cell, when fully charged, is not more than 5 grams.

c. The aggregate lithium content of each battery, when fully charged, is not more than 25 grams.

d. The cells or batteries are of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria (IBR; see §171.7 of this subchapter). A cell or battery and equipment containing a cell or battery that was first transported prior to January 1, 2006 and is of a type proven to meet the criteria of Class 9 by testing in accordance with the tests in the UN Manual of Tests and Criteria, Third Revised Edition, 1999, need not be retested.

e. Cells or batteries are separated so as to prevent short circuits and are packed in a strong outer packaging or are contained in equipment.

f. Electrical devices must conform to §173.21 of this subchapter.

198 Nitrocellulose solutions containing not more than 20% nitrocellulose may be transported as paint, perfumery products, or printing ink, as applicable, provided the nitrocellulose contains no more 12.6% nitrogen (by dry mass). See UN1210, UN1263, UN1266, UN3066, UN3469, and UN3470.

237 “Batteries, dry, containing potassium hydroxide solid, *electric storage*” must be prepared and packaged in accordance with the requirements of §173.159(a), (b), and (c). For transportation by aircraft, the provisions of §173.159(b)(2) are applicable.

332 Magnesium nitrate hexahydrate is not subject to the requirements of this subchapter.

335 Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as “Environmentally hazardous substances, solid, n.o.s.” UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each

transport unit must be leakproof when used as bulk packaging.

340 This entry applies only to the vessel transportation of nickel-metal hydride batteries as cargo. Nickel-metal hydride button cells or nickel-metal hydride cells or batteries packed with or contained in battery-powered devices transported by vessel are not subject to the requirements of this special provision. See “Batteries, dry, sealed, n.o.s.” in the §172.101 Hazardous Materials Table (HMT) of this part for transportation requirements for nickel-metal hydride batteries transported by other modes and for nickel-metal hydride button cells or nickel-metal hydride cells or batteries packed with or contained in battery-powered devices transported by vessel. Nickel-metal hydride batteries subject to this special provision are subject only to the following requirements: (1) The batteries must be prepared and packaged for transport in a manner to prevent a dangerous evolution of heat, short circuits, and damage to terminals; and are subject to the incident reporting in accordance with §171.16 of this subchapter if a fire, violent rupture, explosion or dangerous evolution of heat (*i.e.*, an amount of heat sufficient to be dangerous to packaging or personal safety to include charring of packaging, melting of packaging, scorching of packaging, or other evidence) occurs as a direct result of a nickel metal hydride battery; and (2) when loaded in a cargo transport unit in a total quantity of 100 kg gross mass or more, the shipping paper requirements of Subpart C of this part, the manifest requirements of §176.30 of this subchapter, and the vessel stowage requirements assigned to this entry in Column (10) of the §172.101 Hazardous Materials Table.

342 Glass inner packagings (such as ampoules or capsules) intended only for use in sterilization devices, when containing less than 30 mL of ethylene oxide per inner packaging with not more than 300 mL per outer packaging, may be transported in accordance with §173.4a of this subchapter, irrespective of the restriction of §173.4a(b) provided that:

a. After filling, each glass inner packaging must be determined to be leak-tight by placing the glass inner packaging in a hot water bath at a temperature and for a period of time sufficient to ensure that an internal pressure equal to the vapor pressure of ethylene oxide at 55 °C is achieved. Any glass inner packaging showing evidence of leakage, distortion or other defect under this test must not be transported under the terms of this special provision;

b. In addition to the packaging required in §173.4a, each glass inner packaging must be placed in a sealed plastic bag compatible

with ethylene oxide and capable of containing the contents in the event of breakage or leakage of the glass inner packaging; and c. Each glass inner packaging is protected by a means of preventing puncture of the plastic bag (*e.g.*, sleeves or cushioning) in the event of damage to the packaging (*e.g.*, by crushing).

343 A bulk packaging that emits hydrogen sulfide in sufficient concentration that vapors evolved from the crude oil can present an inhalation hazard must be marked as specified in §172.327 of this part.

345 “Nitrogen, refrigerated liquid (*cryogenic liquid*), UN1977” transported in open cryogenic receptacles with a maximum capacity of 1 L are not subject to the requirements of this subchapter. The receptacles must be constructed with glass double walls having the space between the walls vacuum insulated and each receptacle must be transported in an outer packaging with sufficient cushioning and absorbent materials to protect the receptacle from damage.

346 “Nitrogen, refrigerated liquid (*cryogenic liquid*), UN1977” transported in accordance with the requirements for open cryogenic receptacles in §173.320 and this special provision are not subject to any other requirements of this subchapter. The receptacle must contain no hazardous materials other than the liquid nitrogen which must be fully absorbed in a porous material in the receptacle.

347 Effective July 1, 2011, for transportation by aircraft, this entry may only be used if the results of Test series 6(d) of Part I of the UN Manual of Tests and Criteria (IBR, *see* §171.7 of this subchapter) have demonstrated that any hazardous effects from accidental functioning are confined to within the package. Effective January 1, 2012, for transportation by vessel, this entry may only be used if the results of Test Series 6(d) of Part I of the UN Manual of Tests and Criteria (IBR, *see* §171.7 of this subchapter) have demonstrated that any hazardous effects from accidental functioning are confined to within the package. Effective January 1, 2014, for transportation domestically by highway or rail, this entry may only be used if the results of Test Series 6(d) of Part I of the UN Manual of Tests and Criteria (IBR, *see* §171.7 of this subchapter) have demonstrated that any hazardous effects from accidental functioning are confined to within the package. Testing must be performed or witnessed by a person who is approved by the Associate Administrator (*see* §173.56(b) of this subchapter). All successfully conducted tests or reassignment to another compatibility group require the issuance of a new or revised approval by the Associate Administrator prior to transportation on or after the dates specified for each author-

ized mode of transport in this special provision.

349 Mixtures of hypochlorite with an ammonium salt are forbidden for transport. A hypochlorite solution, UN1791, is a Class 8 corrosive material.

350 Ammonium bromate, ammonium bromate aqueous solutions, and mixtures of a bromate with an ammonium salt are forbidden for transport.

351 Ammonium chlorate, ammonium chlorate aqueous solutions, and mixtures of a chlorate with an ammonium salt are forbidden for transport.

352 Ammonium chlorite, ammonium chlorite aqueous solutions, and mixtures of a chlorite with an ammonium salt are forbidden for transport.

353 Ammonium permanganate, ammonium permanganate aqueous solutions, and mixtures of a permanganate with an ammonium salt are forbidden for transport.

357 A bulk packaging that emits hydrogen sulfide in sufficient concentration that vapors evolved from the crude oil can present an inhalation hazard must be marked as specified in §172.327 of this part.

(2) “A” codes. These provisions apply only to transportation by aircraft:

*Code/Special Provisions*

A1 Single packagings are not permitted on passenger aircraft.

A2 Single packagings are not permitted on aircraft.

A3 For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings.

A4 Liquids having an inhalation toxicity of Packing Group I are not permitted on aircraft.

A5 Solids having an inhalation toxicity of Packing Group I are not permitted on passenger aircraft and may not exceed a maximum net quantity per package of 15 kg (33 pounds) on cargo aircraft.

A6 For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

A7 Steel packagings must be corrosion-resistant or have protection against corrosion.

A8 For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with cushioning material in tightly closed metal receptacles before packing in outer packagings.

A9 For combination packagings, if plastic bags are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

- A10 When aluminum or aluminum alloy construction materials are used, they must be resistant to corrosion.
- A11 For combination packagings, when metal inner packagings are permitted, only specification cylinders constructed of metals which are compatible with the hazardous material may be used.
- A13 Bulk packagings are not authorized for transportation by aircraft.
- A14 This material is not authorized to be transported as a limited quantity or consumer commodity in accordance with §173.306 of this subchapter when transported aboard an aircraft.
- A19 Combination packagings consisting of outer fiber drums or plywood drums, with inner plastic packagings, are not authorized for transportation by aircraft.
- A20 Plastic bags as inner receptacles of combination packagings are not authorized for transportation by aircraft.
- A29 Combination packagings consisting of outer expanded plastic boxes with inner plastic bags are not authorized for transportation by aircraft.
- A30 Ammonium permanganate is not authorized for transportation on aircraft.
- A34 Aerosols containing a corrosive liquid in Packing Group II charged with a gas are not permitted for transportation by aircraft.
- A35 This includes any material which is not covered by any of the other classes but which has an anesthetic, narcotic, noxious or other similar properties such that, in the event of spillage or leakage on an aircraft, extreme annoyance or discomfort could be caused to crew members so as to prevent the correct performance of assigned duties.
- A37 This entry applies only to a material meeting the definition in §171.8 of this subchapter for self-defense spray.
- A53 Refrigerating machines and refrigerating machine components are not subject to the requirements of this subchapter when containing less than 12 kg (26.4 pounds) of a non-flammable gas or when containing 12 L (3 gallons) or less of ammonia solution (UN2672) (see §173.307 of this subchapter).
- A54 Lithium batteries or lithium batteries contained or packed with equipment that exceed the maximum gross weight allowed by Column (9B) of the §172.101 Table may only be transported on cargo aircraft if approved by the Associate Administrator.
- A55 Prototype lithium batteries and cells that are packed with not more than 24 cells or 12 batteries per packaging that have not completed the test requirements in Sub-section 38.3 of the UN Manual of Tests and Criteria (incorporated by reference; see §171.7 of this subchapter) may be transported by cargo aircraft if approved by the Associate Administrator and provided the following requirements are met:
- a. The cells and batteries must be transported in rigid outer packagings that conform to the requirements of Part 178 of this subchapter at the Packing Group I performance level; and
  - b. Each cell and battery must be protected against short circuiting, must be surrounded by cushioning material that is non-combustible and non-conductive, and must be individually packed in an inner packaging that is placed inside an outer specification packaging.
- A56 Radioactive material with a subsidiary hazard of Division 4.2, Packing Group I, must be transported in Type B packages when offered for transportation by aircraft. Radioactive material with a subsidiary hazard of Division 2.1 is forbidden from transport on passenger aircraft.
- A60 Sterilization devices, when containing less than 30 mL per inner packaging with not more than 150 mL per outer packaging, may be transported in accordance with the provisions in §173.4a, irrespective of §173.4a(b), provided such packagings were first subjected to comparative fire testing. Comparative fire testing must show no difference in burning rate between a package as prepared for transport (including the substance to be transported) and an identical package filled with water.
- A82 The quantity limits in columns (9A) and (9B) do not apply to human or animal body parts, whole organs or whole bodies known to contain or suspected of containing an infectious substance.
- A100 Primary (non-rechargeable) lithium batteries and cells are forbidden for transport aboard passenger carrying aircraft. Secondary (rechargeable) lithium batteries and cells are authorized aboard passenger carrying aircraft in packages that do not exceed a gross weight of 5 kg.
- A101 A primary lithium battery or cell packed with or contained in equipment is forbidden for transport aboard a passenger carrying aircraft unless the equipment and the battery conform to the following provisions and the package contains no more than the number of lithium batteries or cells necessary to power the intended piece of equipment:
- (1) The lithium content of each cell, when fully charged, is not more than 5 grams.
  - (2) The aggregate lithium content of the anode of each battery, when fully charged, is not more than 25 grams.
  - (3) The net weight of lithium batteries does not exceed 5 kg (11 pounds).
- A103 Equipment is authorized aboard passenger carrying aircraft if the gross weight of the inner package of secondary lithium batteries or cells packed with the equipment does not exceed 5 kg (11 pounds).



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A104 The net weight of secondary lithium batteries or cells contained in equipment may not exceed 5 kg (11 pounds) in packages that are authorized aboard passenger-carrying aircraft.

A105 The total net quantity of dangerous goods contained in one package, excluding magnetic material, must not exceed the following:

- a. 1 kg (2.2 pounds) in the case of solids;
- b. 0.5 L (0.1 gallons) in the case of liquids;
- c. 0.5 kg (1.1 pounds) in the case of Division 2.2 gases; or
- d. any combination thereof.

A112 Notwithstanding the quantity limits shown in Column (9A) and (9B) for this entry, the following IBCs are authorized for transportation aboard passenger and cargo-only aircraft. Each IBC may not exceed a maximum net quantity of 1,000 kg:

- a. Metal: 11A, 11B, 11N, 21A, 21B and 21N
- b. Rigid plastics: 11H1, 11H2, 21H1 and 21H2
- c. Composite with plastic inner receptacle: 11HZ1, 11HZ2, 21HZ1 and 21HZ2
- d. Fiberboard: 11G
- e. Wooden: 11C, 11D and 11F (with inner liners)
- f. Flexible: 13H2, 13H3, 13H4, 13H5, 13L2, 13L3, 13L4, 13M1 and 13M2 (flexible IBCs must be sift-proof and water resistant or must be fitted with a sift-proof and water resistant liner).

(3) “B” codes. These provisions apply only to bulk packagings. Except as otherwise provided in this subchapter, these special provisions do not apply to UN portable tanks or IBCs:

*Code/Special Provisions*

B1 If the material has a flash point at or above 38 °C (100 °F) and below 93 °C (200 °F), then the bulk packaging requirements of §173.241 of this subchapter are applicable. If the material has a flash point of less than 38 °C (100 °F), then the bulk packaging requirements of §173.242 of this subchapter are applicable.

B2 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

B3 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks and DOT 57 portable tanks are not authorized.

B4 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

B5 Only ammonium nitrate solutions with 35 percent or less water that will remain completely in solution under all conditions of transport at a maximum lading temperature of 116 °C (240 °F) are authorized for transport in the following bulk packagings: MC 307, MC 312, DOT 407 and DOT 412 cargo tanks with at least 172 kPa (25 psig) design pressure. The packaging shall

be designed for a working temperature of at least 121 °C (250 °F). Only Specifications MC 304, MC 307 or DOT 407 cargo tank motor vehicles are authorized for transportation by vessel.

B6 Packagings shall be made of steel.

B7 Safety relief devices are not authorized on multi-unit tank car tanks. Openings for safety relief devices on multi-unit tank car tanks shall be plugged or blank flanged.

B8 Packagings shall be made of nickel, stainless steel, or steel with nickel, stainless steel, lead or other suitable corrosion resistant metallic lining.

B9 Bottom outlets are not authorized.

B10 MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks, and DOT 57 portable tanks are not authorized.

B11 Tank car tanks must have a test pressure of at least 2,068.5 kPa (300 psig). Cargo and portable tanks must have a design pressure of at least 1,207 kPa (175 psig).

B13 A nonspecification cargo tank motor vehicle authorized in §173.247 of this subchapter must be at least equivalent in design and in construction to a DOT 406 cargo tank or MC 306 cargo tank (if constructed before August 31, 1995), except as follows:

a. Packagings equivalent to MC 306 cargo tanks are excepted from the certification, venting, and emergency flow requirements of the MC 306 specification.

b. Packagings equivalent to DOT 406 cargo tanks are excepted from §§178.345–7(d)(5), circumferential reinforcements; 178.345–10, pressure relief; 178.345–11, outlets; 178.345–14, marking, and 178.345–15, certification.

c. Packagings are excepted from the design stress limits at elevated temperatures, as described in Section VIII of the ASME Code (IBR, see §171.7 of this subchapter). However, the design stress limits may not exceed 25 percent of the stress for 0 temper at the maximum design temperature of the cargo tank, as specified in the Aluminum Association’s “Aluminum Standards and Data” (IBR, see §171.7 of this subchapter).

B14 Each bulk packaging, except a tank car or a multi-unit-tank car tank, must be insulated with an insulating material so that the overall thermal conductance at 15.5 °C (60 °F) is no more than 1.5333 kilojoules per hour per square meter per degree Celsius (0.075 Btu per hour per square foot per degree Fahrenheit) temperature differential. Insulating materials must not promote corrosion to steel when wet.

B15 Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.

B16 The lading must be completely covered with nitrogen, inert gas or other inert materials.

- B18 Open steel hoppers or bins are authorized.
- B23 Tanks must be made of steel that is rubber lined or unlined. Unlined tanks must be passivated before being placed in service. If unlined tanks are washed out with water, they must be repassivated prior to return to service. Lading in unlined tanks must be inhibited so that the corrosive effect on steel is not greater than that of hydrofluoric acid of 65 percent concentration.
- B25 Packagings must be made from monel or nickel or monel-lined or nickel-lined steel.
- B26 Tanks must be insulated. Insulation must be at least 100 mm (3.9 inches) except that the insulation thickness may be reduced to 51 mm (2 inches) over the exterior heater coils. Interior heating coils are not authorized. The packaging may not be loaded with a material outside of the packaging's design temperature range. In addition, the material also must be covered with an inert gas or the container must be filled with water to the tank's capacity. After unloading, the residual material also must be covered with an inert gas or the container must be filled with water to the tank's capacity.
- B27 Tanks must have a service pressure of 1,034 kPa (150 psig). Tank car tanks must have a test pressure rating of 1,379 kPa (200 psig). Lading must be blanketed at all times with a dry inert gas at a pressure not to exceed 103 kPa (15 psig).
- B28 Packagings must be made of stainless steel.
- B30 MC 312, MC 330, MC 331 and DOT 412 cargo tanks and DOT 51 portable tanks must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of §173.24b(b) of this subchapter. Thickness of stainless steel for tank shell and heads for cargo tanks and portable tanks must be the greater of 7.62 mm (0.300 inch) or the thickness required for a tank with a design pressure at least equal to 1.5 times the vapor pressure of the lading at 46 °C (115 °F). In addition, MC 312 and DOT 412 cargo tank motor vehicles must:
  - a. Be ASME Code (U) stamped for 100% radiography of all pressure-retaining welds;
  - b. Have accident damage protection which conforms with §178.345-8 of this subchapter;
  - c. Have a MAWP or design pressure of at least 87 psig; and
  - d. Have a bolted manway cover.
- B32 MC 312, MC 330, MC 331, DOT 412 cargo tanks and DOT 51 portable tanks must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of §173.24b(b) of this subchapter. Thickness of

- stainless steel for tank shell and heads for cargo tanks and portable tanks must be the greater of 6.35 mm (0.250 inch) or the thickness required for a tank with a design pressure at least equal to 1.3 times the vapor pressure of the lading at 46 °C (115 °F). In addition, MC 312 and DOT 412 cargo tank motor vehicles must:
  - a. Be ASME Code (U) stamped for 100% radiography of all pressure-retaining welds;
  - b. Have accident damage protection which conforms with §178.345-8 of this subchapter;
  - c. Have a MAWP or design pressure of at least 87 psig; and
  - d. Have a bolted manway cover.
- B33 MC 300, MC 301, MC 302, MC 303, MC 305, MC 306, and DOT 406 cargo tanks equipped with a 1 psig normal vent used to transport gasoline must conform to Table I of this Special Provision. Based on the volatility class determined by using ASTM D 439 and the Reid vapor pressure (RVP) of the particular gasoline, the maximum lading pressure and maximum ambient temperature permitted during the loading of gasoline may not exceed that listed in Table I.

TABLE I—MAXIMUM AMBIENT TEMPERATURE—GASOLINE

ASTM D439 volatility class	Maximum lading and ambient temperature (see note 1)
A ..... (RVP≤9.0 psia)	131 °F
B ..... (RVP≤10.0 psia)	124 °F
C ..... (RVP≤11.5 psia)	116 °F
D ..... (RVP≤13.5 psia)	107 °F
E ..... (RVP≤15.0 psia)	100 °F

NOTE 1: Based on maximum lading pressure of 1 psig at top of cargo tank.

- B35 Tank cars containing hydrogen cyanide may be alternatively marked "Hydrocyanic acid, liquefied" if otherwise conforming to marking requirements in subpart D of this part. Tank cars marked "HYDROCYANIC ACID" prior to October 1, 1991 do not need to be remarked.
- B37 The amount of nitric oxide charged into any tank car tank may not exceed 1,379 kPa (200 psig) at 21 °C (70 °F).
- B42 Tank cars constructed before March 16, 2009, must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105J. Each tank car must have a reclosing pressure relief device having a start-to-discharge pressure of 10.34 Bar (150 psig). The tank car specification may be marked to indicate a test pressure of 13.79 Bar (200 psig).
- B44 All parts of valves and safety relief devices in contact with lading must be of a

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- material which will not cause formation of acetylides.
- B45 Each tank must have a reclosing combination pressure relief device equipped with stainless steel or platinum rupture discs approved by the AAR Tank Car Committee.
- B46 The detachable protective housing for the loading and unloading valves of multi-unit tank car tanks must withstand tank test pressure and must be approved by the Associate Administrator.
- B47 Each tank may have a reclosing pressure relief device having a start-to-discharge pressure setting of 310 kPa (45 psig).
- B48 Portable tanks in sodium metal service may be visually inspected at least once every 5 years instead of being retested hydrostatically. Date of the visual inspection must be stenciled on the tank near the other required markings.
- B49 Tanks equipped with interior heater coils are not authorized. Single unit tank car tanks must have a reclosing pressure relief device having a start-to-discharge pressure set at no more than 1551 kPa (225 psig).
- B50 Each valve outlet of a multi-unit tank car tank must be sealed by a threaded solid plug or a threaded cap with inert luting or gasket material. Valves must be of stainless steel and the caps, plugs, and valve seats must be of a material that will not deteriorate as a result of contact with the lading.
- B52 Notwithstanding the provisions of §173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.
- B53 Packagings must be made of either aluminum or steel.
- B54 Open-top, sift-proof rail cars are also authorized.
- B55 Water-tight, sift-proof, closed-top, metal-covered hopper cars, equipped with a venting arrangement (including flame arrestors) approved by the Associate Administrator are also authorized.
- B56 Water-tight, sift-proof, closed-top, metal-covered hopper cars are also authorized if the particle size of the hazardous material is not less than 149 microns.
- B57 Class 115A tank car tanks used to transport chloroprene must be equipped with a non-reclosing pressure relief device of a diameter not less than 305 mm (12 inches) with a maximum rupture disc pressure of 310 kPa (45 psig).
- B59 Water-tight, sift-proof, closed-top, metal-covered hopper cars are also authorized provided that the lading is covered with a nitrogen blanket.
- B60 DOT Specification 106A500X multi-unit tank car tanks that are not equipped with a pressure relief device of any type are authorized. For the transportation of phosphorus, the outage must be sufficient to prevent tanks from becoming liquid full at 55 °C (130 °F).
- B61 Written procedures covering details of tank car appurtenances, dome fittings, safety devices, and marking, loading, handling, inspection, and testing practices must be approved by the Associate Administrator before any single unit tank car tank is offered for transportation.
- B65 Tank cars constructed before March 16, 2009, must have a test pressure of 34.47 Bar (500 psig) or greater and conform to Class 105A. Each tank car must have a reclosing pressure relief device having a start-to-discharge pressure of 15.51 Bar (225 psig). The tank car specification may be marked to indicate a test pressure of 20.68 Bar (300 psig).
- B66 Each tank must be equipped with gas tight valve protection caps. Outage must be sufficient to prevent tanks from becoming liquid full at 55 °C (130 °F). Specification 110A500W tanks must be stainless steel.
- B67 All valves and fittings must be protected by a securely attached cover made of metal not subject to deterioration by the lading, and all valve openings, except safety valve, must be fitted with screw plugs or caps to prevent leakage in the event of valve failure.
- B68 Sodium must be in a molten condition when loaded and allowed to solidify before shipment. Outage must be at least 5 percent at 98 °C (208 °F). Bulk packagings must have exterior heating coils fusion welded to the tank shell which have been properly stress relieved. The only tank car tanks authorized are Class DOT 105 tank cars having a test pressure of 2,069 kPa (300 psig) or greater.
- B69 Dry sodium cyanide or potassium cyanide may be shipped in the following sift-proof and weather-resistant packagings: metal covered hopper cars, covered motor vehicles, portable tanks, or non-specification bins.
- B70 If DOT 103ANW tank car tank is used: All cast metal in contact with the lading must have 96.7 percent nickel content; and the lading must be anhydrous and free from any impurities.
- B76 Tank cars constructed before March 16, 2009, must have a test pressure of 20.68 Bar (300 psig) or greater and conform to Class 105S, 112J, 114J or 120S. Each tank car must have a reclosing pressure relief device having a start-to-discharge pressure of 10.34 Bar (150 psig). The tank car specification may be marked to indicate a test pressure of 13.79 Bar (200 psig).
- B77 Other packaging are authorized when approved by the Associate Administrator.
- B78 Tank cars must have a test pressure of 4.14 Bar (60 psig) or greater and conform to Class 103, 104, 105, 109, 111, 112, 114 or 120.

Heater pipes must be of welded construction designed for a test pressure of 500 psig. A 25 mm (1 inch) woven lining of asbestos or other approved material must be placed between the bolster slabbing and the bottom of the tank. If a tank car tank is equipped with a non-reclosing pressure relief device, the rupture disc must be perforated with a 3.2 mm (0.13 inch) diameter hole. If a tank car tank is equipped with a reclosing pressure relief valve, the tank must also be equipped with a vacuum relief valve.

- B80 Each cargo tank must have a minimum design pressure of 276 kPa (40 psig).
- B81 Venting and pressure relief devices for tank car tanks and cargo tanks must be approved by the Associate Administrator.
- B82 Cargo tanks and portable tanks are not authorized.
- B83 Bottom outlets are prohibited on tank car tanks transporting sulfuric acid in concentrations over 65.25 percent.
- B84 Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance for sulfuric acid or spent sulfuric acid in concentration up to 65.25 percent.
- B85 Cargo tanks must be marked with the name of the lading in accordance with the requirements of §172.302(b).
- B90 Steel tanks conforming or equivalent to ASME specifications which contain solid or semisolid residual motor fuel anti-knock mixture (including rust, scale, or other contaminants) may be shipped by rail freight or highway. The tank must have been designed and constructed to be capable of withstanding full vacuum. All openings must be closed with gasketed blank flanges or vapor tight threaded closures.
- B115 Rail cars, highway trailers, roll-on/roll-off bins, or other non-specification bulk packagings are authorized. Packagings must be sift-proof, prevent liquid

water from reaching the hazardous material, and be provided with sufficient venting to preclude dangerous accumulation of flammable, corrosive, or toxic gaseous emissions such as methane, hydrogen, and ammonia. The material must be loaded dry.

(4) *IB Codes and IP Codes.* These provisions apply only to transportation in IBCs and Large Packagings. Table 1 authorizes IBCs for specific proper shipping names through the use of IB Codes assigned in the §172.101 table of this subchapter. Table 2 defines IP Codes on the use of IBCs that are assigned to specific commodities in the §172.101 Table of this subchapter. Table 3 authorizes Large Packagings for specific proper shipping names through the use of IB Codes assigned in the §172.101 table of this subchapter. Large Packagings are authorized for the Packing Group III entries of specific proper shipping names when either Special Provision IB3 or IB8 is assigned to that entry in the §172.101 Table. When no IB code is assigned in the §172.101 Table for a specific proper shipping name, or in §173.225(e) Organic Peroxide Table for Type F organic peroxides, use of an IBC or Large Packaging for the material may be authorized when approved by the Associate Administrator. The letter “Z” shown in the marking code for composite IBCs must be replaced with a capital code letter designation found in §178.702(a)(2) of this subchapter to specify the material used for the other packaging. Tables 1, 2, and 3 follow:

TABLE 1—IB CODES (IBC CODES)

IBC code	Authorized IBCs
IB1 .....	<i>Authorized IBCs:</i> Metal (31A, 31B and 31N). <i>Additional Requirement:</i> Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized.
IB2 .....	<i>Authorized IBCs:</i> Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). <i>Additional Requirement:</i> Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized.
IB3 .....	<i>Authorized IBCs:</i> Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). <i>Additional Requirement:</i> Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
IB4 .....	<i>Authorized IBCs:</i> Metal (11A, 11B, 11N, 21A, 21B and 21N).
IB5 .....	<i>Authorized IBCs:</i> Metal (11A, 11B, 11N, 21A, 21B and 21N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 21HZ1 and 31HZ1).
IB6 .....	<i>Authorized IBCs:</i> Metal (11A, 11B, 11N, 21A, 21B and 21N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2). <i>Additional Requirement:</i> Composite IBCs 11HZ2 and 21HZ2 may not be used when the hazardous materials being transported may become liquid during transport.

TABLE 1—IB CODES (IBC CODES)—Continued

IBC code	Authorized IBCs
IB7 .....	<i>Authorized IBCs:</i> Metal (11A, 11B, 11N, 21A, 21B and 21N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Wooden (11C, 11D and 11F). <i>Additional Requirement:</i> Liners of wooden IBCs must be sift-proof.
IB8 .....	<i>Authorized IBCs:</i> Metal (11A, 11B, 11N, 21A, 21B and 21N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
IB9 .....	IBCs are only authorized if approved by the Associate Administrator.

TABLE 2—IP CODES

IP Code	h
IP1 .....	IBCs must be packed in closed freight containers or a closed transport vehicle.
IP2 .....	When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.
IP3 .....	Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.
IP4 .....	Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.
IP5 .....	IBCs must have a device to allow venting. The inlet to the venting device must be located in the vapor space of the IBC under maximum filling conditions.
IP6 .....	Non-specification bulk bins are authorized.
IP7 .....	For UN identification numbers 1327, 1363, 1364, 1365, 1386, 1841, 2211, 2217, 2793 and 3314, IBCs are not required to meet the IBC performance tests specified in part 178, subpart N of this subchapter.
IP8 .....	Ammonia solutions may be transported in rigid or composite plastic IBCs (31H1, 31H2 and 31HZ1) that have successfully passed, without leakage or permanent deformation, the hydrostatic test specified in § 178.814 of this subchapter at a test pressure that is not less than 1.5 times the vapor pressure of the contents at 55 °C (131 °F).
IP13 .....	Transportation by vessel in IBCs is prohibited.
IP14 .....	Air must be eliminated from the vapor space by nitrogen or other means.
IP15 .....	For UN2031 with more than 55% nitric acid, rigid plastic IBCs and composite IBCs with a rigid plastic inner receptacle are authorized for two years from the date of IBC manufacture.
IP20 .....	Dry sodium cyanide or potassium cyanide is also permitted in siftproof, water-resistant, fiberboard IBCs when transported in closed freight containers or transport vehicles.

TABLE 3—IB CODES  
[Large packaging authorizations]

IB3	Authorized Large Packagings (LIQUIDS) (PG III materials only) <sup>2</sup>
Inner packagings: Glass 10 liter. Plastics 30 liter. Metal 40 liter.	Large outer packagings: steel (50A). aluminum (50B). metal other than steel or aluminum (50N). rigid plastics (50H). natural wood (50C). plywood (50D). reconstituted wood (50F). rigid fiberboard (50G).
IB8	Authorized Large Packagings (SOLIDS) (PG III materials only) <sup>2</sup>
Inner packagings: Glass 10 kg ..... Plastics 50 kg ..... Metal 50 kg ..... Paper 50 kg ..... Fiber 50 kg .....	Large outer packagings: steel (50A). aluminum (50B). metal other than steel or aluminum (50N). flexible plastics (51H). <sup>1</sup> rigid plastics (50H). natural wood (50C). plywood (50D). reconstituted wood (50F). rigid fiberboard (50G).

<sup>1</sup> Flexible plastic (51H) Large Packagings are only authorized for use with flexible inner packagings.

<sup>2</sup> Except when authorized under Special Provision 41.

(5) “N” codes. These provisions apply only to non-bulk packagings:

*Code/Special Provisions*

- N3 Glass inner packagings are permitted in combination or composite packagings only if the hazardous material is free from hydrofluoric acid.
- N4 For combination or composite packagings, glass inner packagings, other than ampoules, are not permitted.
- N5 Glass materials of construction are not authorized for any part of a packaging which is normally in contact with the hazardous material.
- N6 Battery fluid packaged with electric storage batteries, wet or dry, must conform to the packaging provisions of §173.159 (g) or (h) of this subchapter.
- N7 The hazard class or division number of the material must be marked on the package in accordance with §172.302 of this subchapter. However, the hazard label corresponding to the hazard class or division may be substituted for the marking.
- N8 Nitroglycerin solution in alcohol may be transported under this entry only when the solution is packed in metal cans of not more than 1 L capacity each, overpacked in a wooden box containing not more than 5 L. Metal cans must be completely surrounded with absorbent cushioning material. Wooden boxes must be completely lined with a suitable material impervious to water and nitroglycerin.
- N11 This material is excepted for the specification packaging requirements of this subchapter if the material is packaged in strong, tight non-bulk packaging meeting the requirements of subparts A and B of part 173 of this subchapter.
- N12 Plastic packagings are not authorized.
- N20 A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle.
- N25 Steel single packagings are not authorized.
- N32 Aluminum materials of construction are not authorized for single packagings.
- N33 Aluminum drums are not authorized.
- N34 Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.
- N36 Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum.
- N37 This material may be shipped in an integrally-lined fiber drum (1G) which meets the general packaging requirements of subpart B of part 173 of this subchapter, the requirements of part 178 of this subchapter
- at the packing group assigned for the material and to any other special provisions of column 7 of the §172.101 table.
- N40 This material is not authorized in the following packagings:
- A combination packaging consisting of a 4G fiberboard box with inner receptacles of glass or earthenware;
  - A single packaging of a 4C2 sift-proof, natural wood box; or
  - A composite packaging 6PG2 (glass, porcelain or stoneware receptacles within a fiberboard box).
- N41 Metal construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.
- N42 1A1 drums made of carbon steel with thickness of body and heads of not less than 1.3 mm (0.050 inch) and with a corrosion-resistant phenolic lining are authorized for stabilized benzyl chloride if tested and certified to the Packing Group I performance level at a specific gravity of not less than 1.8.
- N43 Metal drums are permitted as single packagings only if constructed of nickel or monel.
- N45 Copper cartridges are authorized as inner packagings if the hazardous material is not in dispersion.
- N65 Outage must be sufficient to prevent cylinders or spheres from becoming liquid full at 55 °C (130 °F). The vacant space (outage) may be charged with a nonflammable nonliquefied compressed gas if the pressure in the cylinder or sphere at 55 °C (130 °F) does not exceed 125 percent of the marked service pressure.
- N72 Packagings must be examined by the Bureau of Explosives and approved by the Associate Administrator.
- N73 Packagings consisting of outer wooden or fiberboard boxes with inner glass, metal or other strong containers; metal or fiber drums; kegs or barrels; or strong metal cans are authorized and need not conform to the requirements of part 178 of this subchapter.
- N74 Packages consisting of tightly closed inner containers of glass, earthenware, metal or polyethylene, capacity not over 0.5 kg (1.1 pounds) securely cushioned and packed in outer wooden barrels or wooden or fiberboard boxes, not over 15 kg (33 pounds) net weight, are authorized and need not conform to the requirements of part 178 of this subchapter.
- N75 Packages consisting of tightly closed inner packagings of glass, earthenware or metal, securely cushioned and packed in outer wooden barrels or wooden or fiberboard boxes, capacity not over 2.5 kg (5.5 pounds) net weight, are authorized and

- need not conform to the requirements of part 178 of this subchapter.
- N76 For materials of not more than 25 percent active ingredient by weight, packages consisting of inner metal packagings not greater than 250 mL (8 ounces) capacity each, packed in strong outer packagings together with sufficient absorbent material to completely absorb the liquid contents are authorized and need not conform to the requirements of part 178 of this subchapter.
- N77 For materials of not more than two percent active ingredients by weight, packagings need not conform to the requirements of part 178 of this subchapter, if liquid contents are absorbed in an inert material.
- N78 Packages consisting of inner glass, earthenware, or polyethylene or other non-fragile plastic bottles or jars not over 0.5 kg (1.1 pounds) capacity each, or metal cans not over five pounds capacity each, packed in outer wooden boxes, barrels or kegs, or fiberboard boxes are authorized and need not conform to the requirements of part 178 of this subchapter. Net weight of contents in fiberboard boxes may not exceed 29 kg (64 pounds). Net weight of contents in wooden boxes, barrels or kegs may not exceed 45 kg (99 pounds).
- N79 Packages consisting of tightly closed metal inner packagings not over 0.5 kg (1.1 pounds) capacity each, packed in outer wooden or fiberboard boxes, or wooden barrels, are authorized and need not conform to the requirements of part 178 of this subchapter. Net weight of contents may not exceed 15 kg (33 pounds).
- N80 Packages consisting of one inner metal can, not over 2.5 kg (5.5 pounds) capacity, packed in an outer wooden or fiberboard box, or a wooden barrel, are authorized and need not conform to the requirements of part 178 of this subchapter.
- N82 See § 173.115 of this subchapter for classification criteria for flammable aerosols.
- N83 This material may not be transported in quantities of more than 11.5 kg (25.4 lbs) per package.
- N84 The maximum quantity per package is 500 g (1.1 lbs.).
- N85 Packagings certified at the Packing Group I performance level may not be used.
- N86 UN pressure receptacles made of aluminum alloy are not authorized.
- N87 The use of copper valves on UN pressure receptacles is prohibited.
- N88 Any metal part of a UN pressure receptacle in contact with the contents may not contain more than 65% copper, with a tolerance of 1%.
- N89 When steel UN pressure receptacles are used, only those bearing the “H” mark are authorized.
- N90 Metal packagings are not authorized.
- (6) “R” codes. These provisions apply only to transportation by rail. [Reserved]
- (7) “T” codes. (i) These provisions apply to the transportation of hazardous materials in UN portable tanks. Portable tank instructions specify the requirements applicable to a portable tank when used for the transportation of a specific hazardous material. These requirements must be met in addition to the design and construction specifications in part 178 of this subchapter. Portable tank instructions T1 through T22 specify the applicable minimum test pressure, the minimum shell thickness (in reference steel), bottom opening requirements and pressure relief requirements. Liquefied compressed gases are assigned to portable tank instruction T50. Refrigerated liquefied gases that are authorized to be transported in portable tanks are specified in tank instruction T75.
- (ii) The following table specifies the portable tank requirements applicable to “T” Codes T1 through T22. Column 1 specifies the “T” Code. Column 2 specifies the minimum test pressure, in bar (1 bar = 14.5 psig), at which the periodic hydrostatic testing required by § 180.605 of this subchapter must be conducted. Column 3 specifies the section reference for minimum shell thickness or, alternatively, the minimum shell thickness value. Column 4 specifies the applicability of § 178.275(g)(3) of this subchapter for the pressure relief devices. When the word “Normal” is indicated, § 178.275(g)(3) of this subchapter does not apply. Column 5 references applicable requirements for bottom openings in part 178 of this subchapter. “Prohibited” means bottom openings are prohibited, and “Prohibited for liquids” means bottom openings are authorized for solid material only. The table follows:

TABLE OF PORTABLE TANK T CODES T1–T22

[Portable tank codes T1–T22 apply to liquid and solid hazardous materials of Classes 3 through 9 which are transported in portable tanks.]

Portable tank instruction (1)	Minimum test pressure (bar) (2)	Minimum shell thickness (in mm-reference steel) (See § 178.274(d)) (3)	Pressure-relief requirements (See § 178.275(g)) (4)	Bottom opening requirements (See § 178.275(d)) (5)
T1	1.5	§ 178.274(d)(2)	Normal	§ 178.275(d)(2)
T2	1.5	§ 178.274(d)(2)	Normal	§ 178.275(d)(3)
T3	2.65	§ 178.274(d)(2)	Normal	§ 178.275(d)(2)
T4	2.65	§ 178.274(d)(2)	Normal	§ 178.275(d)(3)
T5	2.65	§ 178.274(d)(2)	§ 178.275(g)(3)	Prohibited
T6	4	§ 178.274(d)(2)	Normal	§ 178.275(d)(2)
T7	4	§ 178.274(d)(2)	Normal	§ 178.275(d)(3)
T8	4	§ 178.274(d)(2)	Normal	Prohibited
T9	4	6 mm	Normal	Prohibited
T10	4	6 mm	§ 178.275(g)(3)	Prohibited
T9	4	6 mm	Normal	Prohibited for liquids. § 178.275(d)(2)
T11	6	§ 178.274(d)(2)	Normal	§ 178.275(d)(3)
T12	6	§ 178.274(d)(2)	§ 178.275(g)(3)	§ 178.275(d)(3)
T13	6	6 mm	Normal	Prohibited
T14	6	6 mm	§ 178.275(g)(3)	Prohibited
T15	10	§ 178.274(d)(2)	Normal	§ 178.275(d)(3)
T16	10	§ 178.274(d)(2)	§ 178.275(g)(3)	§ 178.275(d)(3)
T17	10	6 mm	Normal	§ 178.275(d)(3)
T18	10	6 mm	§ 178.275(g)(3)	§ 178.275(d)(3)
T19	10	6 mm	§ 178.275(g)(3)	Prohibited
T20	10	8 mm	§ 178.275(g)(3)	Prohibited
T21	10	10 mm	Normal	Prohibited for liquids. § 178.275(d)(2)
T22	10	10 mm	§ 178.275(g)(3)	Prohibited

(iii) *T50*. When portable tank instruction T50 is referenced in Column (7) of the §172.101 Table, the applicable liquefied compressed gases are authorized to be transported in portable tanks in accordance with the requirements of §173.313 of this subchapter.

(iv) *T75*. When portable tank instruction T75 is referenced in Column (7) of the §172.101 Table, the applicable refrigerated liquefied gases are authorized to be transported in portable tanks in accordance with the requirements of §178.277 of this subchapter.

(v) *UN and IM portable tank codes/special provisions*. When a specific portable tank instruction is specified by a “T” Code in Column (7) of the §172.101 Table for a specific hazardous material, a specification portable tank conforming to an alternative tank instruction may be used if:

(A) The alternative portable tank has a higher or equivalent test pressure (for example, 4 bar when 2.65 bar is specified);

(B) The alternative portable tank has greater or equivalent wall thickness

(for example, 10 mm when 6 mm is specified);

(C) The alternative portable tank has a pressure relief device as specified in the “T” Code. If a frangible disc is required in series with the reclosing pressure relief device for the specified portable tank, the alternative portable tank must be fitted with a frangible disc in series with the reclosing pressure relief device; and

(D) With regard to bottom openings—

(1) When two effective means are specified, the alternative portable tank is fitted with bottom openings having two or three effective means of closure or no bottom openings; or

(2) When three effective means are specified, the portable tank has no bottom openings or three effective means of closure; or

(3) When no bottom openings are authorized, the alternative portable tank must not have bottom openings.

(vi) Except when an organic peroxide is authorized under §173.225(g), if a hazardous material is not assigned a portable tank “T” Code, the hazardous material may not be transported in a



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portable tank unless approved by the Associate Administrator.

(8) “TP” codes. (i) These provisions apply to the transportation of hazardous materials in IM and UN Specification portable tanks. Portable tank special provisions are assigned to certain hazardous materials to specify requirements that are in addition to those provided by the portable tank instructions or the requirements in part 178 of this subchapter. Portable tank special provisions are designated with the abbreviation TP (tank provision) and are assigned to specific hazardous materials in Column (7) of the §172.101 Table.

(ii) The following is a list of the portable tank special provisions:

*Code/Special Provisions*

TP1 The maximum degree of filling must not exceed the degree of filling determined by the following:

$$\left( \text{Degree of filling} = \frac{97}{1 + \alpha(t_r - t_f)} \right).$$

Where:

$t_r$  is the maximum mean bulk temperature during transport, and  $t_f$  is the temperature in degrees celsius of the liquid during filling.

TP2 a. The maximum degree of filling must not exceed the degree of filling determined by the following:

$$\left( \text{Degree of filling} = \frac{95}{1 + \alpha(t_r - t_f)} \right).$$

Where:

$t_r$  is the maximum mean bulk temperature during transport,

$t_f$  is the temperature in degrees celsius of the liquid during filling, and

$\alpha$  is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling ( $t_f$ ) and the maximum mean bulk temperature during transportation ( $t_r$ ) both in degrees celsius.

b. For liquids transported under ambient conditions  $\alpha$  may be calculated using the formula:

$$\alpha = \frac{d_{15} - d_{50}}{35 d_{50}}$$

Where:

$d_{15}$  and  $d_{50}$  are the densities (in units of mass per unit volume) of the liquid at 15 °C (59 °F) and 50 °C (122 °F), respectively.

TP3 The maximum degree of filling (in %) for solids transported above their melting points and for elevated temperature liquids shall be determined by the following:

$$\left( \text{Degree of filling} = 95 \frac{d_r}{d_f} \right).$$

Where:  $d_r$  and  $d_f$  are the mean densities of the liquid at the mean temperature of the liquid during filling and the maximum mean bulk temperature during transport respectively.

TP4 The maximum degree of filling for portable tanks must not exceed 90%.

TP5 For a portable tank used for the transport of flammable refrigerated liquefied gases or refrigerated liquefied oxygen, the maximum rate at which the portable tank may be filled must not exceed the liquid flow capacity of the primary pressure relief system rated at a pressure not exceeding 120 percent of the portable tank’s design pressure. For portable tanks used for the transport of refrigerated liquefied helium and refrigerated liquefied atmospheric gas (except oxygen), the maximum rate at which the tank is filled must not exceed the liquid flow capacity of the pressure relief device rated at 130 percent of the portable tank’s design pressure. Except for a portable tank containing refrigerated liquefied helium, a portable tank shall have an outage of at least two percent below the inlet of the pressure relief device or pressure control valve, under conditions of incipient opening, with the portable tank in a level attitude. No outage is required for helium.

TP6 The tank must be equipped with a pressure release device which prevent a tank from bursting under fire engulfment conditions (the conditions prescribed in CGA pamphlet S-1.2 (see §171.7 of this subchapter) or alternative conditions approved by the Associate Administrator may be used to consider the fire engulfment condition), taking into account the properties of the hazardous material to be transported.

TP7 The vapor space must be purged of air by nitrogen or other means.

TP8 A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 °C (32 °F).

TP9 A hazardous material assigned to special provision TP9 in Column (7) of the §172.101 Table may only be transported in a portable tank if approved by the Associate Administrator.

TP10 The portable tank must be fitted with a lead lining at least 5 mm (0.2 inches)

thick. The lead lining must be tested annually to ensure that it is intact and functional. Another suitable lining material may be used if approved by the Associate Administrator.

TP12 This material is considered highly corrosive to steel.

TP13 Self-contained breathing apparatus must be provided when this hazardous material is transported by sea.

TP16 The portable tank must be protected against over and under pressurization which may be experienced during transportation. The means of protection must be approved by the approval agency designated to approve the portable tank in accordance with the procedures in part 107, subpart E, of this subchapter. The pressure relief device must be preceded by a frangible disk in accordance with the requirements in §178.275(g)(3) of this subchapter to prevent crystallization of the product in the pressure relief device.

TP17 Only inorganic non-combustible materials may be used for thermal insulation of the tank.

TP18 The temperature of this material must be maintained between 18 °C (64.4 °F) and 40 °C (104 °F) while in transportation. Portable tanks containing solidified methacrylic acid must not be reheated during transportation.

TP19 The calculated wall thickness must be increased by 3 mm at the time of construction. Wall thickness must be verified ultrasonically at intervals midway between periodic hydraulic tests (every 2.5 years). The portable tank must not be used if the wall thickness is less than that prescribed by the applicable T code in Column (7) of the Table for this material.

TP20 This hazardous material must only be transported in insulated tanks under a nitrogen blanket.

TP21 The wall thickness must not be less than 8 mm. Portable tanks must be hydraulically tested and internally inspected at intervals not exceeding 2.5 years.

TP22 Lubricants for portable tank fittings (for example, gaskets, shut-off valves, flanges) must be oxygen compatible.

TP24 The portable tank may be fitted with a device to prevent the build up of excess pressure due to the slow decomposition of the hazardous material being transported. The device must be in the vapor space when the tank is filled under maximum filling conditions. This device must also prevent an unacceptable amount of leakage of liquid in the case of overturning.

TP25 Sulphur trioxide 99.95% pure and above may be transported in tanks without an inhibitor provided that it is maintained at a temperature equal to or above 32.5 °C (90.5 °F).

TP26 The heating device must be exterior to the shell. For UN 3176, this requirement

only applies when the hazardous material reacts dangerously with water.

TP27 A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in §178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

TP28 A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in §178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

TP29 A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in §178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

TP30 This hazardous material may only be transported in insulated tanks.

TP31 This hazardous material may only be transported in tanks in the solid state.

TP32 Portable tanks may be used subject to the following conditions:

a. Each portable tank constructed of metal must be fitted with a pressure-relief device consisting of a reclosing spring loaded type, a frangible disc or a fusible element. The set to discharge for the spring loaded pressure relief device and the burst pressure for the frangible disc, as applicable, must not be greater than 2.65 bar for portable tanks with minimum test pressures greater than 4 bar;

b. The suitability for transport in tanks must be demonstrated using test 8(d) in Test Series 8 (see UN Manual of Tests and Criteria, Part 1, Sub-section 18.7) (IBR, see §171.7 of this subchapter) or an alternative means approved by the Associate Administrator.

TP33 The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in

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accordance with the applicable requirements of this subchapter.

TP36 For material assigned this portable tank special provision, portable tanks used to transport such material may be equipped with fusible elements in the vapor space of the portable

TP37 IM portable tanks are only authorized for the shipment of hydrogen peroxide solutions in water containing 72% or less hydrogen peroxide by weight. Pressure relief devices shall be designed to prevent the entry of foreign matter, the leakage of liquid and the development of any dangerous excess pressure. In addition, the portable tank must be designed so that internal surfaces may be effectively cleaned and passivated. Each tank must be equipped with pressure relief devices conforming to the following requirements:

Concentration of hydrogen peroxide solution	Total <sup>1</sup>
52% or less .....	11
Over 52%, but not greater than 60% .....	22
Over 60%, but not greater than 72% .....	32

<sup>1</sup>Total venting capacity in standard cubic feet hour (S.C.F.H.) per pound of hydrogen peroxide solution.

TP38 Each portable tank must be insulated with an insulating material so that the overall thermal conductance at 15.5 °C (60 °F) is no more than 1.5333 kilojoules per hour per square meter per degree Celsius (0.075 Btu per hour per square foot per degree Fahrenheit) temperature differential. Insulating materials may not promote corrosion to steel when wet.

TP44 Each portable tank must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of §173.24b(b) of this subchapter. Thickness of stainless steel for tank shell and heads must be the greater of 7.62 mm (0.300 inch) or the thickness required for a portable tank with a design pressure at least equal to 1.5 times the vapor pressure of the hazardous material at 46 °C (115 °F).

TP45 Each portable tank must be made of stainless steel, except that steel other than stainless steel may be used in accordance with the provisions of 173.24b(b) of this subchapter. Thickness of stainless steel for portable tank shells and heads must be the greater of 6.35 mm (0.250 inch) or the thickness required for a portable tank with a design pressure at least equal to 1.3 times the vapor pressure of the hazardous material at 46 °C (115 °F).

TP46 Portable tanks in sodium metal service are not required to be hydrostatically retested.

(9) “W” codes. These provisions apply only to transportation by water:

*Code/Special Provisions*

W1 This substance in a non friable prill or granule form is not subject to the requirements of this subchapter when tested in accordance with the UN Manual of Test and Criteria (IBR, see §171.7 of this subchapter) and is found to not meet the definition or criteria for inclusion in Division 5.1.

W7 Vessel stowage category for uranyl nitrate hexahydrate solution is “D” as defined in §172.101(k)(4).

W8 Vessel stowage category for pyrophoric thorium metal or pyrophoric uranium metal is “D” as defined in §172.101(k)(4).

W9 When offered for transportation by water, the following Specification packagings are not authorized unless approved by the Associate Administrator: woven plastic bags, plastic film bags, textile bags, paper bags, IBCs and bulk packagings.

W41 When offered for transportation by water, this material must be packaged in bales and be securely and tightly bound with rope, wire or similar means.

[Amdt. 172–123, 55 FR 52582, Dec. 21, 1990]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §172.102, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

**Subpart C—Shipping Papers**

**§ 172.200 Applicability.**

(a) *Description of hazardous materials required.* Except as otherwise provided in this subpart, each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by this subpart.

(b) This subpart does not apply to any material, other than a hazardous substance, hazardous waste or marine pollutant, that is—

(1) Identified by the letter “A” in column 1 of the §172.101 table, except when the material is offered or intended for transportation by air; or

(2) Identified by the letter “W” in column 1 of the §172.101 table, except when the material is offered or intended for transportation by water; or

(3) A limited quantity package unless the material is offered or intended for transportation by air or vessel and, until December 31, 2013, a package of ORM–D material authorized by this subchapter in effect on October 1, 2010