

Federal Register

Monday
October 31, 1983

Part II

**Department of
Transportation**

**Research and Special Programs
Administration**

**Optional Hazardous Materials Table; Use
of United Nations Shipping Descriptions;
Final Rule**

DEPARTMENT OF TRANSPORTATION**Research and Special Programs
Administration****49 CFR Parts 171 and 172**

[Docket No. HM-171C; Amdt. Nos. 171-75,
172-84]

**Optional Hazardous Materials Table;
Use of United Nations Shipping
Descriptions**

AGENCY: Materials Transportation
Bureau (MTB), Research and Special
Programs Administration, DOT.

ACTION: Final rule.

SUMMARY: This document amends the Optional Hazardous Materials Table (Optional Table) which appears in 49 CFR 172.102. The amendment has been necessitated by a number of changes to the International Maritime Organization (IMO). International Maritime Dangerous Goods Code (IMDG Code) upon which the Optional Table is based. The changes have been published by IMO as Amendment 20-82 to the IMDG Code. The purpose of this amendment to the Optional Table is to maintain alignment between the Optional Table and the corresponding provisions of the IMDG Code, in order to ensure that the import and export of hazardous materials will not be adversely affected by potentially conflicting and duplicative requirements for the description, classification, labeling and marking of hazardous materials. Since the use of the Optional Table is, as the name implies, an option for international shipments, this rule will not impose an undue burden on persons affected by the regulations. This amendment also updates the matter incorporated by reference in 49 CFR 171.7 to include Amendment 20-82.

EFFECTIVE DATE: December 1, 1983.

FOR FURTHER INFORMATION CONTACT:
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SUPPLEMENTARY INFORMATION: The purpose of the Optional Table is to facilitate the international transportation of hazardous materials and to minimize a duplicity of shipping paper descriptions and package marking and labeling requirements that would be required to comply with both domestic and international standards. Consequently, it is essential that the Optional Table be maintained in alignment with the provisions of the applicable international standards to the maximum extent possible.

The Optional Table, in its present form, is reflective of the provisions of the IMDG Code including all amendments through Amendment 19-80. Recently, IMO published Amendment 20-82 to the IMDG Code, and established December 1, 1983, as the worldwide implementation date for the amendment. Consequently, MTB is revising the Optional Table to maintain the necessary alignment with the IMDG Code, and is also updating the matter incorporated in § 171.7 to include a reference to Amendment 20-82. The effective date for these amendments is established as December 1, 1983, in order to conform to the implementation date set by IMO.

Amendment 20-82 to the IMDG Code includes changes to, or deletion of, approximately 480 existing hazardous materials entries and the addition of approximately 85 new entries. In addition, this amendment corrects several errors and omissions in the existing Optional Table. Because of the large number of changes to the table it is being republished in its entirety with all new or amended entries indicated by an

asterisk in Column (1). These asterisks do not, however, constitute a part of the amendment.

Since this rule does not impose mandatory additional requirements, notice and procedure thereon are considered unnecessary.

List of Subjects**49 CFR Part 171**

Hazardous materials transportation.
References, Terms and acronyms.

49 CFR Part 172

Hazardous materials transportation.
Hazardous materials description, Terms
and acronyms.

In consideration of the foregoing, 49
CFR Parts 171 and 172 are amended as
follows:

**PART 171—GENERAL INFORMATION,
REGULATIONS, AND DEFINITIONS**

1. In § 171.7, paragraph (d)(17) is
revised to read as follows:

§ 171.7 / Matter incorporated by reference.

(d) * * *
(17) "International Maritime
Dangerous Goods Code" (IMDG Code),
Volumes I, II, III, and IV, 1977 Edition,
and Amendments 14-76, 15-77, 16-78,
17-79, 18-79, 19-80 and 20-82 thereto.

**PART 172—HAZARDOUS MATERIALS
TABLES AND HAZARDOUS
MATERIALS COMMUNICATIONS
REGULATIONS**

2. In § 172.102, the Optional
Hazardous Materials Table is revised to
read as set forth below.

[Note to the Reader—The asterisks in
Column (1) of the Table indicate new or
amended entries and will not appear in the
Code of Federal Regulations.]

§ 172.102 [Amended]

BILLING CODE 4910-60-M

172.102 Optional Hazardous Materials Table

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c)
						Cargo vessel	Pass- enger vessel	Other requirements
	Acetal	3.1	UN 1088	Flammable Liquid	II	1.3	5	Keep cool
	Acetaldehyde	3.1	UN 1089	Flammable Liquid	I	1.3	5	Keep cool
	Acetaldehyde ammonia	9	UN 1841	None	III	1.2	1.2	Stow 'away from' foodstuffs
	Acetaldehyde oxime	3.3	UN 2352	Flammable Liquid	II	1.2	1.2	
	Acetic acid, glacial or Acetic acid solution, more than 80% acid, by weight	8	UN 2789	Corrosive, Flammable Liquid	II	1.2	1.2	Segregation same as for flammable liquids. Glass carboys in hampers prohibited under deck
	Acetic acid solution, more than 25% but not more than 80% acid, by weight	8	UN 2790	Corrosive	II/III	1.2	1.2	Glass carboys in hampers prohibited under deck
	Acetic anhydride	8	UN 1715	Corrosive, Flammable Liquid	II	1.2	1.2	Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives. Segregation same as for flammable liquids
	Acetone	3.1	UN 1090	Flammable Liquid	II	1.3	5	
	Acetone cyanohydrin, stabilized	6.1	UN 1544	Poison	I	1	5	Shade from radiant heat. Stow 'away from' acids and alkalis
	Acetone oils	3.2	UN 1091	Flammable Liquid	II	1.2	1	
	Acetonitrile. See Methyl cyanide							
	Acetyl acetone peroxide, maximum concentration 40% in solution	5.2	UN 2080	Organic Peroxide	II	1	5	
	Acetyl benzoyl peroxide, maximum concentration 45% in solution	5.2	UN 2081	Organic Peroxide	II	1	5	
	Acetyl bromide	8	UN 1716	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Acetyl chloride	3.2	UN 1717	Flammable Liquid, Corrosive	II	1.2	1	
	Acetyl cyclohexane sulphonyl peroxide, maximum concentration 82%, wetted with minimum 12% water	5.2	UN 2082	Organic Peroxide	I	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Acetyl cyclohexane sulphonyl peroxide, maximum concentration 32% in solution	5.2	UN 2083	Organic Peroxide	II	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Acetylene, dissolved	2.1	UN 1001	Flammable Gas	--	1	1	Shade from radiant heat. Stow 'separated from' chlorine
	Acetyl iodide	8	UN 1898	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Acetyl methyl carbonyl	3.3	UN 2621	Flammable Liquid	III	1.2	1.2	
	Acetyl peroxide, maximum concentration 20% in solution	5.2	UN 2084	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
	Acid mixtures, spent, nitrating	8	UN 1826	Corrosive	I/II	1	5	Stow 'away from' fluorides
	Acids, liquid, n.o.s. See Corrosive liquids, n.o.s.							
	Acridine	4.1	UN 2713	Flammable Solid	III	1.2	1.2	
	Acrolein dimer, stabilized	3.3	UN 2607	Flammable Liquid	II	1.2	1.2	
	Acrolein, inhibited	3.1	UN 1092	Flammable Liquid, Poison	I	1.3	5	Keep cool
	Acrylamide	6.1	UN 2074	St. Andrews Cross	III	1.2	1.2	Shade from radiant heat. Keep cool
	Acrylic acid, inhibited	8	UN 2218	Corrosive, Flammable Liquid	II	1	1	Shade from radiant heat. Keep cool. Segregation same as for flammable liquids. Glass carboys prohibited on passenger vessels
	Acrylonitrile, inhibited	3.2	UN 1093	Flammable Liquid, Poison	I	1.3	5	Keep cool
	Activated carbon. See Carbon, activated							
	Activated charcoal. See Carbon, activated							
	Adhesives, containing a flammable liquid	3.1	UN 1133	Flammable Liquid	II	1.2	5	Keep cool
	Adiponitrile	3.2	UN 1133	Flammable Liquid	II	1.2	1	
		3.3	UN 1133	Flammable Liquid	II	1.2	1.2	
	Aerosol dispensers, with a capacity below 1400 cubic cm.:	6.1	UN 2205	St. Andrews Cross	III	1.2	1.2	Shade from radiant heat
	(1) more than 10% by weight of total contents consisting of flammable gas	2.1	UN 1950	Flammable Gas	--	1.3	1.3	
	(2) internal pressure greater than 160 psig at 130 deg F.	2.2	UN 1950	Nonflammable Gas	--	1.3	1.3	
	(3) more than 45% by weight of total contents consisting of flammable liquid. This limit is reduced to 35% if there is any flammable gas present.	3.1	UN 1950	Flammable Liquid	--	1.3	1.3	
	(4) more than 10% by weight of toxic substances in the liquid concentrate	3.2	UN 1950	Flammable Liquid	--	1.3	1.3	
	(5) more than 10% by weight of toxic substances in the liquid concentrate	6.1	UN 1950	Poison	I/II	1.3	1.3	
	(6) more than 5% by weight of corrosive substances in the liquid concentrate	8	UN 1950	St. Andrews Cross	III	1.3	1.3	
	(7) as specified under Group 2 on page 9011 of IMCO Code	9	UN 1950	None	--	1.3	1.3	
N	Aerosol dispensers, with a capacity of 1400 cubic cm. or more	2	UN 1950	None	--			
	Agents, blasting, Type B. See Explosives, blasting, Type B							
	Agents, blasting, Type E. See Explosives, blasting, Type E							
	Air, compressed	2.2	UN 1002	Nonflammable Gas	--	1.2	1.2	
	Aircraft thrust device for assisted take-off	4.1	UN 2791	Flammable Solid	II	1.2	5	
	Air, refrigerated liquid	2.2	UN 1003	Nonflammable Gas, Oxidizer	--	1.3	1.3	Stow 'separated from' acetylene. Do not over-stow
*N	Alarm devices, explosive automatic	1.4 S	UN 0001	None. Package to be marked '1.4 S'	--	1.3	1.3	
	Alcohols, n.o.s.	3.1	UN 1987	Flammable Liquid	I/II	1.3	5	Keep cool
		3.2	UN 1987	Flammable Liquid	II	1.2	1	
		3.3	UN 1987	Flammable Liquid	II	1.2	1.2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Alcohols, toxic, n.o.s.	3.1 3.2 3.3	UN 1986 UN 1986 UN 1986	Flammable Liquid, Poison Flammable Liquid, Poison Flammable Liquid, Poison	1/II II II	1,3 1,2 1,2	5 1 1,2	Keep cool
	Aldehydes, n.o.s.	3.1 3.2 3.3	UN 1989 UN 1989 UN 1989	Flammable Liquid Flammable Liquid Flammable Liquid	1/II II II	1,3 1,2 1,2	5 1 1,2	Keep cool
	Aldehydes, toxic, n.o.s.	3.1	UN 1988	Flammable Liquid, Poison	1/II	1,3	5	Keep cool
	Aldol	3.2 3.3 6.1	UN 1988 UN 1988 UN 2839	Flammable Liquid, Poison Flammable Liquid, Poison Poison	II II II	1,2 1,2 1,3	1 1,2 1,3	Keep cool. Shade from radiant heat. Stow 'away from' living quarters
	Alkali metal alloys, liquid	4.3	UN 1421	Dangerous When Wet	I	1,2	5	
	Alkali metal amalgams, n.o.s.	4.3	UN 1389	Dangerous When Wet	I	1,2	1,2	
	Alkali metal amides, n.o.s.	4.3	UN 1390	Dangerous When Wet	II	1,2	5	
	Alkali metal dispersions, n.o.s. or Alkali earth metal dispersions, n.o.s.	4.3	UN 1391	Dangerous When Wet	I	1,2	5	
	Alkaline caustic liquids, n.o.s. See Caustic alkali liquids, n.o.s.							
	Alkaline corrosive liquids, n.o.s. See Corrosive liquids, n.o.s.							
	Alkaline earth metal alloys, n.o.s.	4.3	UN 1393	Dangerous When Wet	II	1,2	5	
	Alkaline earth metal amalgams, n.o.s.	4.3	UN 1392	Dangerous When Wet	I	1,2	1,2	
	Alkaloids, n.o.s. or Alkaloid salts, n.o.s., poisonous	6.1 6.1	UN 1544 UN 1544	Poison St. Andrews Cross	1/II III	1,2 1,2	1,2 1,2	
	Alkylamines and polyamines, flashpoint below 23 deg C and boiling point above 35 deg C but not more than 200 deg C, n.o.s.	3.2	UN 2733	Flammable Liquid, Corrosive	II	1,2	1	
	Alkylamines and polyamines, flashpoint 23 deg C or above, boiling point above 35 deg C but not more than 200 deg C, n.o.s.	8	UN 2734	Corrosive, Flammable Liquid (only if flashpoint 61 deg C or below)	II	1,2	1,2	If flashpoint 61 deg C or below, segregation same as for flammable liquids
	Alkylamines and polyamines, flashpoint of 23 deg C or above and boiling point above 200 deg C, n.o.s.	8	UN 2735	Corrosive, Flammable Liquid (only if flashpoint 61 deg C or below)	III	1,2	1,2	If flashpoint 61 deg C or below, segregation same as for flammable liquids
	Alkyl, Aryl or Toluene sulphonic acid, liquid, containing more than 5% free sulphuric acid	8	UN 2584	Corrosive	II	1,2	1	Glass carboys not permitted under deck
	Alkyl, Aryl or Toluene sulphonic acid, liquid, containing not more than 5% free sulphuric acid	8	UN 2586	Corrosive	III	1,2	1	Glass carboys not permitted under deck
	Alkyl, Aryl or Toluene sulphonic acid, solid, containing more than 5% free sulphuric acid	8	UN 2583	Corrosive	II	1,2	1,2	Keep dry
	Alkyl, Aryl or Toluene sulphonic acid, solid, containing not more than 5% free sulphuric acid	8	UN 2585	Corrosive	III	1,2	1,2	Keep dry
	Alkyl phenols, n.o.s.	6.1	UN 2430	St. Andrews Cross	III	1,2	1,2	
	Allyl acetate	3.2	UN 2333	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Allyl alcohol	3.2	UN 1098	Flammable Liquid, Poison	I	1,2	1	
	Allylamine	3.1	UN 2334	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Allyl bromide	3.2	UN 1099	Flammable Liquid, Poison	I	1,2	1	
	Allyl chloride	3.1	UN 1100	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Allyl chlorocarbonate. See Allyl chloroformate							
	Allyl chloroformate	8	UN 1722	Corrosive, Flammable Liquid	I	1	5	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives. Segregation same as for flammable liquids
	Allyl ethyl ether	3.2	UN 2335	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Allyl formate	3.2	UN 2336	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Allyl glycidyl ether	3.3	UN 2219	Flammable Liquid	III	1,2	1,2	
	Allyl iodide	3.2	UN 1723	Flammable Liquid, Corrosive	I	1,2	1	
	Allyl isothiocyanate, stabilized	6.1	UN 1545	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
	Allyl trichlorosilane, stabilized	8	UN 1724	Corrosive, Flammable Liquid	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives. Segregation same as for flammable liquids
	Aluminium alkyl halides, in solution	4.2	UN 2220	Spontaneously Combustible	II	1	1	
	Aluminium alkyl halides, pure	4.2	UN 2221	Spontaneously Combustible	I	1	5	
	Aluminium alkyls. See Metal alkyls, n.o.s.							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c) Other requirements
						Cargo vessel	Pass- enger vessel	
	Aluminium borohydride or Aluminium borohydride in devices	4.2	UN 2870	Spontaneously Combustible, Dangerous When Wet	I	1	5	
	Aluminium bromide, anhydrous	8	UN 1725	Corrosive	II	1,2	1,2	Keep dry
	Aluminium bromide solution	8	UN 2580	Corrosive	III	1,2	1,2	
	Aluminium carbide	4.3	UN 1394	Dangerous When Wet	II	1,2	1,2	
	Aluminium chloride, anhydrous	8	UN 1726	Corrosive	II	1,2	1,2	Keep dry
	Aluminium chloride solution	8	UN 2581	Corrosive	III	1,2	1,2	
	Aluminium ferrosilicon, powder	4.3	UN 1395	Dangerous When Wet	II	1,2	1,2	
	Aluminium hydride	4.2	UN 2463	Spontaneously Combustible	I	1,2	5	
	Aluminium nitrate	5.1	UN 1438	Oxidizer	III	1,2	1,2	
	Aluminium phosphide	4.3	UN 1397	Dangerous When Wet, Poison	I	1	1,2	
	Aluminium powder, coated	4.1	UN 1309	Flammable Solid	III	1,2	1,2	Keep dry. Stow 'away from' liquid halogenated hydrocarbons
	Aluminium, powder, pyrophoric. See Pyrophoric metals							
	Aluminium, powder, uncoated, non-pyrophoric	4.3	UN 1396	Dangerous When Wet	II	1,2	1,2	Stow 'away from' liquid halogenated hydrocarbons
	Aluminium resinate	4.1	UN 2715	Flammable Solid	III	1,2	1,2	
	Aluminium silicon, powder, uncoated	4.3	UN 1398	Dangerous When Wet	III	1,2	1,2	
	2-Amino-4-chlorophenol	6.1	UN 2673	Poison	II	1,2	1,2	
	2-Amino-5-diethylaminopentane	6.1	UN 2946	St. Andrews Cross	III	1,2	1,2	
	N-Aminoethylpiperazine	8	UN 2815	Corrosive	III	1,3	1,3	Keep cool
	Aminophenols (o-, m-, p-)	6.1	UN 2512	St. Andrews Cross	III	1,2	1,2	
	Aminopyridines (o-, m-, p-)	6.1	UN 2671	Poison	II	1,3	1	Keep cool. Stow 'away from' living quarters
	Ammonia, anhydrous, liquefied, or ammonia solutions, density (specific gravity) less than 0.880 at 15 degrees C, in water, containing more than 50% ammonia	2.3	UN 1005	Poison Gas	-	1,2	5	Stow 'separated from' chlorine. Stow 'away from' living quarters
	Ammonia solutions density (specific gravity) between 0.880 and 0.937 at 15 deg C, in water, with more than 10% and not more than 35% ammonia, by weight	8	UN 2672	Corrosive	III	1,2	1,2	Stow 'away from' living quarters
	Ammonia solutions, density (specific gravity) less than 0.880 at 15 degrees C, in water, containing more than 35% and not more than 50% ammonia	2.2	UN 2073	Nonflammable Gas	-	1,2	5	Stow 'separated from' chlorine. Stow 'away from' living quarters
	Ammonium arsenate	6.1	UN 1546	Poison	II	1,2	1,2	Stow 'away from' alkalis
	Ammonium bifluoride. See Ammonium hydrogen fluoride							
	Ammonium dichromate	5.1	UN 1439	Oxidizer	II	1,2	1,2	Stow 'away from' foodstuffs
	Ammonium dinitro-o-cresolate	6.1	UN 1843	Poison	II	1,2	1	Stow 'away from' heavy metals, 'separated from' flammable substances and 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Ammonium fluoride	6.1	UN 2505	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Ammonium hydrogen fluoride, solid	8	UN 1727	Corrosive	II	1,2	1,2	Keep dry
	Ammonium hydrogen fluoride, solution	8	UN 2817	Corrosive, Poison	II	1,2	1	
	Ammonium hydrogen sulphate	8	UN 2506	Corrosive	II	1,2	1,2	Stow 'away from' strong alkalis
	Ammonium metavanadate	6.1	UN 2859	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Ammonium nitrate fertilizers, n.o.s.	5.1	UN 2072	Oxidizer	II	1,3	1,3	Stow 'away from' sources of heat and 'separated from' combustible material, chlorates, hypochlorites, nitrites, permanganates, and metallic powders
	Ammonium nitrate fertilizers, of the same composition as defined in class 5.1 on pages 5015 and 5016 of the IMCO Code but containing greater amounts of organic and/or combustible material than specified in these entries	1.1 D	UN 0223	Explosive (1.1D)	-	1,2	1,2	
	Ammonium nitrate fertilizers, Type A							
	(1) Uniform non-segregating mixtures of ammonium nitrate with added matter which is inorganic and chemically inert towards ammonium nitrate, containing not less than 90% of ammonium nitrate and not more than 0.2% of combustible material (including organic material calculated as carbon), or containing less than 90% but more than 70% of ammonium nitrate and not more than 0.4% of total combustible material	5.1	UN 2067	Oxidizer	III	1,3	1,3	Stow 'away from' sources of heat and 'separated from' combustible material, chlorates, hypochlorites, nitrites, permanganates, and metallic powders
	(2) Uniform non-segregating mixtures of ammonium nitrate with calcium carbonate and/or dolomite, containing more than 80% but less than 90% of ammonium nitrate and not more than 0.4% of total combustible material	5.1	UN 2068	Oxidizer	III	1,3	1,3	Stow 'away from' sources of heat and 'separated from' combustible material, chlorates, hypochlorites, nitrites, permanganates, and metallic powders
	(3) Uniform non-segregating mixtures of ammonium nitrate/ammonium sulphate, containing more than 45% but not more than 70% of ammonium nitrate and containing not more than 0.4% of total combustible material	5.1	UN 2069	Oxidizer	III	1,3	1,3	Stow 'away from' sources of heat and 'separated from' combustible material, chlorates, hypochlorites, nitrites, permanganates, and metallic powders
	(4) Uniform non-segregating mixtures of nitrogen/phosphate or nitrogen/potash types or complete fertilizers of nitrogen/phosphate/potash type, containing more than 70% but less than 90% of ammonium nitrate and not more than 0.4% of total combustible material	5.1	UN 2070	Oxidizer	III	1,3	1,3	Stow 'away from' sources of heat and 'separated from' combustible material, chlorates, hypochlorites, nitrites, permanganates, and metallic powders
	Ammonium nitrate fertilizers, Type B. Uniform non-segregating mixtures of nitrogen/phosphate or nitrogen/potash types or complete fertilizers of nitrogen/phosphate/potash type, containing not more than 70% of ammonium nitrate and not more than 0.4% of total added combustible material or containing not more than 45% of ammonium nitrate with unrestricted combustible material	9	UN 2071	None	III	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c)
						Cargo vessel	Pass- enger vessel	Other requirements
	Ammonium nitrate, with more than 0.2% by weight of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	1.1 D	UN 0222	Explosive (1.1D)	—	1,2	1,2	
	Ammonium nitrate, with not more than 0.2% of combustible substance including any organic substance calculated as carbon, to the exclusion of any other added substance	5.1	UN 1942	Oxidizer	III	1,3	1,3	Stow 'away from' sources of heat and 'separated from' combustible material, chlorates, hypochlorites, nitrites, permanganates, and metallic powders
	Ammonium perchlorate	5.1	UN 1442	Oxidizer	II	1,2	5	Stow 'away from' powdered metals
N	Ammonium perchlorate, average particle size less than 45 microns	1.1D	UN 0402	Explosive (1.1D)	—	—	—	
	Ammonium persulphate	5.1	UN 1444	Oxidizer	III	1,2	1,2	
*N	Ammonium picrate, dry or wetted with less than 10% water, by weight	1.1D	UN 0004	Explosive (1.1D)	—	—	—	
	Ammonium picrate, wetted, with not less than 10% water, by weight	4.1	UN 1310	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
	Ammonium picrate, wetted, with not less than 33 1/3 % water, by weight	4.1	UN 1310	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Ammonium polysulphide, solution	8	UN 2818	Corrosive, Poison	II	1,3	1	Keep cool. Stow 'away from' acids
	Ammonium polyvanadate	6.1	UN 2861	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Ammonium silicofluoride	6.1	UN 2854	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Ammonium sulphide, solution	8	UN 2683	Corrosive, Poison, Flammable Liquid (only if flashpoint below 61 deg C)	II	1,3	1	Keep cool. Stow 'away from' all other corrosives. If flashpoint below 61 deg C, segregation same as for flammable liquids
	Ammunition, illuminating, with or without burster, expelling charge or propelling charge	1.4 G	UN 0297	Explosive (1.4G)	—	1,3	1,3	
N	Ammunition, illuminating, with or without burster, expelling charge or propelling charge	1.2G	UN 0171	Explosive (1.2G)	—	—	—	
N	Ammunition, illuminating, with or without burster, expelling charge or propelling charge	1.3G	UN 0254	Explosive (1.3G)	—	—	—	
N	Ammunition, incendiary, liquid or gel, with burster, expelling charge or propelling charge	1.3J	UN 0247	Explosive (1.3J)	—	—	—	
	Ammunition, incendiary (other than water-activated ammunition), without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge	1.4 G	UN 0300	Explosive (1.4G)	—	1,3	1,3	
N	Ammunition, incendiary (other than water-activated ammunition), without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge	1.2G	UN 0009	Explosive (1.2G)	—	—	—	
N	Ammunition, incendiary (other than water-activated ammunition), without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge	1.3G	UN 0010	Explosive (1.3G)	—	—	—	
N	Ammunition, incendiary, white phosphorus, with burster, expelling charge or propelling charge	1.2H	UN 0243	Explosive (1.2H)	—	—	—	
N	Ammunition, incendiary, white phosphorus, with burster, expelling charge or propelling charge	1.3H	UN 0244	Explosive (1.3H)	—	—	—	
	Ammunition, practice	1.4G	UN 0362	Explosive (1.4G)	—	1,3	1,3	
	Ammunition, proof	1.4G	UN 0363	Explosive (1.4G)	—	1,3	1,3	
N	Ammunition, smoke (other than water-activated ammunition) without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge	1.2G	UN 0015	Explosive (1.2G), Corrosive	—	—	—	
N	Ammunition, smoke (other than water-activated ammunition) without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge	1.3G	UN 0016	Explosive (1.3G), Corrosive	—	—	—	
N	Ammunition, smoke (other than water-activated ammunition) without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge	1.4G	UN 0303	Explosive (1.4G), Corrosive	—	—	—	
N	Ammunition, smoke, white phosphorus (other than water-activated ammunition), with burster, expelling charge or propelling charge	1.2H	UN 0245	Explosive (1.2H)	—	—	—	
N	Ammunition, smoke, white phosphorus (other than water-activated ammunition), with burster, expelling charge or propelling charge	1.3H	UN 0246	Explosive (1.3H)	—	—	—	
	Ammunition, tear producing, non-explosive, with neither burster nor expelling charge, non-fused	6.1	UN 2017	Poison, Corrosive	II	1,2	5	Keep dry. Stow 'away from' living quarters
N	Ammunition, tear producing, with burster, expelling charge or propelling charge	1.2G	UN 0018	Explosive (1.2G), Poison, Corrosive	—	—	—	Segregation same as for corrosives
N	Ammunition, tear producing, with burster, expelling charge or propelling charge	1.3G	UN 0019	Explosive (1.3G), Poison, Corrosive	—	—	—	
	Ammunition, tear-producing, with burster, expelling charge or propelling charge	1.4 G	UN 0301	Explosive (1.4G), Poison, Corrosive	—	1,3	1,3	
	Ammonium, toxic, non-explosive, with neither burster nor expelling charge, non-fused	6.1	UN 2016	Poison	II	1,2	5	Keep dry
N	Ammunition, toxic (other than water-activated ammunition) with burster, expelling charge or propelling charge	1.2K	UN 0020	Explosive (1.2K), Poison	—	—	—	
N	Ammunition, toxic (other than water-activated ammunition) with burster, expelling charge or propelling charge	1.3K	UN 0021	Explosive (1.3K), Poison	—	—	—	
	Amyl acetates	3.2	UN 1104	Flammable Liquid	II	1,2	1	
	Amyl acid phosphate	3.3	UN 1104	Flammable Liquid	II	1,2	1,2	
	Amyl alcohols	8	UN 2819	Corrosive	III	1,2	1,2	
	Amylamine	3.2	UN 1105	Flammable Liquid	II	1,2	1	
	Amyl butyrate	3.3	UN 1105	Flammable Liquid	II	1,2	1,2	
	Amyl chloride	3.2	UN 1107	Flammable Liquid	II	1,2	1	
	n-Amylene	3.1	UN 1108	Flammable Liquid	I	1,3	5	Keep cool
	Amyl formates	3.3	UN 1109	Flammable Liquid	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Amyl mercaptan	3.2	UN 1111	Flammable Liquid	II	1,2	1	
	Amyl methyl ketone	3.3	UN 1110	Flammable Liquid	III	1,2	1,2	
	Amyl nitrate	3.3	UN 1112	Flammable Liquid	II	1,3	5	
	Amyl nitrite	3.1	UN 1113	Flammable Liquid	II	1,3	5	
	tert-Amyl peroxy-2-ethylhexanoate, technical pure	5.2	UN 2898	Organic Peroxide	II	1	5	Keep cool
	tert-Amyl peroxyneodecanoate with at least 25% phlegmatizer	5.2	UN 2891	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
	tert-Amyl peroxyisobutyrate maximum concentration 77% in solution	5.2	UN 2957	Organic Peroxide	II	1	5	Control temperature 0 deg C. Emergency temperature 10 deg C
	Amyl trichlorosilane	8	UN 1728	Corrosive	II	1	1	Control temperature 10 deg C. Emergency temperature 15 deg C
	Aniline	6.1	UN 1547	Poison	II	1,2	1,2	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Aniline hydrochloride	6.1	UN 1548	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids and oxidizers
	Aniline oil. See Aniline							Stow 'away from' alkalis
	o-Anisidine	6.1	UN 2431	St. Andrews Cross	III	1,2	1,2	
	Anisole	3.3	UN 2222	Flammable Liquid	III	1,2	1,2	
	Anisoyl chloride	8	UN 1729	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on pas- senger vessels
	Anti-freeze. See Flammable liquid preparations, n.o.s.							
	Antimony chloride. See Antimony trichloride, liquid or solid							
	Antimony compounds, inorganic, n.o.s.	6.1	UN 1549	Poison	I/II	1,2	1,2	
		6.1	UN 1549	St. Andrews Cross	III	1,2	1,2	
	Antimony lactate	6.1	UN 1550	St. Andrews Cross	III	1,2	1,2	
	Antimony pentachloride, liquid	8	UN 1730	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on pas- senger vessels
	Antimony pentachloride, solutions	8	UN 1731	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels
	Antimony pentafluoride	8	UN 1732	Corrosive, Poison	II	1	5	Keep dry
	Antimony potassium tartrate	6.1	UN 1551	St. Andrews Cross	III	1,2	1,2	
	Antimony powder	6.1	UN 2871	St. Andrews Cross	III	1,2	1,2	
	Antimony trichloride, liquid	8	UN 1733	Corrosive	II	1	1	Keep dry
	Antimony trichloride, solid	8	UN 1733	Corrosive	II	1,2	1,2	Keep dry
	Argon, compressed	2.2	UN 1006	Nonflammable Gas	-	1,3	1,3	
	Argon, refrigerated liquid	2.2	UN 1951	Nonflammable Gas	-	1,3	1	
	Arsenic acid, liquid	6.1	UN 1553	Poison	I	1,2	1,2	
	Arsenic acid, solid	6.1	UN 1554	Poison	II	1,2	1,2	
	Arsenical dust	6.1	UN 1562	Poison	II	1,2	1,2	
	Arsenical flue dust. See Arsenical dust							
	Arsenical pesticides, liquid, flammable, toxic, n.o.s., flashpoint less than 23 deg C	3.2	UN 2760	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Arsenical pesticides, liquid, toxic, flammable, n.o.s. flashpoint between 23 deg C and 61 deg C	6.1	UN 2993	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 2993	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 2993	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Arsenical pesticides, liquid, toxic, n.o.s.	6.1	UN 2994	Poison	I	1	1	
		6.1	UN 2994	Poison	II	1,2	1	
		6.1	UN 2994	St. Andrews Cross	III	1,2	1,2	
	Arsenical pesticides, solid, toxic, n.o.s.	6.1	UN 2759	Poison	I/II	1,2	1,2	
		6.1	UN 2759	St. Andrews Cross	III	1,2	1,2	
	Arsenic bromide	6.1	UN 1555	Poison	II	1,2	1,2	Keep cool. Stow 'away from' living quarters
	Arsenic chloride. See Arsenic trichloride							
	Arsenic compounds, liquid, n.o.s.	6.1	UN 1556	Poison, Flammable Liquid (if flashpoint between 23 deg C and 61 deg C)	I/II	1,2	1	
		6.1	UN 1556	St. Andrews Cross, Flammable Liquid (if flashpoint between 23 deg C and 61 deg C)	III	1,2	1	
	Arsenic compounds, solid, n.o.s.	6.1	UN 1557	Poison	I	1,2	1	
		6.1	UN 1557	Poison	II	1,2	1,2	
		6.1	UN 1557	St. Andrews Cross	III	1,2	1,2	
	Arsenic, metallic	6.1	UN 1558	Poison	II	1,2	1,2	
	Arsenic pentoxide	6.1	UN 1559	Poison	II	1,2	1,2	
	Arsenic sulphides, solid, n.o.s. See Arsenic compounds, solid, n.o.s.							
	Arsenic trichloride	6.1	UN 1560	Poison	I	1,2	1,2	
	Arsenic trioxide	6.1	UN 1561	Poison	II	1,2	1,2	
	Arsine	2.3	UN 2188	Poison Gas, Flammable Gas	-	1	5	Stow 'away from' living quarters
	Articles, explosive, n.o.s.	1.4B	UN 0350	Explosive (1.4B)	-	1,3	1,3	
	Articles, explosive, n.o.s.	1.4C	UN 0351	Explosive (1.4C)	-	1,3	1,3	
	Articles, explosive, n.o.s.	1.4D	UN 0352	Explosive (1.4D)	-	1,3	1,3	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Articles, explosive, n.o.s.	1.4G	UN 0353	Explosive (1.4G)	—	1,3	1,3	
	Articles, explosive, n.o.s.	1.4S	UN 0349	None. Package to be marked '1.4S'	—	1,3	1,3	
N	Articles, explosive, n.o.s.	1.1L	UN 0354	Explosive (1.1L)	—	—	—	
N	Articles, explosive, n.o.s.	1.2L	UN 0355	Explosive (1.2L)	—	—	—	
N	Articles, explosive, n.o.s.	1.3L	UN 0356	Explosive (1.3L)	—	—	—	
N	Articles, pyrophoric	1.2L	UN 0380	Explosive (1.2L)	—	—	—	
	Asbestos, blue	9	UN 2212	None	II	1,2	1,2	
	Asbestos, white	9	UN 2590	None	III	1,2	1,2	
	Asphalt cut-backs. See Cut-backs, asphalt or bitumen							
	2,2'-Azodi-(2,4-dimethyl-4-methoxyvaleronitrile)	4.1	UN 2955	Flammable Solid	II	1	1	Control temperature -5 deg C. Emergency temperature 5 deg C
	2,2'-Azodi-(2,4-dimethylvaleronitrile)	4.1	UN 2953	Flammable Solid	II	1	1	Control temperature 10 deg C. Emergency temperature 15 deg C
	Azodi-(1,1'-hexahydrobenzoxazole)	4.1	UN 2954	Flammable Solid	II	1,2	1	Shade from radiant heat
	Azodisobutyronitrile	4.1	UN 2952	Flammable Solid	II	1	5	Control temperature 40 deg C. Emergency temperature 45 deg C
	Bags, empty and unwashed, having contained Potassium nitrate or sodium nitrate	4.1	UN 1359	Flammable Solid	III	1,2	5	
	Barium, alloys, non-pyrophoric	4.3	UN 1399	Dangerous When Wet	II	1,2	5	
	Barium alloys, pyrophoric	4.2	UN 1854	Spontaneously Combustible	II	1	5	
N	Barium azide, dry or containing, by weight, less than 50% water	1.1A	UN 0224	Explosive (1.1A), Poison	—	—	—	
	Barium azide, wetted with not less than 50% water, by weight	4.1	UN 1571	Flammable Solid, Poison	I	1	5	Stow 'away from' heavy metals
	Barium bromate	5.1	UN 2719	Oxidizer, Poison	II	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' finely powdered metals and foodstuffs
	Barium chlorate	5.1	UN 1445	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' Ammonium compounds
	Barium compounds, n.o.s.	6.1	UN 1564	Poison	I/II	1,2	1,2	
	Barium cyanide	6.1	UN 1563	Poison	I	1,2	1,2	Stow 'away from' acids
	Barium hypochlorite, with more than 22% available chlorine	5.1	UN 2741	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' foodstuffs
	Barium, metal, non-pyrophoric	4.3	UN 1400	Dangerous When Wet	II	1,2	5	
	Barium nitrate	5.1	UN 1446	Oxidizer, Poison	II	1,2	1,2	
	Barium oxide	6.1	UN 1384	St. Andrews Cross	III	1,2	1,2	
	Barium perchlorate	5.1	UN 1447	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' powdered metals
	Barium permanganate	5.1	UN 1448	Oxidizer, Poison	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Barium peroxide	5.1	UN 1449	Oxidizer, Poison	II	1,2	1,2	Keep dry
	Batteries, wet, filled with acid, electric, storage	8	UN 2794	Corrosive	III	1,2	1,2	
	Batteries, wet, filled with alkali, electric, storage	8	UN 2795	Corrosive	III	1,2	1,2	
	Batteries, wet, non-spillable, electric, storage	8	UN 2800	None. Package to be marked 'Class 8'	III	1,2	1,2	
	Battery fluid, acid	8	UN 2796	Corrosive	II	1,2	1	Stow 'away from' fluorides. Glass carboys in hampers prohibited under deck
	Battery fluid, alkali	8	UN 2797	Corrosive	II	1,2	1,2	
	Benzene	3.2	UN 1114	Flammable Liquid	II	1,2	1	
	Benzene sulphonyl chloride	8	UN 2225	Corrosive	III	1,2	1,2	
	Benzidine	6.1	UN 1885	Poison	II	1,2	1,2	
	Benzine	3.1	UN 1115	Flammable Liquid	II	1,2	1	Keep cool
		3.2	UN 1115	Flammable Liquid	II	1,2	1	
		3.3	UN 1115	Flammable Liquid	II	1,2	1,2	
	Benzoic derivative pesticides, liquid, flammable, toxic, n.o.s. flash-point less than 23 deg C	3.2	UN 2770	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Benzoic derivative pesticides, liquid, toxic, flammable, n.o.s. flash-point between 23 deg C and 61 deg C	6.1	UN 3003	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3003	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3003	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Benzoic derivative pesticides liquid, toxic, n.o.s.	6.1	UN 3004	Poison	I	1	1	
		6.1	UN 3004	Poison	II	1,2	1	
		6.1	UN 3004	St. Andrews Cross	III	1,2	1,2	
	Benzoic derivative pesticides, solid, toxic, n.o.s.	6.1	UN 2769	Poison	I/II	1,2	1,2	
		6.1	UN 2769	St. Andrews Cross	III	1,2	1,2	
	Benzonitrile	6.1	UN 2224	Poison	II	1,2	1,2	Stow 'away from' acids
	Benzoquinone	6.1	UN 2587	Poison	II	1,2	1,2	
	Benzoic chloride	8	UN 2226	Corrosive	II	1,2	1,2	Stow 'away from' living quarters
	Benzoic fluoride	3.2	UN 2338	Flammable Liquid	II	1,2	1	
	Benzoyl chloride	8	UN 1736	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Benzoyl peroxide, in a concentration of more than 77% but less than 95% with water	5.2	UN 2088	Organic Peroxide	I	1	5	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Benzoyl peroxide, in a concentration of more than 72% but less than 95% as a paste	5.2	UN 2086	Organic Peroxide	I	1	5	
	Benzoyl peroxide, in a concentration of not more than 72% as a paste	5.2	UN 2087	Organic Peroxide	II	1	5	
	Benzoyl peroxide, in a concentration of not more than 77% with water	5.2	UN 2090	Organic Peroxide	II	1	5	
	Benzoyl peroxide, in concentrations from 30% to maximum 52% with inert solid	5.2	UN 2089	Organic Peroxide	II	1	5	
	Benzoyl peroxide, technical pure or in a concentration of more than 52% with inert solid	5.2	UN 2085	Organic Peroxide	I	1	5	
	Benzyl bromide	8	UN 1737	Corrosive	II	1	5	Keep dry
	Benzyl chloride	6.1	UN 1738	Poison, Corrosive	II	1	5	Keep dry. Segregation same as for corrosives
	Benzyl chloroformate	8	UN 1739	Corrosive	I	1	5	Keep dry
	Benzyl dimethylamine	8	UN 2619	Corrosive, Flammable Liquid	II	1,3	1,3	Segregation same as for flammable liquids. Stow 'away from' sources of heat
	Benzylidene chloride	6.1	UN 1886	Poison	II	1	5	
	Benzyl iodide	6.1	UN 2653	Poison	II	1,3	1	Keep cool. Stow 'away from' living quarters
	Beryllium compounds	6.1	UN 1566	Poison	II	1,2	1,2	
	Beryllium, metal powder	6.1	UN 1567	Poison, Flammable Solid	II	1,2	1,2	Segregation same as for flammable solids
	Beryllium nitrate	5.1	UN 2464	Oxidizer, Poison	II	1,2	1,2	Keep cool. If packaged in a liner within a wooden barrel, fiber drum or plywood drum or in plastic bags within a fiberboard box, stow 'away from' sources of heat
	Bhusa	4.1	UN 1327	None	III	1,2	1,2	Stow 'away from' animal or vegetable oils
	Bifluorides, n.o.s.	8	UN 1740	Corrosive	II	1,2	1,2	Keep dry
	Bipyridilium pesticides, liquid, flammable, toxic, n.o.s., flashpoint less than 23 deg C	3.2	UN 2782	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Bipyridilium pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3015	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3015	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3015	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Bipyridilium pesticides, liquid, toxic, n.o.s.	6.1	UN 3016	Poison	I	1	1	
		6.1	UN 3016	Poison	II	1,2	1	
		6.1	UN 3016	St. Andrews Cross	III	1,2	1,2	
	Bipyridilium pesticides, solid, toxic, n.o.s.	6.1	UN 2781	Poison	I	1,2	1,2	
		6.1	UN 2781	Poison	II	1,2	1,2	
		6.1	UN 2781	St. Andrews Cross	III	1,2	1,2	
	Bisulphites, inorganic, aqueous solution, n.o.s.	8	UN 2693	Corrosive	III	1,2	1,2	Stow 'away from' other corrosive substances. Glass carboys prohibited on passenger vessels
N	Black powder, compressed	1.1D	UN 0028	Explosive (1.1D)	--	--	--	
N	Black powder, granular or as meal	1.1D	UN 0027	Explosive (1.1D)	--	--	--	
	Bleaching powder. See Calcium hypochlorite mixtures, dry, with more than 10% but not more than 39% available chlorine							
	Blue asbestos. See Asbestos, blue							
N	Bombs, containing flammable liquid, with bursting charge	1.1J	UN 0399	Explosive (1.1J)	--	--	--	
N	Bombs, containing flammable liquid, with bursting charge	1.2J	UN 0400	Explosive (1.2J)	--	--	--	
N	Bombs, photo-flash	1.1D	UN 0038	Explosive (1.1D)	--	--	--	
N	Bombs, photo-flash	1.1F	UN 0037	Explosive (1.1F)	--	--	--	
N	Bombs, photo-flash	1.2G	UN 0039	Explosive (1.2G)	--	--	--	
N	Bombs, photo-flash	1.3G	UN 0299	Explosive (1.3G)	--	--	--	
	Bombs, smoke, containing a corrosive liquid, non-explosive, without initiating device	8	UN 2028	Corrosive	II	1,2	5	Keep dry. Stow 'away from' living quarters
N	Bombs, with bursting charge	1.1D	UN 0034	Explosive (1.1D)	--	--	--	
N	Bombs, with bursting charge	1.2D	UN 0035	Explosive (1.2D)	--	--	--	
N	Bombs, with bursting charge	1.1F	UN 0033	Explosive (1.1F)	--	--	--	
N	Bombs, with bursting charge	1.2F	UN 0291	Explosive (1.2F)	--	--	--	
N	Boosters, with detonator	1.1B	UN 0225	Explosive (1.1B)	--	--	--	
N	Boosters, with detonator	1.2B	UN 0268	Explosive (1.2B)	--	--	--	
N	Boosters, without detonator	1.1D	UN 0042	Explosive (1.1D)	--	--	--	
N	Boosters, without detonator	1.2D	UN 0283	Explosive (1.2D)	--	--	--	
	Borate and chlorate, mixtures. See Chlorate and borate mixtures							
	Boracal	4.1	UN 1312	None. Package to be marked "Class 4.1"	III	1,2	1,2	
	Boron tribromide	8	UN 2692	Corrosive	I	1	1	Keep cool and dry. Stow 'away from' foodstuffs
	Boron trichloride	2.2	UN 1741	Nonflammable Gas, Corrosive	--	1	5	Shade from radiant heat. Stow 'away from' foodstuffs and living quarters
	Boron trifluoride	2.3	UN 1008	Poison Gas	--	1	5	Stow 'away from' foodstuffs and living quarters
	Boron trifluoride acetic acid complex	8	UN 1742	Corrosive	II	1,2	1,2	
	Boron trifluoride diethyletherate	4.3	UN 2604	Dangerous When Wet, Flammable Liquid, Corrosive	II	1	5	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) * Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Boron trifluoride dihydrate	8	UN 2851	Corrosive	II	1,3	1	Keep cool
	Boron trifluoride dimethyl etherate	4.3	UN 2965	Dangerous When Wet, Flammable Liquid, Corrosive	II	1	5	
	Boron trifluoride propionic acid complex	8	UN 1743	Corrosive	II	1,2	1,2	
	Box toe gum. See Nitrocellulose							
	Brake fluid, hydraulic	3.2	UN 1118	Flammable Liquid	II	1,2	1	
		3.3	UN 1118	Flammable Liquid	II	1,2	1,2	
	Bromates, inorganic, n.o.s.	5.1	UN 1450	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Bromine, (and solutions)	8	UN 1744	Corrosive, Poison	I	1	5	Keep cool
	Bromine chloride	2.3	UN 2901	Poison Gas, Oxidizer, Corrosive	-	1	5	Stow 'away from' combustible materials
	Bromine pentafluoride	5.1	UN 1745	Oxidizer, Poison, Corrosive	I	1	5	Keep dry. Shade from radiant heat
	Bromine trifluoride	5.1	UN 1746	Oxidizer, Poison, Corrosive	I	1	5	Keep dry. Shade from radiant heat
	Bromoacetic acid, solid	8	UN 1938	Corrosive	II	1,2	1,2	Keep dry
	Bromoacetic acid, solution	8	UN 1938	Corrosive	II	1,2	1,2	Glass carboys in hampers not permitted under deck
	Bromoacetone	6.1	UN 1569	Poison, Flammable Liquid	II	1	5	Segregation same as for flammable liquids. Stow 'away from' living quarters
	Bromoacetyl bromide	8	UN 2513	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels
	Bromobenzene	3.3	UN 2514	Flammable Liquid	III	1,2	1,2	
	Bromobenzyl cyanides	6.1	UN 1694	Poison	I	1	5	Keep cool. Stow 'away from' living quarters
	2-Bromobutane	3.2	UN 2339	Flammable Liquid	II	1,2	1	
	Bromochloromethane	6.1	UN 1887	St. Andrews Cross	III	1,2	1,2	
	2-Bromoethyl ethyl ether	3.2	UN 2340	Flammable Liquid	II	1,2	1	
	Bromoform	6.1	UN 2515	St. Andrews Cross	III	1,3	1,3	Keep cool
	1-Bromo-3-methylbutane	3.2	UN 2341	Flammable Liquid	II	1,2	1	
	Bromomethylpropanes	3.2	UN 2342	Flammable Liquid	II	1,2	1	
	Bromomethylpropanes	3.3	UN 2342	Flammable Liquid	II	1,2	1,2	
	2-Bromopentane	3.2	UN 2343	Flammable Liquid	II	1,2	1	
	Bromopropanes	3.2	UN 2344	Flammable Liquid	II	1,2	1	
	Bromopropanes	3.3	UN 2344	Flammable Liquid	II	1,2	1,2	
	3-Bromopropyne	3.2	UN 2345	Flammable Liquid	II	1,2	1	
	Bromotrifluoroethylene	2.1	UN 2419	Flammable Gas	-	1,2	5	
	Bromotrifluoromethane	2.2	UN 1009	Nonflammable Gas	-	1,2	1,2	
	Brucine	6.1	UN 1570	Poison	II	1,2	1,2	
N	Burstera, explosive	1.1D	UN 0043	Explosive (1.1D)	-	-	-	
	Butadiene, inhibited	2.1	UN 1010	Flammable Gas	-	1,2	1	Stow 'away from' living quarters
	Butanedione	3.2	UN 2346	Flammable Liquid	II	1,2	1	
	Butane or butane mixtures	2.1	UN 1011	Flammable Gas	-	1,2	1	
	sec-Butanol	3.3	UN 1120	Flammable Liquid	II	1,2	1,2	
	tert-Butanol	3.2	UN 1120	Flammable Liquid	II	1,2	1	
	Butanol	3.3	UN 1120	Flammable Liquid	II	1,2	1,2	
	Butene. See Butylene							
	Butoxyl	3.3	UN 2708	Flammable Liquid	III	1,2	1,2	
	Butyl acetates	3.2	UN 1123	Flammable Liquid	II	1,2	1	
	Butyl acid phosphate	8	UN 1718	Corrosive	III	1,2	1,2	Glass carboys in hampers prohibited under deck
	Butylacrylate, inhibited	3.3	UN 2348	Flammable Liquid	II	1,2	1,2	
	Butyl alcohol. See Butanol							
	sec-Butyl alcohol. See sec-Butanol							
	tert-Butyl alcohol. See tert-Butanol							
	n-Butylamine	3.2	UN 1125	Flammable Liquid	II	1,2	1	
	n-n-Butylaniline	6.1	UN 2738	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Butyl benzenes	3.3	UN 2709	Flammable Liquid	III	1,2	1,2	
	n-Butyl bromide	3.3	UN 1126	Flammable Liquid	II	1,2	1,2	
	n-Butyl chloride. See Chlorobutanes							
	n-Butylchloroformate	6.1	UN 2743	Poison, Corrosive, Flammable Liquid	II	1,3	1,3	Keep cool and dry. Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
	tert-Butyl cumene peroxide. See tert-Butyl cumyl peroxide							
	tert-Butyl cumyl peroxide, technical pure	5.2	UN 2091	Organic Peroxide	II	1	5	
	tert-Butylcyclohexylchloroformate	6.1	UN 2747	St. Andrews Cross	III	1,3	1,3	Keep cool and dry. Shade from radiant heat
	n-Butyl-4,4-di-(tert-butyl-peroxy) valerate, maximum concentration 52% with inert solid	5.2	UN 2141	Organic Peroxide	II	1	5	
	n-Butyl-4,4-di-(tert-butyl-peroxy) valerate, technical pure	5.2	UN 2140	Organic Peroxide	II	1	5	
	Butylene	2.1	UN 1012	Flammable Gas	-	1,2	1	
	Butyl ether. See Dibutyl ethers							
	n-Butyl formate	3.2	UN 1128	Flammable Liquid	II	1,2	1	
	tert-Butyl hydroperoxide, in a concentration over 72% to maximum 90% with water	3.2	UN 2094	Organic Peroxide	I	1	5	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c)
						Cargo vessel	Pass- enger vessel	Other requirements
	tert-Butyl hydroperoxide, maximum concentration 80% in di-tert-butyl peroxide and/or solvent	5.2	UN 2092	Organic Peroxide, Flammable Liquid (only if flashpoint of solvent is 61 deg C. or below)	I	1	5	
	tert-Butyl hydroperoxide, maximum concentration 72% with water	5.2	UN 2093	Organic Peroxide	II	1	5	
	N-n-Butyl imidazole	6.1	UN 2690	Poison	II	1,2	1,2	Stow 'away from' living quarters
	tert-Butyl isocyanate	3.2	UN 2484	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	n-Butyl isocyanate	3.2	UN 2485	Flammable Liquid, Poison	II	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Butyl mercaptan	3.2	UN 2347	Flammable Liquid	II	1,2	1	
	n-Butyl methacrylate	3.3	UN 2227	Flammable Liquid	III	1,2	1,2	
	Butyl methyl ether	3.2	UN 2350	Flammable Liquid	II	1,2	1	
	tert-Butyl monoperoxymaleate, maximum concentration 55% as a paste	5.2	UN 2101	Organic Peroxide	II	1	5	
	tert-Butyl monoperoxymaleate, maximum concentration 55% in solu- tion	5.2	UN 2100	Organic Peroxide	II	1	5	
	tert-Butyl monoperoxymaleate, technical pure	5.2	UN 2099	Organic Peroxide	II	1	5	
	tert-Butyl monoperoxyphthalate, technical pure	5.2	UN 2105	Organic Peroxide	II	1	5	
	Butyl nitrile	3.2	UN 2351	Flammable Liquid	II	1,2	1	
	tert-Butyl peroxide. See Di-tert-butyl peroxide.							
	tert-Butyl peroxyacetate, in a concentration of more than 52% to a maximum concentration of 76% in solution	5.2	UN 2095	Organic Peroxide	II	1	5	
	tert-Butyl peroxyacetate, maximum concentration 52% in solution	5.2	UN 2096	Organic Peroxide	II	1	5	
	tert-Butyl peroxybenzoate, maximum concentration 75% in solution	5.2	UN 2098	Organic Peroxide	II	1	5	
	tert-Butyl peroxybenzoate, technical pure or in a concentration of more than 75% in solution	5.2	UN 2097	Organic Peroxide	II	1	5	
	tert-Butyl peroxybenzoate with at least 30% inert inorganic solid	5.2	UN 2890	Organic Peroxide	II	1	5	
	tert-Butyl peroxyacrylate, maximum concentration 76% in solution	5.2	UN 2183	Organic Peroxide	II	1	5	
	n-Butyl peroxydicarbonate, in a concentration of more than 27% to a maximum concentration of 52% in solution	5.2	UN 2169	Organic Peroxide	II	1	5	Control temperature -5 deg C. Emergency temperature -5 deg C.
	n-Butyl peroxydicarbonate, maximum concentration 27% in solution	5.2	UN 2170	Organic Peroxide	II	1	5	Control temperature 0 deg C. Emergency temperature 10 deg C.
	tert-Butyl peroxydiethylacetate, (in a maximum concentration of 33%), with tert-butyl peroxybenzoate, (in a maximum concentra- tion of 33%), and with solvent	5.2	UN 2551	Organic Peroxide	I/II	1	5	
	tert-Butyl peroxydiethylacetate, technical pure	5.2	UN 2144	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C.
	tert-Butyl peroxy-2-ethylhexanoate, maximum concentration 30% with 2,2-di-(tert-butyl peroxy) butane maximum concentration 35% and with at least 35% phlegmatizer	5.2	UN 2886	Organic Peroxide	II	1	5	Control temperature 35 deg C. Emergency temperature 40 deg C.
	tert-Butyl peroxy-2-ethylhexanoate maximum concentration 12% with 2,2-di-(tert-butyl peroxy)butane maximum concentration 14%, and with at least 14% phlegmatizer and 60% inert inorganic solid	5.2	UN 2887	Organic Peroxide	II	1	5	
	tert-Butyl peroxy-2-ethyl hexanoate, technical pure	5.2	UN 2143	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C.
	tert-Butyl peroxy-2-ethylhexanoate, with at least 50% phlegmatizer	5.2	UN 2888	Organic Peroxide	II	1	5	Control temperature 35 deg C. Emergency temperature 40 deg C.
	tert-Butyl peroxyisobutyrate, in a concentration of more than 52% to a maximum concentration of 77% in solution	5.2	UN 2142	Organic Peroxide	II	1	5	Control temperature 15 deg C. Emergency temperature 20 deg C.
	tert-Butyl peroxyisobutyrate, maximum concentration 52% in solu- tion	5.2	UN 2562	Organic Peroxide	II	1	5	Emergency temperature 15 deg C. Emergen- cy temperature 20 deg C.
	tert-Butyl peroxy isopropyl carbonate, technical pure	5.2	UN 2103	Organic Peroxide	II	1	5	
	tert-Butyl peroxyneodecanoate, maximum concentration 77% in solu- tion	5.2	UN 2177	Organic Peroxide	II	1	5	Control temperature 0 deg C. Emergency temperature 10 deg C.
	tert-Butyl peroxyneodecanoate, technical pure	5.2	UN 2594	Organic Peroxide	II	1	5	Control temperature -5 deg C. Emergency temperature 5 deg C.
	3-tert-Butylperoxy-3-phenyl phthalide, technical pure	5.2	UN 2596	Organic Peroxide	II	1	5	
	tert-Butyl peroxyphthalate, maximum concentration 77% in solution	5.2	UN 2110	Organic Peroxide	II	1	5	Control temperature 0 deg C. Emergency temperature 10 deg C.
	tert-Butyl peroxy-3,5,5-trimethyl hexanoate, technical pure	5.2	UN 2104	Organic Peroxide	II	1	5	
	Butylphenols, liquid	6.1	UN 2228	St. Andrews Cross	III	1,2	1,2	
	Butylphenols, solid	6.1	UN 2229	St. Andrews Cross	III	1,2	1,2	
	Butyl phosphoric acid. See Butyl acid phosphate							
	Butyl propionate	3.3	UN 1914	Flammable Liquid	II	1,2	1,2	
	Butyl toluenes	6.1	UN 2667	Poison, Flammable Liquid (only if flashpoint below 61 deg C)	III	1,2	1,2	Shade from radiant heat. If flashpoint below 61 deg C segregation same as for flamma- ble liquids
	Butyl trichlorosilane	8	UN 1747	Corrosive, Flammable Liquid	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or bald from' explosives. Segregation same as for flammable liquids
	Butyl vinyl ether, inhibited	3.2	UN 2352	Flammable Liquid	II	1,2	1	
	1,4-Butynediol	4.1	UN 2716	Flammable Solid	III	1,2	1	Stow 'separated from' mercury salts, strong acids, alkaline compounds and halides
	Butyraldehyde	3.2	UN 1129	Flammable Liquid	II	1,2	1	
	Butyraldoxime	3.3	UN 2840	Flammable Liquid	III	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	n-Butyric acid	8	UN 2820	Corrosive	III	1,3	1,3	Keep cool. Glass carboys in hampers prohibited under deck
	Butyric anhydride	8	UN 2739	Corrosive	III	1,2	1,2	
	Butyronitrile	3.2	UN 2411	Flammable Liquid, Poison	II	1,3	5	Keep cool
*	Butyryl chloride	3.2	UN 2353	Flammable Liquid, Corrosive	II	1	1	Keep dry. Shade from radiant heat
	Cacodylic acid	6.1	UN 1572	Poison	II	1,2	5	Stow 'away from' acids
	Cadmium compounds	6.1	UN 2570	Poison	I/II	1,2	1,2	Stow 'away from' living quarters
	Cesium hydroxide, solid	6.1	UN 2570	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
	Cesium hydroxide, solution	8	UN 2682	Corrosive	II	1,2	1,2	Keep dry
	Cesium, metal	8	UN 2681	Corrosive	II	1,2	1,2	
	Cesium nitrate	4.3	UN 1407	Dangerous When Wet	I	1,2	5	
	Cesium, powdered. See Pyrophoric metals	5.1	UN 1451	Oxidizer	III	1,2	1,2	
	Calcium arsenate	6.1	UN 1573	Poison	II	1,2	1,2	
	Calcium arsenate and arsenite, solid mixtures	6.1	UN 1574	Poison	II	1,2	1,2	
	Calcium bisulphite, solution. See Calcium hydrogen sulphite, solution							
	Calcium carbide	4.3	UN 1402	Dangerous When Wet	II	1,2	1,2	Stow 'away from' copper, its alloys and its salts
	Calcium chlorate	5.1	UN 1452	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Calcium chlorate, aqueous solution	5.1	UN 2429	Oxidizer	II	1,2	1	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Calcium chlorite	5.1	UN 1453	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and cyanides, 'separated from' ammonium compounds
*	Calcium cyanamide, containing more than 0.1% and not more than 0.3% of calcium carbide	4.3	UN 1403	Dangerous When Wet	III	1,2	1,2	
*	Calcium cyanamide, containing more than 0.5% of calcium carbide	4.3	UN 1403	Dangerous When Wet	III	1,2	1,2	
	Calcium cyanide	6.1	UN 1575	Poison	I	1,2	1,2	
	Calcium hydride	4.3	UN 1404	Dangerous When Wet	I	1,2	5	
	Calcium hydrosulphite	4.2	UN 1923	Spontaneously Combustible	II	1,2	5	Keep dry
*	Calcium hypochlorite, hydrated or Calcium hypochlorite, hydrated mixtures with not less than 3.5% but not more than 10% water	5.1	UN 2880	Oxidizer	II	1,2	1,2	Stow 'away from' sources of heat where temperatures in excess of 55 deg. C for a period of 24 hours or more will be encountered
*	Calcium hypochlorite, dry or Calcium hypochlorite mixtures, with more than 39% available chlorine (8.8% available oxygen)	5.1	UN 1748	Oxidizer	II	1,2	5	Stow 'separated from' ammonium compounds and 'away from' sources of heat
	Calcium hypochlorite mixtures, dry, with more than 10%, but not more than 39%, available chlorine	5.1	UN 2208	Oxidizer	III	1,2	1,2	
	Calcium manganese silico	4.3	UN 2844	Dangerous When Wet	III	1,2	1,2	
	Calcium, metal and alloys, non-pyrophoric	4.3	UN 1401	Dangerous When Wet	II	1,2	5	
	Calcium nitrate	5.1	UN 1454	Oxidizer	III	1,2	1,2	
	Calcium perchlorate	5.1	UN 1455	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Calcium permanganate	5.1	UN 1456	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Calcium peroxide	5.1	UN 1457	Oxidizer	II	1,2	1,2	Keep dry
*	Calcium phosphide	4.3	UN 1360	Dangerous When Wet	I	1,2	5	
	Calcium, pyrophoric or Calcium alloys, pyrophoric	4.2	UN 1855	Spontaneously Combustible	II	1	5	
	Calcium resinate, fused	4.1	UN 1314	Flammable Solid	III	1,2	1,2	
	Calcium resinate, technical pure	4.1	UN 1313	Flammable Solid	III	1,2	1,2	
	Calcium silicide	4.3	UN 1405	Dangerous When Wet	II	1,2	1,2	
	Calcium silicon	4.3	UN 1406	Dangerous When Wet	III	1,2	1,2	
	Camphor, natural or synthetic	4.1	UN 2717	Flammable Solid	III	1,2	1,2	
	Camphor oil	3.3	UN 1130	Flammable Liquid	III	1,3	1,3	
	Capryloyl peroxide. See n-Octanoyl peroxide							
	Caps, blasting. See Blasting caps							
*	Carbamate pesticides, liquid, flammable, toxic, n.o.s., flashpoint less than 23 deg. C	3.2	UN 2758	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
*	Carbamate pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg. C and 61 deg. C	6.1	UN 2991	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 2991	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 2991	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
*	Carbamate pesticides, liquid, toxic, n.o.s.	6.1	UN 2992	Poison	I	1	1	
		6.1	UN 2992	Poison	II	1,2	1	
		6.1	UN 2992	St. Andrews Cross	III	1,2	1,2	
*	Carbamate pesticides, solid, toxic, n.o.s.	6.1	UN 2757	Poison	I/II	1,2	1,2	
		6.1	UN 2757	St. Andrews Cross	III	1,2	1,2	
	Carbolic acid. See Phenols. Phenol solutions or Phenol, molten							
	Carbon, activated	4.2	UN 1362	Spontaneously Combustible	III	1,3	1,3	Keep cool. Stow 'away from' oily matter

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c)
						Cargo vessel	Pass- enger vessel	Other requirements
	Carbon, animal or vegetable origin	4.2	UN 1361	Spontaneously Combustible	III	1,3	1,3	Keep cool. Stow 'away from' oily matter
	Carbon bisulphide. <i>See</i> Carbon disulphide							
	Carbon dioxide	2.2	UN 1013	Nonflammable Gas	-	1,2	1,2	
	Carbon dioxide and ethylene oxide mixtures with more than 6% ethylene oxide	2.3	UN 1041	Poison Gas, Flammable Gas	-	1,2	1	
	Carbon dioxide and ethylene oxide mixtures with not more than 6% ethylene oxide	2.3	UN 1952	Poison Gas	-	1,2	1	
	Carbon dioxide and nitrous oxide, mixtures	2.2	UN 1015	Nonflammable Gas	-	1,2	1,2	
	Carbon dioxide and oxygen, mixtures	2.2	UN 1014	Nonflammable Gas	-	1,2	1,2	
	Carbon dioxide, refrigerated liquid	2.2	UN 2187	Nonflammable Gas	-	1,2	1	
	Carbon dioxide, solid	9	UN 1845	None	III	1	1	Stow 'away from' living quarters
	Carbon disulphide	3.1	UN 1131	Flammable Liquid, Poison	I	1	5	Prohibited on any ship carrying explosives (except explosives in Division 1.4, Compatibility Group 5). Keep cool
	Carbon monoxide	2.1	UN 1016	Flammable Gas, Poison Gas	-	1	5	Stow 'away from' living quarters
	Carbon monoxide and hydrogen mixture	2.3	UN 2600	Poison Gas, Flammable Gas	-	1	5	
	Carbon paper. <i>See</i> Paper, treated with unsaturated oils, incompletely dried							
	Carbon remover, liquid	3.2	UN 1132	Flammable Liquid	II	1,2	1	
	Carbon sulphide. <i>See</i> Carbon disulphide							
	Carbon tetrabromide	6.1	UN 2516	St. Andrews Cross	III	1,2	1,2	Shade from radiant heat
	Carbon tetrachloride	6.1	UN 1846	Poison	II	1,2	1,2	
	Carbonyl chloride. <i>See</i> Phosgene							
	Carbonyl fluoride	2.3	UN 2417	Poison Gas	-	1	5	Stow 'away from' living quarters
	Carbonyl sulfide	2.3	UN 2204	Poison Gas, Flammable Gas	-	1	5	
	Cartridge cases. <i>See</i> Cases, cartridges							
N	Cartridges, flash	1.1G	UN 0049	Explosive (1.1G)	-	-	-	
N	Cartridges, flash	1.3G	UN 0050	Explosive (1.3G)	-	-	-	
	Cartridges for weapons, blank	1.4C	UN 0338	Explosive (1.4C)	-	1,3	1,3	
*N	Cartridges for weapons, blank	1.2C	UN 0413	Explosive (1.2C)	-	-	-	
N	Cartridges for weapons, blank	1.1C	UN 0326	Explosive (1.1C)	-	-	-	
N	Cartridges for weapons, blank	1.3C	UN 0327	Explosive (1.3C)	-	-	-	
	Cartridges for weapons, blank or Cartridges, safety, blank	1.4S	UN 0014	None. Package to be marked '1.4 S'	-	1,3	1,3	
	Cartridges for weapons, other than blank	1.4S	UN 0012	None. Package to be marked '1.4 S'	-	1,3	1,3	
N	Cartridges for weapons, with bursting charge	1.1E	UN 0006	Explosive (1.1E)	-	-	-	
N	Cartridges for weapons, with bursting charge	1.2E	UN 0321	Explosive (1.2E)	-	-	-	
N	Cartridges for weapons, with bursting charge	1.1F	UN 0005	Explosive (1.1F)	-	-	-	
N	Cartridges for weapons, with bursting charge	1.2F	UN 0007	Explosive (1.2F)	-	-	-	
	Cartridges for weapons, with bursting charge	1.4E	UN 0412	Explosive (1.4E)	-	1,3	1,3	
N	Cartridges for weapons, with bursting charge	1.4F	UN 0348	Explosive (1.4F)	-	-	-	
	Cartridges for weapons, with inert projectile	1.4C	UN 0339	Explosive (1.4C)	-	1,3	1,3	
N	Cartridges for weapons, with inert projectile	1.2C	UN 0328	Explosive (1.2C)	-	-	-	
*N	Cartridges for weapons, with inert projectile	1.3C	UN 0417	Explosive (1.3C)	-	-	-	
	Cartridges, oil well	1.4C	UN 0278	Explosive (1.4C)	-	1,3	1,3	
N	Cartridges, oil well	1.3C	UN 0277	Explosive (1.3C)	-	-	-	
	Cartridges, power device	1.4C	UN 0276	Explosive (1.4C)	-	1,3	1,3	
	Cartridges, power device	1.4S	UN 0323	None. Package to be marked '1.4 S'	-	1,3	1,3	
N	Cartridges, power device	1.2C	UN 0381	Explosive (1.2C)	-	-	-	
N	Cartridges, power device	1.3C	UN 0275	Explosive (1.3C)	-	-	-	
	Cartridges, safety. <i>See</i> Cartridges for weapons, other than blank (UN 0012) or Cartridges for weapons, blank (UN 0014)							
	Cartridges, signal	1.4G	UN 0312	Explosive (1.4G)	-	1,3	1,3	
N	Cartridges, signal	1.3G	UN 0054	Explosive (1.3G)	-	-	-	
	Cartridges, signal	1.4S	UN 0405	None. Package to be marked '1.4S'	-	1,3	1,3	
	Cases, cartridge, empty, with primer	1.4C	UN 0379	Explosive (1.4C)	-	1,3	1,3	
	Cases, cartridges, empty, with primer	1.4S	UN 0055	None. Package to be marked '1.4 S'	-	1,3	1,3	
	Casinghead gasoline	3.1	UN 1257	Flammable Liquid	II	1,3	5	Keep cool
	Castor beans, Castor meal, Castor pomace or Castor flake	9	UN 2969	None	II	1,2	5	Stow 'away from' living quarters, foodstuffs, and oxidizing substances
	Caustic alkali liquids, n.o.s.	8	UN 1719	Corrosive	II	1,2	1,2	
	Caustic potash. <i>See</i> Potassium hydroxide, solution							
	Caustic potash, solid. <i>See</i> Potassium hydroxide, solid							
	Celluloid, in blocks, rods, rolls, sheets, tubes, etc. (scrap excluded)	4.1	UN 2000	Flammable Solid	III	1,2	1,2	
	Celluloid, scrap	4.2	UN 2002	Spontaneously Combustible	III	1	5	
	Cement, liquid. <i>See</i> Adhesives, containing a flammable liquid							
	Cerium, crude, powder	4.1	UN 1333	Flammable Solid	II	1,2	5	Stow 'separated from' flammable substances and oxidizers

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Cerium, crude, <i>slabs or ingots</i>	4.1	UN 1333	Flammable Solid	III	1,2	1,2	Stow 'separated from' flammable substances and oxidizers
	Charcoal, activated. <i>See Carbon, activated</i>							
	Charcoal, non-activated, of animal or vegetable origin. <i>See Carbon, of animal or vegetable origin</i>							
N	Charges, demolition	1.1D	UN 0048	Explosive (1.1D)	--	--	--	
N	Charges, depth	1.1D	UN 0056	Explosive (1.1D)	--	--	--	
N	Charges, propelling, for cannon	1.1C	UN 0279	Explosive (1.1C)	--	--	--	
*N	Charges, propelling, for cannon	1.2C	UN 0414	Explosive (1.2C)	--	--	--	
N	Charges, propelling, for rocket motors	1.3C	UN 0242	Explosive (1.3C)	--	--	--	
N	Charges, propelling, for rocket motors	1.1C	UN 0271	Explosive (1.1C)	--	--	--	
*N	Charges, propelling, for rocket motors	1.2C	UN 0415	Explosive (1.2C)	--	--	--	
N	Charges, propelling, for rocket motors	1.3C	UN 0272	Explosive (1.3C)	--	--	--	
N	Charges, propelling, for rocket motors, composite mixture	1.1C	UN 0273	Explosive (1.1C)	--	--	--	
*N	Charges, propelling, for rocket motors, composite mixture	1.2C	UN 0416	Explosive (1.2C)	--	--	--	
N	Charges, propelling, for rocket motors, composite mixture	1.3C	UN 0274	Explosive (1.3C)	--	--	--	
*N	Charges, shaped, commercial, without detonator	1.1D	UN 0059	Explosive (1.1D)	--	--	--	
N	Charges, shaped, flexible, linear, metal clad	1.4 D	UN 0237	Explosive (1.4D)	--	1,3	1,3	
N	Charges, shaped, flexible, linear, metal clad	1.1D	UN 0288	Explosive (1.1D)	--	--	--	
N	Charges, supplementary, explosive	1.1D	UN 0060	Explosive (1.1D)	--	--	--	
	Chloral, anhydrous, inhibited	6.1	UN 2075	Poison	II	1	5	
	Chlorate and borate, mixtures	5.1	UN 1458	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Chlorate and magnesium chloride, mixture	5.1	UN 1459	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Chlorates, inorganic, n.o.s.	5.1	UN 1461	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Chloric acid solution with not more than 10% acid	5.1	UN 2626	Oxidizer	II	1	5	Stow 'separated from' ammonium compounds and 'away from' finely powdered metals
	Chlorine	2.3	UN 1017	Poison Gas	--	1	5	Stow 'separated from' acetylene, ammonia, diborane and hydrogen
	Chlorine pentafluoride	2.3	UN 2548	Poison Gas, Oxidizer, Corrosive	--	1	5	Stow 'away from' combustible materials
	Chlorine trifluoride	2.3	UN 1749	Poison Gas, Oxidizer, Corrosive	--	1,2	5	Stow 'away from' food stuffs and living quarters
	Chlorites, inorganic, n.o.s.	5.1	UN 1462	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and cyanides, 'separated from' ammonium compounds
	Chloroacetaldehyde	6.1	UN 2232	Poison	II	1	5	
	Chloroacetic acid, liquid	8	UN 1750	Corrosive	II	1,2	1,2	Glass carboys in hampers not permitted under deck
	Chloroacetic acid, solid	8	UN 1751	Corrosive	II	1,2	1,2	Keep dry
	Chloroacetone, stabilized	6.1	UN 1693	Poison	II	1	5	Stow 'away from' living quarters
	Chloroacetonitrile	6.1	UN 2668	Poison, Flammable Liquid	II	1,3	1,3	Keep cool. Shade from radiant heat. Stow 'away from' acids. Segregation same as for flammable liquids
	Chloroacetophenone	6.1	UN 1697	Poison	II	1	5	Keep cool. Stow 'away from' living quarters
	Chloroacetyl chloride	8	UN 1752	Corrosive	II	1	5	Keep dry
	Chloroanilines, liquid	6.1	UN 2019	Poison	II	1,2	1,2	
	Chloroanilines, solid	6.1	UN 2018	Poison	II	1,2	1,2	
	p-Chloro-o-anisidine	6.1	UN 2233	St. Andrews Cross	III	1,2	1,2	
	Chlorobenzene	3.3	UN 1134	Flammable Liquid	II	1,3	1,3	
	Chlorobenzotrifluorides	3.3	UN 2234	Flammable Liquid	III	1,2	1,2	
	p-Chlorobenzoyl peroxide. <i>See Di-(4-chlorobenzoyl) peroxide</i>							
	p-Chlorobenzyl chloride	6.1	UN 2235	St. Andrews Cross	III	1,2	1,2	
	1-Chloro-3-bromopropane	6.1	UN 2688	St. Andrews Cross	III	1,2	1,2	
	Chlorobutanes	3.2	UN 1127	Flammable Liquid	II	1,2	1	
	Chlorocresols	6.1	UN 2669	Poison	II	1,3	1,3	Keep cool. Stow 'away from' living quarters
	Chlorodifluorobromomethane	2.2	UN 1974	Nonflammable Gas	--	1,2	1,2	
	Chlorodifluoroethanes	2.1	UN 2517	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Chlorodifluoromethane	2.2	UN 1018	Nonflammable Gas	--	1,2	1,2	
	Chlorodifluoromethane and chloropentafluoroethane, mixture with a fixed boiling point containing about 49% of chlorodifluoromethane	2.2	UN 1973	Nonflammable Gas	--	1,2	1,2	
	Chlorodinitrobenzene	6.1	UN 1577	Poison	II	1,2	1,2	
	Chloroform	6.1	UN 1888	Poison	II	1,2	1,2	
	Chloroformates, n.o.s., with a flashpoint not less than 23 deg C	6.1	UN 2742	Poison, Corrosive, Flammable Liquid (only if flashpoint below 61 deg C)	II	1,3	1,3	Keep cool and dry. Shade from radiant heat. Stow 'away from' living quarters. If flashpoint below 61, segregation same as for flammable liquids
	Chloromethylchloroformate	6.1	UN 2743	Poison, Corrosive	II	1,3	1,3	Keep cool and dry. Shade from radiant heat. Stow 'away from' living quarters
	Chloromethyl ethyl ether	3.2	UN 2354	Flammable Liquid, Poison	II	1,3	5	Keep cool
	3-Chloro-4-methylphenyl isocyanate	6.1	UN 2236	Poison	II	1,2	1,2	Shade from radiant heat
	Chloronitroanilines	6.1	UN 2237	St. Andrews Cross	III	1,2	1,2	
	Chloronitrobenzenes (o-, m-, p-)	6.1	UN 1578	Poison	II	1,2	1,2	
	Chloro-o-nitrotoluene	6.1	UN 2433	St. Andrews Cross	III	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Chloropentafluoroethane	2.2	UN 1020	Nonflammable Gas	II	1,2	1,2	
	3-Chloroperoxybenzoic acid, maximum concentration 86%	5.2	UN 2755	Organic Peroxide	II	1	5	
	Chlorophenates, liquid	8	UN 2904	Corrosive	III	1,2	1,2	
	Chlorophenates, solid	8	UN 2905	Corrosive	III	1,2	1,2	
	Chlorophenols, liquid	6.1	UN 2021	St. Andrews Cross	III	1,2	1,2	
	Chlorophenols, solid	6.1	UN 2020	St. Andrews Cross	III	1,2	1,2	
	Chlorophenyl trichlorosilane	8	UN 1753	Corrosive	II	1	1	
	Chloropicrin	6.1	UN 1580	Poison	I	1	5	Keep dry
	Chloropicrin and methyl bromide, mixtures	2.3	UN 1581	Poison Gas	-	1	5	Stow 'away from' living quarters
	Chloropicrin and methyl chloride, mixtures	2.3	UN 1582	Poison Gas	-	1	5	Shade from radiant heat. Stow 'away from' living quarters
	Chloropicrin mixtures, n.o.s.	6.1	UN 1583	Poison	I/II	1	1	Shade from radiant heat. Stow 'away from' living quarters
	Chloroplatinic acid, solid	6.1	UN 1583	St. Andrews Cross	III	1	1	Stow 'away from' living quarters
	Chloroprene, inhibited	3.2	UN 2507	Corrosive	III	1,2	1,2	
	2-Chloropropane	3.1	UN 1991	Flammable Liquid, Poison	I	1,2	1	
	1-Chloropropanol-1	3.1	UN 2356	Flammable Liquid	I	1,3	5	Keep cool
	2-Chloropropene	6.1	UN 2849	St. Andrews Cross	III	1,2	1,2	
	Chloropropionic acid	3.1	UN 2456	Flammable Liquid	I	1,3	5	Keep cool
	1-Chloropyridine	8	UN 2531	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Chlorosulphonic acid, with or without sulphur trioxide	6.1	UN 2822	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Chlorotetrafluoroethane	8	UN 1754	Corrosive	I	1	1	Glass carboys prohibited on passenger vessels
	Chlorotoluenes (o-, m-, p-)	2.2	UN 1021	Nonflammable Gas	-	1,2	1,2	
	4-Chloro-o-toluidine hydrochloride	3.3	UN 2238	Flammable Liquid	III	1,2	1,2	
	Chlorotoluidine	6.1	UN 1579	St. Andrews Cross	III	1,2	1,2	
	Chlorotrifluoroethane	6.1	UN 2239	St. Andrews Cross	III	1,2	1,2	
	Chlorotrifluoroethane. See Trifluorochloroethane	2.2	UN 1983	Nonflammable Gas	-	1,2	1,2	
	Chlorotrifluoroethylene. See Trifluorochloroethylene							
	Chlorotrifluoromethane	2.2	UN 1022	Nonflammable Gas	-	1,2	1,2	
	Chlorotrifluoromethane and trifluoromethane azeotropic mixture with approximately 60% chlorotrifluoromethane	2.2	UN 2599	Nonflammable Gas	-	1,2	1,2	
	Chromic acid, solid. See Chromium trioxide, anhydrous							
	Chromic acid, solution	8	UN 1755	Corrosive	II	1	1	
	Chromic anhydride. See Chromium trioxide, anhydrous							
	Chromic fluoride, solid	8	UN 1756	Corrosive	II	1,2	1,2	
	Chromic fluoride, solution	8	UN 1757	Corrosive	II	1,2	1,2	
	Chromium nitrate	5.1	UN 2720	Oxidizer	III	1,2	1,2	
	Chromium oxychloride	8	UN 1758	Corrosive	I	1	1	
	Chromium trioxide, anhydrous	5.1	UN 1463	Oxidizer, Corrosive	II	1,2	1,2	Keep dry. Glass carboys prohibited on passenger vessels
	Chromosulphuric acid	8	UN 2240	Corrosive	I	1,2	1	Stow 'separated from' flammable substances and 'away from' foodstuffs
	Chrysotil. See Asbestos, white							Carboys not permitted on passenger vessels and permitted only on deck on cargo vessels
	Cigarettes, self-lighting	4.1	UN 1867	Flammable Solid	III	1,2	1,2	Keep dry
	Cleaning compound. See Flammable liquid preparations, n.o.s.							
	Coal gas	2.3	UN 1023	Poison Gas, Flammable Gas	-	1	5	
	Coal tar distillate	3.2	UN 1136	Flammable Liquid	II	1,2	1	
	Coal tar naphtha	3.3	UN 1136	Flammable Liquid	III	1,2	1,2	
	Coal tar oil. See Coal tar distillate							
	Coating solution	3.2	UN 2553	Flammable Liquid	II	1,2	1	
	Cobalt naphthenates, powder	3.3	UN 1139	Flammable Liquid	II	1,2	1	
	Cobalt resinates, precipitated	4.1	UN 1139	Flammable Liquid	III	1,2	1,2	
	Coccolus, solid	4.1	UN 2001	Flammable Solid	III	1,2	1,2	
	Cologne spirits. See Ethanol							
	Columbian spirits. See Methanol							
	Components, explosive train, n.o.s.	6.1	UN 1584	Poison	II	1,2	1,2	
	Components, explosive train, n.o.s.	1.4B	UN 0383	Explosive (1.4B)	-	1,3	1,3	
	Components, explosive train, n.o.s.	1.4S	UN 0384	None. Package to be marked '1.4S'	-	1,3	1,3	
	Components, explosive train, n.o.s.	1.2B	UN 0382	Explosive (1.2B)	-	-	-	
	Compressed or liquefied gases, flammable, non-toxic, n.o.s.	2.1	UN 1954	Flammable Gas	-	1	5	Stow 'away from' living quarters
	Compressed or liquefied gases, flammable, toxic, n.o.s.	2.1	UN 1953	Flammable Gas, Poison Gas	-	1	5	Stow 'away from' living quarters
	Compressed or liquefied gases, non-flammable, non-toxic, n.o.s.	2.2	UN 1956	Nonflammable Gas	-	1,2	1,2	
	Compressed or liquefied gases, non-flammable, toxic, n.o.s.	2.3	UN 1955	Poison Gas	-	1	5	Stow 'away from' living quarters
	Contrivances, water-activated, with burster, expelling charge or propelling charge	1.2L	UN 0248	Explosive (1.2L), Dangerous When Wet	-	-	-	
	Contrivances, water-activated, with burster, expelling charge or propelling charge	1.3L	UN 0249	Explosive (1.3L), Dangerous When Wet	-	-	-	

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(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Copper acetoarsenite	6.1	UN 1585	Poison	II	1,2	1,2	
	Copper arsenite	6.1	UN 1586	Poison	II	1,2	1,2	
	Copper based pesticides, liquid, flammable, toxic, n.o.s. flashpoint less than 23 deg C	3.2	UN 2776	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Copper based pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3009	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3009	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3009	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Copper based pesticides, liquid, toxic, n.o.s.	6.1	UN 3010	Poison	I	1	1	
		6.1	UN 3010	Poison	II	1,2	1	
		6.1	UN 3010	St. Andrews Cross	III	1,2	1,2	
	Copper based pesticides, solid, toxic, n.o.s.	6.1	UN 2775	Poison	I/II	1,2	1,2	
		6.1	UN 2775	St. Andrews Cross	III	1,2	1,2	
	Copper chlorate	5.1	UN 2721	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' finely powdered metals
	Copper cyanide	6.1	UN 1587	Poison	II	1,2	1,2	Stow 'away from' acids
	Copra	4.2	UN 1363	None. Package to be marked 'Class 4.2'	III	1,2	1,2	Keep dry. Protect from sparks and open flame
	Cord, detonating, flexible	1.4 D	UN 0289	Explosive (1.4D)	-	1,3	1,3	
N	Cord, detonating, flexible	1.1D	UN 0065	Explosive (1.1D)	-	-	-	
N	Cord, detonating, metal clad	1.1D	UN 0290	Explosive (1.1D)	-	-	-	
N	Cord, detonating, metal clad	1.2D	UN 0102	Explosive (1.2D)	-	-	-	
N	Cord, detonating, mild effect, metal clad	1.4 D	UN 0104	Explosive (1.4D)	-	1,3	1,3	
	Cord, igniter	1.4 G	UN 0066	Explosive (1.4G)	-	1,3	1,3	
	Corrosive liquids, flammable, n.o.s.	8	UN 2920	Corrosive, Flammable Liquid	I/II	1	1	Segregation same as for flammable liquids. Keep cool. Shade from radiant heat
	Corrosive liquids, n.o.s.	8	UN 1760	Corrosive	I/II	1,2	1	
		8	UN 1760	Corrosive	III	1,2	1,2	
	Corrosive liquids, poisonous, n.o.s.	8	UN 2922	Corrosive, Poison	I/II	1,2	1	Stow 'away from' living quarters
	Corrosive solids, flammable, n.o.s.	8	UN 2921	Corrosive, Flammable Solid	I/II	1,3	1	Keep cool. Shade from radiant heat
	Corrosive solids, n.o.s.	8	UN 1759	Corrosive	I	1,2	1	Keep dry
		8	UN 1759	Corrosive	II/III	1,2	1,2	Keep dry
	Corrosive solids, poisonous, n.o.s.	8	UN 2923	Corrosive, Poison	I/II	1,2	1	Keep dry. Stow 'away from' living quarters
	Cosmetics. See Perfumery products							
	Cotton, dry. See Fibres, vegetable, dry							
	Cotton waste, oily impregnated with less than 5% of animal or vegetable oil	4.2	UN 1364	Spontaneously Combustible	III	1,2	1,2	Stow 'separated from' explosives
	Cotton waste, oily impregnated with 5% or more, of animal or vegetable oil	4.2	UN 1364	Spontaneously Combustible	III	1,2	1,2	Keep dry. Stow 'separated from' explosives, animal oils or vegetable oils
	Cotton, wet or contaminated	4.2	UN 1365	Spontaneously Combustible	III	1,2	1,2	Keep dry
	Cresols (o-, m-, p-)	6.1	UN 2076	Poison	II	1,2	1,2	
	Cresylic acid	6.1	UN 2022	Poison	II	1,2	1,2	
	Crocidolite. See Asbestos, blue							
	Crotonaldehyde, inhibited	3.2	UN 1143	Flammable Liquid	II	1,2	1	Keep cool
	Crotonic acid	8	UN 2823	Corrosive	III	1,3	1,3	Keep cool
	Crotonylene	3.1	UN 1144	Flammable Liquid	I	1,3	5	
	Cumene hydroperoxide. See Cumyl hydroperoxide							
	Cumyl hydroperoxide, technical pure	5.2	UN 2116	Organic Peroxide	I	1	5	
	Cumyl peroxyneodecanoate, maximum concentration 77% in solution	5.2	UN 2963	Organic Peroxide	II	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Cumyl peroxyisovalate, maximum concentration 77% in solution	5.2	UN 2964	Organic Peroxide	II	1	5	Control temperature -5 deg C. Emergency temperature 5 deg C
	Capric cyanide. See Copper cyanide							
	Capriethylenediamine, solution	8	UN 1761	Corrosive, Poison	II	1,2	1,2	
	Cut-backs, asphalt or bitumen	3.2	UN 1999	Flammable Liquid	II	1,2	1	
		3.3	UN 1999	Flammable Liquid	II	1,2	1,2	
	Cutters, cable, explosive	1.4 S	UN 0070	None. Package to be marked '1.4 S'	-	1,3	1,3	
	Cyanide mixtures. See Cyanides, (inorganic), n.o.s.							
	Cyanides, inorganic, n.o.s.	6.1	UN 1588	Poison	I/II	1,2	1,2	Stow 'away from' acids.
		6.1	UN 1588	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
		6.1	UN 1935	Poison	I	1,2	1,2	Stow 'away from' living quarters or acids
	Cyanide, solutions	2.3	UN 1026	Poison Gas, Flammable Gas	-	1	5	Stow 'away from' foodstuffs and living quarters
	Cyanogen	6.1	UN 1889	Poison, Corrosive	I	1	5	Shade from radiant heat. Segregation same as for corrosives
	Cyanogen bromide	2.3	UN 1589	Poison Gas	-	1	5	
	Cyanogen chloride, inhibited	8	UN 2670	Corrosive	III	1,3	1,3	Keep dry and cool
	Cyanuric chloride	2.1	UN 2601	Flammable Gas	-	1,2	1	
	Cyclobutane							

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(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Cyclobutylchloroformate	6.1	UN 2744	Poison, Corrosive, Flammable Liquid	II	1,3	1,3	Keep cool and dry. Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
*	1,5,9-Cyclododecatriene	8	UN 2518	Corrosive	II	1,2	5	Stow 'away from' living quarters
	Cycloheptane	3.2	UN 2241	Flammable Liquid	II	1,2	1	
	Cycloheptatriene	3.2	UN 2603	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Cycloheptene	3.2	UN 2242	Flammable Liquid	II	1,2	1	
	Cyclohexane	3.1	UN 1145	Flammable Liquid	II	1,3	5	Keep cool
	Cyclohexanone	3.3	UN 1915	Flammable Liquid	III	1,2	1,2	
	Cyclohexanone peroxides, in a concentration of more than 90% with less than 10% water	5.2	UN 2117	Organic Peroxide	I	1	5	
	Cyclohexanone peroxides, maximum concentration 90%, with at least 10% water	5.2	UN 2119	Organic Peroxide	I	1	5	
	Cyclohexanone peroxides, maximum concentration 72% and contain- ing not more than 9% available oxygen, in solution	5.2	UN 2118	Organic Peroxide	I	1	5	
	Cyclohexanone peroxides, maximum concentration 72% and contain- ing not more than 9% available oxygen, as a paste	5.2	UN 2896	Organic Peroxide	II	1	5	
	Cyclohexene	3.1	UN 2256	Flammable Liquid	II	1,3	5	Keep cool
	Cyclohexene	3.2	UN 2256	Flammable Liquid	II	1,2	1	
	Cyclohexenyl trichlorosilane	8	UN 1762	Corrosive	II	1	1	Keep dry
	Cyclohexyl acetate	3.3	UN 2243	Flammable Liquid	III	1,2	1,2	
	Cyclohexylamine	3.2	UN 2357	Flammable Liquid, Corrosive	II	1,2	1	
		3.3	UN 2357	Flammable Liquid, Corrosive	II	1,2	1,2	
	Cyclohexyl isocyanate	6.1	UN 2488	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
	Cyclohexyl trichlorosilane	8	UN 1763	Corrosive	II	1	1	Keep dry
	Cyclooctadienes	3.3	UN 2520	Flammable Liquid	II	1,2	1,2	
	Cyclooctatetraene	3.2	UN 2358	Flammable Liquid	II	1,2	1	
	Cyclopentane	3.1	UN 1146	Flammable Liquid	II	1,3	5	Keep cool
	Cyclopentanol	3.3	UN 2244	Flammable Liquid	III	1,2	1,2	
	Cyclopentanone	3.3	UN 2245	Flammable Liquid	II	1,2	1,2	
	Cyclopentene	3.1	UN 2246	Flammable Liquid	II	1,3	5	Keep cool
*	Cyclopropane, liquefied	2.1	UN 1027	Flammable Gas	-	1,2	1	
*N	Cyclotetramethylenetetranitramine, wetted with not less than 25% water, by weight, or desensitized with not less than 10% phlegmatizer, by weight	1.1D	UN 0226	Explosive (1.1D)	-	-	-	
*N	Cyclotrimethylenetrinitramine and cyclotetramethylenetetranitramine, mixtures, wetted with not less than 25% water, by weight, or desensitized with not less than 10% phlegmatizer, by weight	1.1D	UN 0391	Explosive (1.1D)	-	-	-	
*N	Cyclotrimethylenetrinitramine, wetted with not less than 25% water, by weight, or desensitized with not less than 10% phlegmatizer, by weight	1.1D	UN 0072	Explosive (1.1D), Corrosive	-	-	-	
	Cymenes	3.3	UN 2046	Flammable Liquid	II	1,2	1,2	
	Decaborane	4.1	UN 1868	Flammable Solid, Poison	II	1,2	1,2	
	Decahydronaphthalene	3.3	UN 1147	Flammable Liquid	II	1,2	1,2	
	Decalin. See Decahydronaphthalene							
	n-Decane	3.3	UN 2247	Flammable Liquid	III	1,2	1,2	
N	Deflagrating metal salts of aromatic nitro-derivatives, n.o.s.	1.3C	UN 0132	Explosive (1.3C)	-	-	-	
*	Detonator assemblies, non-electric, for blasting	1.4B	UN 0361	Explosive (1.4B)	-	1,3	1,3	
*N	Detonator assemblies, non-electric, for blasting	1.1B	UN 0360	Explosive (1.1B)	-	-	-	
*	Detonators, electric, for blasting	1.4 B	UN 0255	Explosive (1.4B)	-	1,2	5	
*N	Detonators, electric, for blasting	1.1B	UN 0030	Explosive (1.1B)	-	-	-	
	Detonators for ammunition	1.4B	UN 0365	Explosive (1.4B)	-	1,3	1,3	
	Detonators for ammunition	1.4S	UN 0366	None. Package to be marked '1.4S'	-	1,3	1,3	
N	Detonators for ammunition	1.1B	UN 0073	Explosive (1.1B)	-	-	-	
	Detonators for ammunition	1.2B	UN 0364	Explosive (1.2B)	-	-	-	
*	Detonators, non-electric, for blasting	1.4 B	UN 0267	Explosive (1.4B)	-	1,2	5	
*N	Detonators, non-electric, for blasting	1.1B	UN 0029	Explosive (1.1B)	-	-	-	
*	Deuterium	2.1	UN 1957	Flammable Gas	-	1,2	5	
	Diacetone alcohol	3.2	UN 1148	Flammable Liquid	II	1,2	1	
		3.3	UN 1148	Flammable Liquid	II	1,2	1,2	
	Diacetone alcohol peroxides, maximum 57% in solution with maxi- mum 9% hydrogen peroxide, minimum 26% diacetone alcohol and minimum 9% water, total active oxygen content maximum 10%	5.2	UN 2163	Organic Peroxide	I	1	5	Control temperature: 30 deg C. Emergency temperature 35 deg C
	Diallylamine	3.2	UN 2359	Flammable Liquid	II	1,2	1	
	Diallylether	3.2	UN 2360	Flammable Liquid, Poison	II	1,3	5	Keep cool
	4,4'-Diaminodiphenyl methane	6.1	UN 2651	St. Andrews Cross	III	1,2	1,2	
	Di-n-amylamine	6.1	UN 2841	St. Andrews Cross, Flammable Liquid	III	1,3	1,3	Keep cool. Shade from radiant heat. Segrega- tion same as for flammable liquids
N	Diazodinitrophenol, containing, by weight, at least 40% water or mixture of alcohol and water	1.1A	UN 0074	Explosive (1.1A)	-	-	-	
	Dibenzylchlorosilane	8	UN 2434	Corrosive	II	1	1	Keep dry

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Dibenzyl peroxydicarbonate, maximum concentration 87% with water	5.2	UN 2149	Organic Peroxide	I	1	5	Control temperature 25 deg C. Emergency temperature 30 deg C
	Diborane	2.1	UN 1911	Flammable Gas, Poison Gas	—	1	5	Stow 'separated from' chlorine and oxidizers
	Dibromobenzene	3.3	UN 2711	Flammable Liquid	III	1,2	1,2	
	1,2-Dibromobutan-3-one	6.1	UN 2648	Poison	II	1,2	1	
	1,2-Dibromo-3-chloropropane	6.1	UN 2872	St. Andrews Cross	III	1,2	1,2	
	Dibromodifluoromethane	9	UN 1941	None	III	1,2	1,2	Shade from radiant heat. Stow 'away from' foodstuffs
	Dibromomethane	6.1	UN 2664	St. Andrews Cross	III	1,2	1,2	
	Di-(n-butyl)amine	8	UN 2248	Corrosive, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids
	N,N-Di-n-butylaminoethanol	6.1	UN 2873	St. Andrews Cross	III	1,2	1,2	
	Di-(4-tert-butylcyclohexyl) peroxydicarbonate, maximum concentration 42%, stable dispersion in water	5.2	UN 2894	Organic Peroxide	II	1	5	Control temperature 25 deg C. Emergency temperature 30 deg C
	Di-(4-tert-butylcyclohexyl) peroxydicarbonate, technical pure	5.2	UN 2154	Organic Peroxide	II	1	5	Control temperature 30 deg C. Emergency temperature 35 deg C
	Di-butyl ethers	3.3	UN 1149	Flammable Liquid	III	1,2	1,2	
	Di-tert-butyl peroxide, technical pure	5.2	UN 2102	Organic Peroxide, Flammable Liquid	II	1	5	
	2,2-Di-(tert-butylperoxy) butane, maximum concentration 55% in solution	5.2	UN 2111	Organic Peroxide	II	1	5	
	1,1-Di-(tert-butylperoxy) cyclohexane, maximum concentration 77% in solution	5.2	UN 2180	Organic Peroxide	II	1	5	
	1,1-Di-(tert-butylperoxy) cyclohexane, technical pure	5.2	UN 2179	Organic Peroxide	II	1	5	
	1,1-Di-(tert-butylperoxy) cyclohexane with at least 13% phlegmatizer and 47% inert inorganic solid	5.2	UN 2885	Organic Peroxide	II	1	5	
	1,1-Di-(tert-butylperoxy) cyclohexane with at least 50% phlegmatizer	5.2	UN 2897	Organic Peroxide	II	1	5	
	Di-sec-butyl peroxydicarbonate, maximum concentration 52% in solution	5.2	UN 2151	Organic Peroxide	II	1	5	Control temperature -15 deg C. Emergency temperature -5 deg C
	Di-sec-butyl peroxydicarbonate, technical pure	5.2	UN 2150	Organic Peroxide	I	1	5	Control temperature -20 deg C. Emergency temperature -10 deg C
	1,4-Di-(2-tert-butylperoxy isopropyl) benzene, or 1,3-di-(2-tert-butylperoxy isopropyl) benzene, or mixtures thereof, technical pure or in a concentration of more than 40% with inert solid	5.2	UN 2112	Organic Peroxide	II	1	5	
	Di-(tert-butylperoxy)phthalate, maximum concentration 55% as a paste	5.2	UN 2108	Organic Peroxide	II	1	5	
	Di-(tert-butylperoxy)phthalate, maximum concentration 55% in solution	5.2	UN 2107	Organic Peroxide	II	1	5	
	Di-(tert-butylperoxy)phthalate, technical pure	5.2	UN 2106	Organic Peroxide	II	1	5	
	2,2-Di-(tert-butylperoxy) propane, with at least 50% phlegmatizer	5.2	UN 2883	Organic Peroxide	II	1	5	
	2,2-Di-(tert-butylperoxy) propane, with at least 13% phlegmatizer and 47% inert inorganic solid	5.2	UN 2884	Organic Peroxide	II	1	5	
	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, technical pure	5.2	UN 2145	Organic Peroxide	II	1	5	
	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, maximum concentration 57% in solvent	5.2	UN 2146	Organic Peroxide	II	1	5	
	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, maximum concentration 58% with inert solid	5.2	UN 2147	Organic Peroxide	II	1	5	
	Dicetyl peroxydicarbonate maximum concentration 42%, stable dispersion in water	5.2	UN 2985	Organic Peroxide	II	1	5	Control temperature 25 deg C. Emergency temperature 30 deg C
	Dicetyl peroxydicarbonate, technical pure	5.2	UN 2164	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
	Dichloroacetic acid	8	UN 1764	Corrosive	II	1,2	1,2	Glass carboy in hampers not permitted under deck
	1,3-Dichloroacetone	6.1	UN 2649	Poison	II	1,2	1	Keep cool. Stow 'away from' living quarters
	Dichloroacetyl chloride	8	UN 1765	Corrosive	II	1	5	Keep dry
	Dichloroanilines	6.1	UN 1590	Poison	II	1,2	1,2	Stow 'away from' acids
	o-Dichlorobenzene	6.1	UN 1591	St. Andrews Cross	III	1,2	1,2	
	p-Dichlorobenzene	6.1	UN 1592	St. Andrews Cross	III	1,2	1,2	
	Di-(4-chlorobenzoyl) peroxide, maximum concentration 52% as a paste	5.2	UN 2114	Organic Peroxide	II	1	5	
	Di-(4-chlorobenzoyl) peroxide, maximum concentration 52% in solution	5.2	UN 2115	Organic Peroxide	II	1	5	
	Di-(4-chlorobenzoyl) peroxide, maximum concentration 75% with water	5.2	UN 2113	Organic Peroxide	II	1	5	
	Dichlorodifluoromethane	2.2	UN 1028	Nonflammable Gas	—	1,2	1,2	
	Dichlorodifluoromethane and difluoroethane, azeotropic mixture, with approximately 74% dichlorodifluoromethane	2.2	UN 2602	Nonflammable Gas	—	1,2	1,2	
	Dichlorodimethyl ether, symmetrical	6.1	UN 2749	Poison, Flammable Liquid	I	1	5	Stow 'away from' living quarters
	1,1-Dichloroethane	3.2	UN 2362	Flammable Liquid	II	1,2	1	
	Dichloroethylene	3.2	UN 1150	Flammable Liquid	II	1,2	1	
	Dichloroethyl ether	6.1	UN 1916	Poison	II	1,2	1,2	
	Dichloroisocyanuric acid, dry or Dichloroisocyanuric acid salts	5.1	UN 2465	Oxidizer	II	1,2	1,2	
	Dichloroisopropyl ether	6.1	UN 2490	Poison	II	1,2	1	
	Dichloromethane	6.1	UN 1593	St. Andrews Cross	III	1,2	1,2	Shade from radiant heat
	Dichloromono-fluoromethane	2.2	UN 1029	Nonflammable Gas	—	1,2	1,2	
	1,1-Dichloro-1-nitroethane	6.1	UN 2650	Poison	II	1,2	1,2	Keep cool. Stow 'away from' living quarters
	Dichloropentanes	3.3	UN 1152	Flammable Liquid	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Dichlorophenyl isocyanates	6.1	UN 2250	Poison	II	1,3	1,3	Shade from radiant heat. Stow 'away from' living quarters
	Dichlorophenyl trichlorosilane	8	UN 1766	Corrosive	II	1	1	Keep dry
	1,3-Dichloropropanol-2	6.1	UN 2750	Poison	II	1,3	1,3	Keep cool. Stow 'away from' living quarters
	Dichloropropene	3.3	UN 2047	Flammable Liquid	II	1,2	1,2	
	Dichlorosilane	2.3	UN 2189	Poison Gas, Flammable Gas	—	1	5	Stow 'away from' living quarters
	Dichlorotetrafluoroethane	2.2	UN 1958	Nonflammable Gas	—	1,2	1,2	
	Diethyl peroxide, technical pure or with inert solid	5.2	UN 2121	Organic Peroxide	II	1	5	
	Dicyclohexylamine	9	UN 2565	Corrosive	III	1	5	Keep dry
	Dicyclohexylammonium nitrate	6.1	UN 2687	St. Andrews Cross	III	1,2	1,2	
	Dicyclohexyl peroxydicarbonate, maximum concentration 91% with water	5.2	UN 2153	Organic Peroxide	I	1	5	Control temperature 5 deg C. Emergency temperature 10 deg C
	Dicyclohexyl peroxydicarbonate, technical pure	5.2	UN 2152	Organic Peroxide	I	1	5	Control temperature 5 deg C. Emergency temperature 10 deg C
	Dicyclopentadiene	3.3	UN 2048	Flammable Liquid	II	1,2	1,2	
	Didecanoyl peroxide, technical pure	5.2	UN 2120	Organic Peroxide	II	1	5	Control temperature 15 deg C. Emergency temperature 20 deg C
	2,2-Di-(4,4-di-tert-butylperoxy cyclohexyl) propane, maximum concentration 42% with inert solid	5.2	UN 2168	Organic Peroxide	II	1	5	
	Di-2,4-dichlorobenzoyl peroxide, maximum concentration 75% with water	5.2	UN 2137	Organic Peroxide	II	1	5	
	Di-2,4-dichlorobenzoyl peroxide, maximum concentration 52% as a paste	5.2	UN 2138	Organic Peroxide	II	1	5	
	Di-2,4-dichlorobenzoyl peroxide, maximum concentration 52% in solution	5.2	UN 2139	Organic Peroxide	II	1	5	
	1,2-Di-(dimethylamino)-ethane	3.2	UN 2372	Flammable Liquid	II	1,2	1	
	Didymium nitrate	5.1	UN 1465	Oxidizer	III	1,2	1,2	
	Diethoxymethane	3.1	UN 2373	Flammable Liquid	II	1,3	5	Keep cool
	3,3-Diethoxypropene	3.2	UN 2374	Flammable Liquid	II	1,2	1	
	Diethylaluminum chloride	4.2	UN 1101	Spontaneously Combustible	I	1	1	
	Diethylamine	3.1	UN 1154	Flammable Liquid	II	1,3	5	Keep cool
	Diethylaminoethanol	3.3	UN 2686	Flammable Liquid	III	1,2	1,2	
	3-(Diethylamino) propylamine	8	UN 2684	Corrosive, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	N,N-Diethylaniline	6.1	UN 2432	St. Andrews Cross	III	1,2	1,2	
	Diethylbenzene	3.3	UN 2049	Flammable Liquid	II	1,2	1,2	
	Diethylcarbinol	3.3	UN 2706	Flammable Liquid	II	1,2	1,2	
	Diethyl carbonate	3.3	UN 2366	Flammable Liquid	II	1,2	1,2	
	Diethyl dichlorosilane	8	UN 1767	Corrosive, Flammable Liquid	II	1	1	Keep dry. Separate longitudinally by an intervening compartment or hold from explosives. Segregation same as for flammable liquids
	N,N-Diethylene diamine	8	UN 2685	Corrosive, Flammable Liquid	II	1,3	1,3	Keep cool. Segregation same as for flammable liquids
*N	Diethyleneglycol dinitrate, desensitized with not less than 25% non-volatile water-insoluble phlegmatizer, by weight	1.1D	UN 0075	Explosive (1.1D)	—	—	—	
	Diethylenetriamine	8	UN 2079	Corrosive	II	1,2	1,2	Stow 'away from' acids, copper and copper alloys, and living quarters; separated from nitric acid
	Diethyl ether	3.1	UN 1155	Flammable Liquid	I	1,3	5	Keep cool
	Di-(2-ethylhexyl) peroxydicarbonate, maximum concentration 77% in solution	5.2	UN 2123	Organic Peroxide	II	1	5	Control temperature -15 deg C. Emergency temperature -5 deg C
	Di-(2-ethylhexyl) peroxydicarbonate, maximum concentration 32%, stable dispersion in water	5.2	UN 2960	Organic Peroxide	II	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Di-(2-ethylhexyl) peroxydicarbonate, technical pure	5.2	UN 2122	Organic Peroxide	II	1	5	Control temperature -20 deg C. Emergency temperature -10 deg C
	Diethyl ketone	3.2	UN 1156	Flammable Liquid	II	1,2	1	
	Diethylmagnesium	4.2	UN 1367	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives (except explosives in Division 1.4, Compatibility Group 5)
	Diethyl-p-nitrosoaniline	4.2	—	Spontaneously Combustible	—	1,2	5	Stow 'away from' foodstuff
	Diethyl peroxydicarbonate, maximum concentration 27% in solution	5.2	UN 2175	Organic Peroxide	II	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Diethyl sulfide	3.2	UN 2375	Flammable Liquid, Poison	II	1,3	5	Keep cool and dry
	Diethyl sulphate	6.1	UN 1594	Poison	II	1	1	
	Diethylthiophosphoryl chloride	8	UN 2751	Corrosive, Flammable Liquid	II	1	5	Keep cool and dry. Segregation same as for flammable liquids
	Diethylzinc	4.2	UN 1366	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives (except explosives in Division 1.4, Compatibility Group 5)
	1,1-Difluoroethane	2.1	UN 1030	Flammable Gas	—	1,2	1	Stow 'away from' living quarters
	1,1-Difluoroethylene	2.1	UN 1959	Flammable Gas	—	1,2	5	Stow 'away from' living quarters
	Difluoromonoethane. See Chlorodifluoroethanes	8	UN 1768	Corrosive	II	1,2	1,2	
	Difluorophosphoric acid, anhydrous	5.2	UN 2178	Organic Peroxide	II	1	5	
	2,2-Dihydroperoxy propane, maximum concentration 25% with inert inorganic solid	5.2	—	—	—	—	—	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	2,3-Dihydropyran	3.2	UN 2376	Flammable Liquid	II	1,2	1	
	Di-(1-hydroxy cyclohexyl) peroxide, technical pure	5.2	UN 2148	Organic Peroxide	II	1	5	
	Diisobutylamine	3.3	UN 2361	Flammable Liquid	II	1,2	1,2	
	Diisobutylene, (isomeric compounds)	3.2	UN 2050	Flammable Liquid	II	1,2	1	
	Diisobutyl ketone	3.3	UN 1157	Flammable Liquid	III	1,2	1,2	
	Diisooctyl acid phosphate	8	UN 1902	Corrosive	III	1,2	1,2	Glass carboys in hampers not permitted under deck
	Diisopropylamine	3.2	UN 1158	Flammable Liquid	II	1,2	1	
	Diisopropylbenzene hydroperoxide, maximum concentration 72% in solution	5.2	UN 2171	Organic Peroxide	I	1	5	
	N,N-Diisopropyl ethanolamine	8	UN 2825	Corrosive	HI	1,2	1,2	Stow 'away from' caustic alkalis
	Diisopropyl ether	3.1	UN 1159	Flammable Liquid	II	1,3	5	Keep cool
	Diisopropyl peroxydicarbonate, technical pure	5.2	UN 2133	Organic Peroxide	II	1	5	Control temperature -15 deg C. Emergency temperature -5 deg C
	Diisopropyl peroxydicarbonate, maximum concentration 52% in solution	5.2	UN 2134	Organic Peroxide	II	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Diisotridecyl peroxydicarbonate, technical pure	5.2	UN 2889	Organic Peroxide	II	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Diketene, inhibited	3.3	UN 2521	Flammable Liquid	II	1,2	1,2	
	Dilauroyl peroxide, maximum concentration 42%, stable dispersion in water	5.2	UN 2893	Organic Peroxide	II	1	5	
	Dilauroyl peroxide, technical pure	5.2	UN 2124	Organic Peroxide	II	1	5	
	1,1-Dimethoxyethane	3.1	UN 2377	Flammable Liquid	II	1,3	5	Keep cool
	1,2-Dimethoxyethane	3.2	UN 2377	Flammable Liquid	II	1,2	1	
	Dimethylamine, anhydrous	2.1	UN 1032	Flammable Gas	-	1,2	5	Stow 'away from' living quarters
	Dimethylamine, solution	3.2	UN 1160	Flammable Liquid	II	1,2	1	
	2-Dimethylaminoacetonitrile	3.3	UN 2378	Flammable Liquid, Poison	II	1,2	1,2	
	Dimethylaminoethyl methacrylate	6.1	UN 2522	Poison	II	1,2	1	
	N,N-Dimethylaniline	6.1	UN 2253	Poison	II	1,3	1,3	Stow 'away from' sources of heat
	Di-(2-methylbenzoyl)peroxide, with at least 15% water	5.2	UN 2593	Organic Peroxide	I	1	5	Control temperature 30 deg C. Emergency temperature 35 deg C
	2,3-Dimethylbutane	3.1	UN 2457	Flammable Liquid	II	1,3	5	Keep cool
	1,3-Dimethylbutylamine	3.2	UN 2379	Flammable Liquid	II	1,2	1	
	N,N-Dimethylcarbamoyl chloride	8	UN 2262	Corrosive	II	1,2	1,2	
	Dimethyl carbonate	3.2	UN 1161	Flammable Liquid	II	1,2	1	
	Dimethylcyclohexane	3.2	UN 2263	Flammable Liquid	II	1,2	1	
	N,N-Dimethylcyclohexylamine	8	UN 2264	Corrosive, Flammable Liquid	II	1,3	1,3	Keep cool. Segregation same as for flammable liquids
	2,5-Dimethyl-2,5-di-(benzoylperoxy) hexane, maximum concentration 82% with water	5.2	UN 2959	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-di-(benzoylperoxy) hexane, maximum concentration 82% with inert solid	5.2	UN 2173	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-di-(benzoylperoxy) hexane, technical pure	5.2	UN 2172	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-di-(tert-butylperoxy) hexane, maximum concentration 52% with inert solid	5.2	UN 2156	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-di-(tert-butylperoxy) hexane, technical pure	5.2	UN 2155	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-di-(tert-butylperoxy) hexyne-3, maximum concentration 52% with inert solid	5.2	UN 2159	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-di-(tert-butylperoxy) hexyne-3, technical pure	5.2	UN 2158	Organic Peroxide	II	1	5	
	Dimethyldichlorosilane	3.2	UN 1162	Flammable Liquid, Corrosive	I	1,2	1	
	Dimethyldiethoxysilane	3.2	UN 2380	Flammable Liquid	II	1,2	1	
	2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy) hexane, technical pure	5.2	UN 2157	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
	2,5-Dimethyl-2,5-dihydroperoxy hexane, maximum concentration 82% with water	5.2	UN 2174	Organic Peroxide	I	1	5	
	Dimethyldioxanes	3.2	UN 2707	Flammable Liquid	II	1,2	1	
	Dimethyldioxanes	3.3	UN 2707	Flammable Liquid	II	1,2	1,2	
	Dimethyl disulfide	3.2	UN 2381	Flammable Liquid	II	1,2	1	
	Dimethylethanolamine	3.3	UN 2091	Flammable Liquid	II	1,3	1,3	
	Dimethyl ether	2.1	UN 1033	Flammable Gas	-	1,2	1	Stow 'away from' living quarters
	N,N-Dimethylformamide	3.3	UN 2265	Flammable Liquid	III	1,2	1,2	
	Dimethylhydrazine, symmetrical	3.2	UN 2382	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Dimethylhydrazine, unsymmetrical	3.2	UN 1163	Flammable Liquid, Corrosive	I	1,2	1	Stow 'separated from' corrosive liquids and oxidizers
	Dimethylmagnesium	4.2	UN 1368	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives (except explosives in Division 1.4, Compatibility Group 5)
	Dimethyl-p-nitrosoaniline. See p-Nitrosodimethylaniline	2.1	UN 2044	Flammable Gas	-	1,2	1	
	2,2-Dimethylpropane other than pentane and isopentane	3.2	UN 2266	Flammable Liquid, Corrosive	II	1,2	1	
	Dimethyl-N-propylamine	6.1	UN 1595	Poison	I	1	5	Stow 'away from' living quarters
	Dimethyl sulphate	3.1	UN 1164	Flammable Liquid	I	1,3	5	Keep cool

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c)
						Cargo vessel	Pass- enger vessel	Other requirements
	Dimethyl thiophosphoryl chloride	8	UN 2267	Corrosive	III	1,2	1	Keep dry. Shade from radiant heat. Glass carboys prohibited on passenger vessels.
	Dimethylzinc	4.2	UN 1370	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives (except explosives in Division 1.4, Compatibility Group 5)
	Dimyristylperoxydicarbonate, maximum concentration 22%, stable dispersion in water	5.2	UN 2892	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
	Dimyristylperoxydicarbonate, technical pure	5.2	UN 2595	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
	Dinitroanilines	6.1	UN 1596	Poison	II	1,2	1,2	
	Dinitrobenzenes (o-, m-, p-)	6.1	UN 1597	Poison	II	1,2	1,2	
	Dinitro-o-cresol, liquid	6.1	UN 1598	Poison	I	1	1	
		6.1	UN 1598	Poison	II	1,2	1	
		6.1	UN 1598	St. Andrews Cross	III	1,2	1,2	
	Dinitro-o-cresol, solid	6.1	UN 1598	Poison	I/II	1,2	1,2	
		6.1	UN 1598	St. Andrews Cross	III	1,2	1,2	
	Dinitrogen tetroxide. See Nitrogen dioxide							
*N	Dinitrophenates alkali metals, dry or wetted with less than 15% water, by weight	1.3C	UN 0077	Explosive (1.3C), Poison		-	-	
	Dinitrophenolates, wetted with, by weight, at least 15% water	4.1	UN 1321	Flammable Solid, Poison	I	1,2	5	Stow 'away from' heavy metals and their compounds
*N	Dinitrophenol, dry or wetted with less than 15% water, by weight	1.1D	UN 0076	Explosive (1.1D), Poison		-	-	
	Dinitrophenol, solution in water or flammable liquid	6.1	UN 1599	Poison, Flammable Liquid (only if flashpoint between 23 deg C and 61 deg C)	II	1,2	5	Stow 'away from' heavy metals and their compounds. Segregation same as for flammable liquids if flash point below 61 deg C
	Dinitrophenol, wetted with, by weight, at least 15% water	4.1	UN 1320	Flammable Solid, Poison	I	1,2	5	Stow 'away from' heavy metals and their compounds and sodium compounds
*N	Dinitrosorcinol, dry or wetted with less than 15% water	1.1D	UN 0078	Explosive (1.1D)		-	-	
	Dinitrosorcinol, wetted with, by weight, at least 15% water	4.1	UN 1322	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
N	Dinitrosobenzene	1.3C	UN 0406	Explosive (1.3C)		-	-	
	Dinitrotoluenes, molten	6.1	UN 1600	Poison	II	1,2	1,2	
	Dinitrotoluenes, solid	6.1	UN 2038	Poison	II	1,2	1,2	
	Di-n-nonyl peroxide, technical pure	5.2	UN 2130	Organic Peroxide	II	1	5	Control temperature 0 deg C. Emergency temperature 10 deg C
	Di-n-octanoyl peroxide, technical pure	5.2	UN 2129	Organic Peroxide	II	1	5	Control temperature 10 deg C. Emergency temperature 15 deg C
	Dioxane	3.2	UN 1165	Flammable Liquid	II	1,2	1	
	Dioxolane	3.2	UN 1166	Flammable Liquid	II	1,2	1	
	Dipentene	3.3	UN 2052	Flammable Liquid	II	1,2	1,2	
	Diperoxyazelaic acid, maximum concentration 27%, with not less than 15% azelaic acid and not less than 53% sodium sulphate	5.2	UN 2958	Organic Peroxide	II	1	5	Control temperature 35 deg C. Emergency temperature 40 deg C
	Diphenylaminechlorarsine	6.1	UN 1698	Poison	I	1	5	Stow 'away from' living quarters
	Diphenylchlorarsine	6.1	UN 1699	Poison	I	1	5	Keep dry
	Diphenyl dichlorosilane	8	UN 1769	Corrosive	II	1	1	Stow 'away from' sources of heat
	Diphenylmethane-4,4'-disocyanate	6.1	UN 2489	St. Andrews Cross	III	1,2	1,2	
	Diphenylmethyl bromide	8	UN 1770	Corrosive	II	1	5	
*N	Dipicryl sulfide, dry or wetted with less than 10% water, by weight	1.1D	UN 0401	Explosive (1.1D)		-	-	
	Dipicryl sulphide, wetted with, by weight, at least 10% water	4.1	UN 2832	Flammable Solid	I	1	5	
	Dipropionyl peroxide, maximum concentration 28% in solution	5.2	UN 2132	Organic Peroxide	II	1	5	Control temperature 15 deg C. Emergency temperature 20 deg C
	Dipropylamine	3.2	UN 2383	Flammable Liquid	II	1,2	1	
	Dipropyl ether	3.1	UN 2384	Flammable Liquid	II	1,3	5	Keep cool
	Dipropylketone	3.3	UN 2710	Flammable Liquid	III	1,2	1,2	
	Di-n-propyl peroxydicarbonate, technical pure	5.2	UN 2176	Organic Peroxide	I	1	5	Control temperature -25 deg C. Emergency temperature -15 deg C
	Disinfectants, corrosive, liquid, n.o.s.	8	UN 1903	Corrosive	II	1,2	1,2	
	Disinfectants, n.o.s., poisonous, liquid or solid	6.1	UN 1601	Poison	I	1,2	1	
		6.1	UN 1601	Poison	II	1,2	1,2	
		6.1	UN 1601	St. Andrews Cross	III	1,2	1,2	
	Distearylperoxydicarbonate, with 15% stearyl alcohol	5.2	UN 2592	Organic Peroxide	II	1	5	
	Disuccinic acid peroxide, maximum concentration 72%, wetted with water	5.2	UN 2962	Organic Peroxide	I	1	5	Control temperature 10 deg C. Emergency temperature 15 deg C
	Disuccinic acid peroxide, technical pure	5.2	UN 2135	Organic Peroxide	I	1	5	
	Dithiocarbamate pesticides, liquid, flammable, toxic, n.o.s., flash-point less than 23 deg C	3.2	UN 2772	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Dithiocarbamate pesticides, liquid, toxic, flammable, n.o.s., flash-point between 23 deg C and 61 deg C	6.1	UN 3005	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3005	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3005	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Dithiocarbamate pesticides, liquid, toxic, n.o.s.	6.1	UN 3006	Poison	I	1	1	
		6.1	UN 3006	Poison	II	1,2	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Dithiocarbamate pesticides, solid, toxic, n.o.s.	6.1	UN 3006	St. Andrews Cross Poison	III	1,2	1,2	
		6.1	UN 2771		I/II	1,2	1,2	
		6.1	UN 2771	St. Andrews Cross	III	1,2	1,2	
	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide, as a paste with at least 50% phlegmatizer	5.2	UN 2597	Organic Peroxide	II	1	5	Control temperature 30 deg C. Emergency temperature 35 deg C
	Di-(3,5,5-trimethylhexanoyl)peroxide, technical pure or in solution	5.2	UN 2128	Organic Peroxide	II	1	5	Control temperature 0 deg C. Emergency temperature 10 deg C
	Divinyl ether, inhibited	3.1	UN 1167	Flammable Liquid	II	1,2	5	Keep cool
	Dodecyl trichlorosilane	8	UN 1771	Corrosive	II	1	1	Keep dry
	Dressing, leather. See Flammable liquid preparations, n.o.s.							
	Driers, paint or varnish, liquid, n.o.s.	3.2	UN 1168	Flammable Liquid	II	1,2	1	
		3.3	UN 1168	Flammable Liquid	II	1,2	1,2	
	Dyes, paint or varnish, solid, n.o.s.	4.1	UN 1371	Flammable Solid	III	1,2	1,2	
	Dyes, n.o.s. or Dye intermediates, n.o.s., liquid or solid, corrosive	8	UN 2801	Corrosive, Flammable Liquid (only if flashpoint between 23 and 61 deg C)	II/III	1,2	1,2	Segregation same as for flammable liquids, if flashpoint between 23 and 61 deg C
	Dyes, n.o.s. or Dye intermediates, n.o.s., liquid or solid, poisonous	6.1	UN 1602	Poison	I	1,2	1	
		6.1	UN 1602	Poison	II	1,2	1,2	
		6.1	UN 1602	St. Andrews Cross	III	1,2	1,2	
	Enamels. See Paints, etc.							
	Engine starting fluid, with flammable gas	2.1	UN 1960	Flammable Gas	-	1,2	5	Stow 'away from' living quarters
	Epibromohydrin	6.1	UN 2558	Poison, Flammable Liquid	I	1	5	Stow 'away from' living quarters. Segregation same as for flammable liquids. Shade from radiant heat
	Epichlorohydrin	6.1	UN 2023	Poison, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids. Stow 'away from' living quarters
	1,2-Epoxy-3-ethoxy propane	3.3	UN 2752	Flammable Liquid	III	1,2	1,2	
	Eradicators, paint or grease, liquid. To be classified and labeled according to the principle hazardous constituent	-	UN 1850		-	1,2	1	
	Essences. See Extracts, aromatic, liquid							
	Ethane, compressed	2.1	UN 1035	Flammable Gas	-	1,2	5	
	Ethane, refrigerated liquid	2.1	UN 1961	Flammable Gas	-	1	5	
	Ethanolamine or Ethanolamine solutions	8	UN 2491	Corrosive	III	1,2	1,2	
	Ethanol or Ethanol solutions including Alcoholic beverages	3.2	UN 1170	Flammable Liquid	II	1,2	1	
		3.3	UN 1170	Flammable Liquid	III	1,2	1,2	
	Ether. See Diethyl ether							
	Ethyl acetate	3.2	UN 1173	Flammable Liquid	II	1,2	1	
	Ethyl acetylene, inhibited	2.1	UN 2452	Flammable Gas	-	1	5	
	Ethyl acrylate, inhibited	3.2	UN 1917	Flammable Liquid	II	1,2	1	
	Ethyl alcohol. See Ethanol							
	Ethyl aldehyde. See Acetaldehyde							
	Ethyl aluminum dichloride	4.2	UN 1924	Spontaneously Combustible	I	1	1	
	Ethyl aluminum sesquichloride	4.2	UN 1925	Spontaneously Combustible	I	1	1	
	Ethylamine	2.1	UN 1036	Flammable Gas	-	1,2	5	
	Ethylamine solution in water, concentrations up to 70%	3.1	UN 2270	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 2270	Flammable Liquid	II	1,2	1,2	
		3.3	UN 2270	Flammable Liquid	III	1,2	1,2	
	Ethyl amyl ketone	3.3	UN 2271	Flammable Liquid	III	1,2	1,2	
	N-Ethylaniline	6.1	UN 2272	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	2-Ethylaniline	6.1	UN 2273	St. Andrews Cross	III	1,2	1,2	
	Ethylbenzene	3.2	UN 1175	Flammable Liquid	II	1,2	1,2	
	N-Ethyl-n-benzylaniline	6.1	UN 2274	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
	N-Ethylbenzyltoluidines	6.1	UN 2753	St. Andrews Cross	III	1,3	1,3	Keep cool
	Ethyl borate	3.2	UN 1176	Flammable Liquid	II	1,2	1	
	Ethyl bromide	6.1	UN 1891	Poison	II	1,3	1	Stow 'away from' sources of heat
	Ethyl bromoacetate	6.1	UN 1603	Poison, Flammable Liquid	II	1	5	Stow 'away from' living quarters. Segregation same as for flammable liquids
	2-Ethylbutanol	3.3	UN 2275	Flammable Liquid	III	1,2	1,2	
	Ethylbutyl acetate	3.3	UN 1177	Flammable Liquid	III	1,2	1,2	
	Ethyl butyl ether	3.2	UN 1179	Flammable Liquid	II	1,2	1	
	2-Ethylbutyraldehyde	3.2	UN 1178	Flammable Liquid	II	1,2	1	
	Ethyl butyrate	3.3	UN 1180	Flammable Liquid	II	1,2	1,2	
	Ethyl chloride	2.1	UN 1037	Flammable Gas	-	1,2	5	Stow 'away from' living quarters
	Ethyl chloroacetate	6.1	UN 1181	Poison, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids. Stow 'away from' sources of heat and living quarters
	Ethyl chlorocarbonate. See Ethyl chloroformate							
	Ethyl chloroformate	3.2	UN 1182	Flammable Liquid, Poison, Corrosive	I	1,2	1	
	Ethyl-2-chloropropionate	3.3	UN 2935	Flammable Liquid	III	1,2	1,2	
	Ethyl chlorobisformate	8	UN 2826	Corrosive, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids
	Ethyl crotonate	3.2	UN 1862	Flammable Liquid	II	1,2	1	
	Ethyl cyanoacetate	6.1	UN 2666	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Ethyl-3,3-di-(tert-butylperoxy) butyrate, maximum concentration 77% in solution	5.2	UN 2185	Organic Peroxide	II	1	5	
	Ethyl-3,3-di-(tert-butylperoxy) butyrate, technical pure	5.2	UN 2184	Organic Peroxide, Explosive (May not be required under certain conditions. See IMDG Code)	II	1	5	
	Ethyl-3,3-di-(tert-butylperoxy)butyrate, with at least 50% inert, inorganic solid	5.2	UN 2598	Organic Peroxide	II	1	5	
	Ethyl dichloroarsine	6.1	UN 1892	Poison	I	1	5	Stow 'away from' living quarters
	Ethylchlorosilane	3.2	UN 1183	Flammable Liquid, Corrosive	II	1,2	1	
	Ethylene chlorohydrin	6.1	UN 1135	Poison, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids. Stow 'away from' living quarters and sources of heat
	Ethylene, compressed	2.1	UN 1962	Flammable Gas	—	1,2	5	Stow 'away from' living quarters
	Ethylenediamine	6	UN 1604	Corrosive, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids
	Ethylene dibromide	6.1	UN 1603	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Ethylene dichloride	3.2	UN 1104	Flammable Liquid, Poison	II	1,2	1	
	Ethylene glycol diethyl ether	3.3	UN 1153	Flammable Liquid	III	1,2	1,2	
	Ethylene glycol monobutyl ether	6.1	UN 2369	St. Andrews Cross, Flammable Liquid (only if flashpoint below 61 deg C)	III	1,3	1,3	Shade from radiant heat. Stow 'away from' living quarters. If flashpoint below 61 deg C, segregation same as for flammable liq- uids
	Ethylene glycol monoethyl ether	3.3	UN 1171	Flammable Liquid	III	1,2	1,2	
	Ethylene glycol monoethyl ether acetate	3.3	UN 1172	Flammable Liquid	III	1,2	1,2	
	Ethylene glycol monomethyl ether	3.3	UN 1188	Flammable Liquid	III	1,2	1,2	
	Ethylene glycol monomethyl ether acetate	3.3	UN 1189	Flammable Liquid	III	1,2	1,2	
	Ethyleneimine, inhibited	3.2	UN 1185	Flammable Liquid, Poison	I	1,2	1	
	Ethylene oxide and carbon dioxide, mixtures. See Carbon dioxide and ethylene oxide mixtures							
	Ethylene oxide and propylene oxide mixtures, not more than 30% ethylene oxide	3.1	UN 2983	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Ethylene oxide, containing not more than 0.2% of nitrogen	2.1	UN 1040	Flammable Gas, Poison Gas	—	1,2	1	Stow 'away from' living quarters
	Ethylene, refrigerated liquid	2.1	UN 1038	Flammable Gas	—	1	5	Stow 'away from' living quarters
	Ethyl ether. See Diethyl ether							
	Ethyl fluid. See Motor fuel antiknock mixtures.							
	Ethyl fluoride	2.1	UN 2453	Flammable Gas	—	1,2	5	Keep cool
	Ethyl formate	3.1	UN 1190	Flammable Liquid	II	1,3	5	
	Ethyl hexaldehyde	3.3	UN 1191	Flammable Liquid	III	1,2	1,2	
	2-Ethylhexylamine	8	UN 2276	Corrosive, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	2-Ethylhexylchloroformate	6.1	UN 2748	Poison, Corrosive	II	1,3	1,3	Keep cool and dry. Shade from radiant heat Stow 'away from' living quarters
	Ethylisobutyrate	3.2	UN 2385	Flammable Liquid	II	1,2	1	
	Ethyl isocyanate	3.2	UN 2481	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Ethyl lactate	3.3	UN 1192	Flammable Liquid	III	1,2	1,2	
	Ethyl mercaptan	3.1	UN 2363	Flammable Liquid, Poison	II	1,3	5	Keep cool and dry. Stow 'separated from' foodstuffs and all odor absorbing cargo
	Ethyl methacrylate, inhibited	3.2	UN 2277	Flammable Liquid	II	1,2	1	
	Ethyl methyl ether	2.1	UN 1039	Flammable Gas	—	1,2	1	Stow 'away from' living quarters
	Ethyl methyl ketone	3.2	UN 1193	Flammable Liquid	II	1,2	1	
	Ethyl methyl ketone peroxide(s), maximum concentration 60%	5.2	UN 2127	Organic Peroxide	I	1	5	
	Ethyl methyl ketone peroxide(s), maximum concentration 50%, con- taining not more than 10% available oxygen	5.2	UN 2550	Organic Peroxide	I	1	5	
N	Ethyl methyl ketone peroxide(s), maximum concentration 50%, con- taining more than 10% available oxygen				—	—	—	
	Ethyl nitrite, solutions	3.1	UN 1194	Flammable Liquid	I	1,3	5	Keep cool
	Ethyl orthoformate	3.3	UN 2524	Flammable Liquid	II	1,2	1,2	
	Ethyl oxalate	6.1	UN 2525	St. Andrews Cross	III	1,2	1,2	
	Ethylphenyldichlorosilane	8	UN 2435	Corrosive	II	1	1	Keep dry
	1-Ethyl piperidine	3.2	UN 2386	Flammable Liquid	II	1,2	1	
	Ethyl propionate	3.2	UN 1195	Flammable Liquid	II	1,2	1	
	Ethyl propyl ether	3.1	UN 2615	Flammable Liquid	II	1,3	5	Keep cool
	Ethyl silicate. See Tetraethyl silicate							
	Ethylsulphuric acid	8	UN 2571	Corrosive	II	1,2	1	Keep dry. Metal drums only permitted under deck
	N-Ethyltoluidines (a.m.p.)	6.1	UN 2754	Poison, Flammable- Liquid (only if flashpoint below 61 deg C)	II	1,3	1,3	Keep cool. Shade from radiant heat. Stow 'away from' living quarters. If flashpoint below 61 deg C, segregation same as for flammable liquids
	Ethyltrichlorosilane	3.2	UN 1196	Flammable Liquid, Corrosive	II	1,2	1	
N	Explosives, blasting, Type A	1.1D	UN 0081	Explosive (1.1D)	—	6	5	
	Explosives, blasting, Type B	1.5D	UN 0031	Explosive (1.5D)	—	6	5	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
N	Explosives, blasting, Type B	1.1D	UN 0082	Explosive (1.1D)	--	--	--	
N	Explosives, blasting, Type C	1.1D	UN 0083	Explosive (1.1D)	--	--	--	
N	Explosives, blasting, Type D	1.1D	UN 0084	Explosive (1.1D)	--	--	--	
N	Explosives, blasting, Type E	1.5 D	UN 0332	Explosive (1.5D)	--	6	5	
N	Explosives, blasting, Type E	1.1D	UN 0241	Explosive (1.1D)	--	--	--	
	Extracts, aromatic, liquid	3.2	UN 1169	Flammable Liquid	II/III	1,2	1	
		3.3	UN 1169	Flammable Liquid	III	1,2	1,2	
	Extracts, flavouring, liquid	3.2	UN 1197	Flammable Liquid	II/III	1,2	1	
		3.3	UN 1197	Flammable Liquid	III	1,2	1,2	
	Fabric, animal or vegetable. See Fibres, animal or vegetable							
	Ferric arsenate	6.1	UN 1606	Poison	II	1,2	1,2	
	Ferric arsenite	6.1	UN 1607	Poison	II	1,2	1,2	
	Ferric chloride, anhydrous	8	UN 1773	Corrosive	III	1,2	1,2	
	Ferric chloride, solution	8	UN 2582	Corrosive	III	1,2	1,2	
	Ferric nitrate	5.1	UN 1466	Oxidizer	III	1,2	1,2	
	Ferrocenium	4.1	UN 1323	Flammable Solid	II	1,2	1,2	
	Ferrosilicon, containing more than 30% but less than 90% silicon	4.3	UN 1408	Dangerous When Wet, Poison	III	1,2	1,2	Keep dry. When stowed under deck, stow in a mechanically ventilated space
	Ferrous arsenate	6.1	UN 1608	Poison	II	1,2	1,2	
	Ferrous metal borings, shavings, turnings, or cuttings in a form liable to self heating	4.2	UN 2793	Spontaneously Combustible	III	1,2	1,2	
	Fertilizer ammoniating solution, containing free ammonia in excess of 35% ammonia	2.2	UN 1043	Nonflammable Gas	--	1,2	5	Stow 'away from' living quarters
	Fibres, animal or vegetable, burnt, wet or damp	4.2	UN 1372	Spontaneously Combustible	III	1,2	1,2	
	Fibres or Fabric, animal or vegetable, containing more than 3% of animal or vegetable oil	4.2	UN 1373	Spontaneously Combustible	III	1,2	1,2	
	Fibres, vegetable, dry	4.1	--	None	--	1,2	1,2	Stow 'away from' animal or vegetable oils
	Fillers, liquid. See Paints, etc.							
	Film, motion picture, nitrocellulose base, exposed and developed film, or unexposed or undeveloped film	4.1	UN 1324	Flammable Solid	III	1,2	1,2	Stow 'away from' flammable substances. Maximum 250 Kg. net on deck on passenger vessels
	Film, motion picture, nitrocellulose base, old film	4.1	UN 1324	Flammable Solid	III	1	5	Stow 'away from' flammable substances
	Fire extinguisher charges, corrosive liquid	8	UN 1774	Corrosive	II	1,2	1,2	
	Fire extinguishers, containing compressed or liquefied gas	2.2	UN 1044	Nonflammable Gas	--	1,2	1,2	
	Firelighters, solid, with a flammable liquid	4.1	UN 2623	Flammable Solid	II/III	1,2	1,2	
N	Fireworks, Type A	1.1G	UN 0333	Explosive (1.1G)	--	--	--	
N	Fireworks, Type B	1.2G	UN 0334	Explosive (1.2G)	--	--	--	
N	Fireworks, Type C	1.3G	UN 0335	Explosive (1.3G)	--	--	--	
N	Fireworks, Type D	1.4 G	UN 0336	Explosive (1.4G)	--	1,3	1,3	
	Fireworks, Type D	1.4 S	UN 0337	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Fishmeal or fish scrap, antioxidant treated, moisture content greater than 3% but not exceeding 12% by weight, fat content not more than 15% by weight	9	UN 2216	None	III	1,2	1,2	
	Fishmeal or fish scrap, high hazard, unrestricted moisture content, unrestricted fat content in excess of 12% by weight, unrestricted fat content in excess of 15% by weight, in the case of anti-oxidant treated fishmeal or fish scrap	4.2	UN 1374	Spontaneously Combustible	II	1,2	1,2	
	Fishmeal or fish scrap, not antioxidant treated, moisture content greater than 3% but not exceeding 12% by weight, fat content not exceeding 12% by weight	4.2	UN 1374	None. Package to be marked 'Class 4.2'	III	1,2	1,2	Double strip stowage recommended. Provide good surface and through ventilation
	Flammable gas in lighters. See Lighters for cigars and cigarettes, etc. with flammable gas							
	Flammable liquid preparations, n.o.s.	3.2	UN 1142	Flammable Liquid	II	1,2	1,2	
	Flammable liquids, corrosive, n.o.s.	3.1	UN 2924	Flammable Liquid, Corrosive	I/II	1,3	5	Keep cool. Stow 'away from' foodstuffs
	Flammable liquids, n.o.s.	3.2	UN 2924	Flammable Liquid, Corrosive	I/II	1,2	1	
	Flammable liquids, n.o.s.	3.1	UN 1993	Flammable Liquid	I/II	1,3	5	Keep cool
	Flammable liquids, n.o.s.	3.2	UN 1993	Flammable Liquid	II	1,2	1,2	
	Flammable liquids, n.o.s.	3.3	UN 1993	Flammable Liquid	II	1,2	1,2	
	Flammable liquids, poisonous, n.o.s.	3.1	UN 1992	Flammable Liquid, Poison	I/II	1,3	5	Keep cool
	Flammable liquids, poisonous, n.o.s.	3.2	UN 1992	Poison	II	1,2	1,2	
	Flammable liquids, poisonous, n.o.s.	3.3	UN 1992	Flammable Liquid, Poison	II	1,2	1,2	
	Flammable solids, corrosive, n.o.s.	4.1	UN 2925	Flammable Solid, Corrosive	I/II/III	1	5	Stow 'separated from' oxidizing substances
	Flammable solids, n.o.s.	4.1	UN 1325	Flammable Solid	I	1,2	5	
	Flammable solids, n.o.s.	4.1	UN 1325	Flammable Solid	II/III	1,2	1	
	Flammable solids, poisonous, n.o.s.	4.1	UN 2926	Flammable Solid	I	1,2	5	
	Flammable solids, poisonous, n.o.s.	4.1	UN 2926	Flammable Solid	II	1,2	1	
N	Flares, aerial	1.1G	UN 0420	Explosive (1.1G)	--	--	--	
N	Flares, aerial	1.2G	UN 0421	Explosive (1.2G)	--	--	--	
N	Flares, aerial	1.3G	UN 0093	Explosive (1.3G)	--	--	--	
N	Flares, aerial	1.4G	UN 0403	Explosive (1.4G)	--	1,3	1,3	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Flares, aerial	1.4S	UN 0404	None. Package to be marked "1.4S"	—	1,3	1,3	
*N	Flares, surface (other than water-activated flares)	1.1G	UN 0418	Explosive (1.1G)	—	—	—	
*N	Flares, surface (other than water-activated flares)	1.2G	UN 0419	Explosive (1.2G)	—	—	—	
N	Flares, surface (other than water-activated flares)	1.3G	UN 0092	Explosive (1.3G)	—	—	—	
	Flax, dry. See <i>Fibres, vegetable, dry</i>							
	Fluoboric acid	8	UN 1775	Corrosive	II	1,2	1,2	
	Fluoric acid. See <i>Hydrofluoric acid, solution</i>							
	Fluorine, compressed	2.3	UN 1045	Poison Gas, Oxidizer	—	1	5	Stow 'away from' foodstuffs, organic materi- als, and living quarters
	Fluoroacetic acid	6.1	UN 2642	Poison	I	1,3	1,3	Keep cool. Stow 'away from' living quarters
*	4-Fluoroaniline	6.1	UN 2944	St. Andrews Cross	III	1,2	1,2	
*	2-Fluoroaniline	6.1	UN 2941	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Shade from radiant heat. Segregation same as for flammable liquids
	Fluorobenzene	3.2	UN 2387	Flammable Liquid	II	1,2	1	
	Fluorophosphoric acid, anhydrous	8	UN 1776	Corrosive	II	1,2	1,2	
	Fluorosulphonic acid	8	UN 1777	Corrosive	I	1	5	Keep dry. Stow 'away from' fluorides
	Fluorotoluenes	3.2	UN 2388	Flammable Liquid	II	1,2	1	
		3.3	UN 2388	Flammable Liquid	II	1,2	1,2	
	Fluosilicic acid	8	UN 1778	Corrosive	II	1,2	1,2	
	Formaldehyde solutions	3.3	UN 1198	Flammable Liquid	II	1,2	1,2	
	Formaldehyde, solutions with a flashpoint above 61 degrees C	9	UN 2209	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Formalin. See <i>Formaldehyde</i>							
	Formic acid	8	UN 1779	Corrosive	II	1,2	1,2	Glass carboy in hampers prohibited under deck
N	Fracturing devices, explosive, for oil well	1.1E	UN 0099	Explosive (1.1D)	—	—	—	
	Fuel, aviation, turbine engine	3.2	UN 1863	Flammable Liquid	II	1,2	1	
	Fuel, pyrophoric, n.o.s.	4.2	UN 1375	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives (except explosives in Division 1.4, Com- patibility Group 9)
	Fumaryl chloride	8	UN 1780	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on pas- senger vessels
	Furan	3.1	UN 2389	Flammable Liquid	I	1,3	5	Keep cool
	Furfural	3.3	UN 1199	Flammable Liquid	II	1,2	1,2	
	Furfuryl alcohol	6.1	UN 2874	St. Andrews Cross	III	1,2	1,2	Stow 'separated from' oxidizing substances
	Furfurylamine	3.3	UN 2526	Flammable Liquid	II	1,2	1,2	
	Fuse, igniter, tubular, metal clad	1.4 G	UN 0103	Explosive (1.4G)	—	1,3	1,3	
N	Fuse, instantaneous, non-detonating	1.3G	UN 0101	Explosive (1.3G)	—	—	—	
	Fusel oil	3.2	UN 1201	Flammable Liquid	II	1,2	1	
	Fuse, safety	1.4 S	UN 0105	None. Package to be marked "1.4 S"	—	1,3	1,3	
	Fuzes, detonating	1.4S	UN 0267	None. Package to be marked "1.4S"	—	1,3	1,3	
	Fuzes, detonating	1.4 B	UN 0257	Explosive (1.4B)	—	1,3	1,3	
N	Fuzes, detonating	1.1B	UN 0106	Explosive (1.1B)	—	—	—	
N	Fuzes, detonating	1.2B	UN 0107	Explosive (1.2B)	—	—	—	
N	Fuzes, detonating, with protective features	1.1D	UN 0408	Explosive (1.1D)	—	—	—	
N	Fuzes, detonating, with protective features	1.2D	UN 0409	Explosive (1.2D)	—	—	—	
N	Fuzes, detonating, with protective features	1.4D	UN 0410	Explosive (1.4D)	—	—	—	
N	Fuzes, detonating, with protective features	1.4S	UN 0368	None. Package to be marked "1.4S"	—	1,3	1,3	
N	Fuzes, igniting	1.3G	UN 0316	Explosive (1.3G)	—	—	—	
N	Fuzes, igniting	1.4G	UN 0317	Explosive (1.4G)	—	—	—	
	Gallium, metal	8	UN 2803	Corrosive	III	1,2	1	Stow 'away from' sources of heat and ists
	Gas drips, hydrocarbon	3.2	UN 1864	Flammable Liquid	II	1,2	1	
	Gas oil	3.3	UN 1202	Flammable Liquid	II	1,2	1,2	
	Gasoline	3.1	UN 1203	Flammable Liquid	II	1,3	5	Keep cool
	Germane	2.3	UN 2192	Poison Gas, Flammable Gas	—	1	5	Stow 'away from' living quarters
	Glycerol-alpha-monochlorohydrin	6.1	UN 2689	St. Andrews Cross	III	1,2	1,2	
	Glycidaldehyde	3.3	UN 2622	Flammable Liquid, Poison	II	1,2	1,2	
N	Grenades, hand or rifle, with bursting charge	1.1D	UN 0284	Explosive (1.1D)	—	—	—	
N	Grenades, hand or rifle, with bursting charge	1.2D	UN 0285	Explosive (1.2D)	—	—	—	
N	Grenades, hand or rifle, with bursting charge	1.1F	UN 0292	Explosive (1.1F)	—	—	—	
N	Grenades, hand or rifle, with bursting charge	1.2F	UN 0293	Explosive (1.2F)	—	—	—	
	Grenades, practice, hand or rifle	1.4 S	UN 0110	None. Package to be marked "1.4 S"	—	1,3	1,3	
N	Grenades, practice, hand or rifle	1.2G	UN 0372	Explosive (1.2G)	—	—	—	
N	Grenades, practice, hand or rifle	1.3G	UN 0318	Explosive (1.3G)	—	—	—	
	Guanidine nitrate	5.1	UN 1467	Oxidizer	III	1,2	1,2	Stow 'separated from' nitro-o. apouones and chlorates
N	Guanyl nitrosamino guanylidene hydrazine, containing, by weight, at least 30% water	1.1A	UN 0113	Explosive (1.1A)	—	—	—	
N	Guanyl nitrosamino guanylyl tetrazeu, containing, by weight, at least 30% water or mixture of alcohol and water	1.1A	UN 0114	Explosive (1.1A)	—	—	—	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c)
						Cargo vessel	Pass- enger vessel	Other requirements
	Gutta percha solution	3.2	UN 1205	Flammable Liquid	II	1,2	1	
	Hafnium metal powder, dry	3.3	UN 1205	Flammable Liquid	II	1,2	1,2	
		4.2	UN 2545	Spontaneously Combustible	II	1	5	
	Hafnium metal powder, wetted, with not less than 25% water (a visible excess of water must be present) mechanically produced, particle size less than 53 microns, or chemically produced, particle size less than 840 microns	4.1	UN 1326	Flammable Solid	II	1,2	5	
	Halogenated irritating liquids, n.o.s.	6.1	UN 1610	Poison, Flammable Liquid (only if flashpoint between 23 and 61 deg C)	I/II	1	5	Stow 'away from' living quarters. If flash- point below 61 deg C, segregation same as for flammable liquids
		6.1	UN 1610	St. Andrews Cross, Flammable Liquid (only if flashpoint between 23 and 61 deg C)	III	1	5	Stow 'away from' living quarters. If flash- point below 61 deg C, segregation same as for flammable liquids
	Hay	4.1	UN 1327	None	III	1,2	1,2	Stow 'away from' animal or vegetable oils
	Helium, compressed	2.2	UN 1046	Nonflammable Gas	-	1,2	1,2	
	Helium, refrigerated liquid	2.2	UN 1963	Nonflammable Gas	-	1,2	1	
	Hemp, dry. See Fibres, vegetable, dry							
	Heptane, and its isomers	3.2	UN 1206	Flammable Liquid	II	1,2	1	
	n-Heptane	3.2	UN 2278	Flammable Liquid	II	1,2	1	
	Hexachloroacetone	6.1	UN 2661	Poison	II	1,3	1	Keep cool
	Hexachlorobenzene	6.1	UN 2729	St. Andrews Cross	III	1,2	1,2	
	Hexachlorobutadiene	6.1	UN 2279	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
	Hexachlorocyclopentadiene	6.1	UN 2646	Poison	I	1	5	Stow 'away from' living quarters
	Hexachlorophene	6.1	UN 2875	St. Andrews Cross	III	1,2	1,2	
	Hexadecyl trichlorosilane	8	UN 1781	Corrosive	II	1	1	Keep dry
	Hexadiene	3.1	UN 2458	Flammable Liquid	II	1,3	5	Keep cool
	Hexaethyl tetraphosphate	6.1	UN 1611	Poison	I/II	1,2	5	Stow 'away from' living quarters
		6.1	UN 1611	St. Andrews Cross	III	1,2	5	Stow 'away from' living quarters
	Hexaethyl tetraphosphate and compressed gas mixture	2.3	UN 1612	Poison Gas	-	1	5	Stow 'away from' living quarters
	Hexafluoroacetone	2.3	UN 2420	Poison Gas	-	1	5	Stow 'away from' living quarters
	Hexafluoroacetone hydrate	6.1	UN 2552	Poison	II	1,2	1	Stow 'away from' living quarters
	Hexafluoroethane	2.2	UN 2193	Nonflammable Gas	-	1,2	1,2	
	Hexafluorophosphoric acid	8	UN 1782	Corrosive	II	1,2	1,2	
	Hexafluoropropylene	2.2	UN 1858	Nonflammable Gas	-	1,2	1,2	
	Hexaldehyde	3.3	UN 1207	Flammable Liquid	III	1,2	1,2	
	Hexamethylenediamine, solid	8	UN 2280	Corrosive	III	1,3	1,3	Keep cool
	Hexamethylenediamine, solution	8	UN 1783	Corrosive, Poison	II	1,2	1,2	
	Hexamethylenedisocyanate	6.1	UN 2281	Poison	II	1,2	1	Keep dry
	Hexamethylenimine	3.2	UN 2493	Flammable Liquid, Corrosive	II	1,2	1	
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane, maximum concentration 52% with inert solid	5.2	UN 2166	Organic Peroxide	II	1	5	
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane, maximum concentration 52% in solution	5.2	UN 2167	Organic Peroxide	II	1	5	
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane, technical pure	5.2	UN 2165	Organic Peroxide	I	1	5	
	Hexamine	4.1	UN 1328	Flammable Solid	III	1,2	1,2	
	Hexane, and its isomers	3.1	UN 1208	Flammable Liquid	II	1,3	5	Keep cool
*N	Hexanitrodiphenylamine	1.1D	UN 0079	Explosive (1.1D), Poison	-	-	-	
N	Hexanitrostilbene	1.1D	UN 0392	Explosive (1.1D)	-	-	-	
	Hexanols	3.3	UN 2282	Flammable Liquid	III	1,2	1,2	
N	Hexatolal, cast	1.1D	UN 0393	Explosive (1.1D)	-	-	-	
	Hex-1-ene	3.1	UN 2370	Flammable Liquid	II	1,3	5	Keep cool
	1-Hexene. See Hex-1-ene							
*N	Hexolite, dry or wetted with less than 15% water, by weight	1.1D	UN 0118	Explosive (1.1D)	-	-	-	
	Hexyl trichlorosilane	8	UN 1784	Corrosive	II	1	1	Keep dry
	Hydrazine, anhydrous or Hydrazine aqueous solutions containing more than 64%, by weight, hydrazine	3.3	UN 2029	Flammable Liquid, Poison, Corrosive	I	1	5	
	Hydrazine hydrate or Hydrazine aqueous solutions with not more than 64%, by weight, hydrazine	8	UN 2030	Corrosive, Poison	II	1,2	5	Under deck permitted only if containing not more than 36%, by weight, hydrazine. Stow 'away from' nitric acids and perch- loric acids not exceeding 50% acid by weight
	Hydrides, metal, n.o.s.	4.3	UN 1409	Dangerous When Wet	I	1,2	5	
	Hydriodic acid, solution	8	UN 1787	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels
	Hydrobromic acid, solution	8	UN 1788	Corrosive	II	1	1	Glass carboys prohibited on passenger ves- sels. Stow 'away from' fluorides
	Hydrocarbon gases, compressed, n.o.s. or Hydrocarbon gases, mix- tures, compressed, n.o.s.	2.1	UN 1964	Flammable Gas	-	1,2	1	
	Hydrocarbon gases, liquefied, n.o.s. or Hydrocarbon gases, mixtures, liquefied, n.o.s.	2.1	UN 1965	Flammable Gas	-	1,2	1	
	Hydrochloric acid, solution	8	UN 1789	Corrosive	II	1	1	Glass carboys prohibited on passenger ves- sels. Stow 'away from' fluorides
	Hydrocyanic acid, anhydrous, stabilized. See Hydrogen cyanide, anhy- drous, stabilized							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Hydrocyanic acid, aqueous solutions, with not more than 20% hydrogen cyanide	6.1	UN 1613	Poison	I	1	5	Stow 'away from' living quarters.
	Hydrofluoric acid and sulphuric acid mixtures	8	UN 1786	Corrosive, Poison	I	1	5	Stow 'away from' fluorides
	Hydrofluoric acid, solution	8	UN 1790	Corrosive, Poison	I/II	1	5	Keep cool
	Hydrofluosilicic acid. See Fluosilicic acid							
	Hydrogen and methane mixtures, compressed	2.1	UN 2034	Flammable Gas	—	1,2	5	
	Hydrogen bromide, anhydrous	2.3	UN 1048	Poison Gas, Corrosive	—	1	5	
	Hydrogen chloride, anhydrous	2.2	UN 1050	Nonflammable Gas, Corrosive	—	1	5	Stow 'away from' foodstuffs and living quarters
	Hydrogen, compressed	2.1	UN 1049	Flammable Gas	—	1,2	5	Stow 'separated from' chlorine, 'away from' living quarters
	Hydrogen cyanide, anhydrous, stabilized	6.1	UN 1051	Poison, Flammable Liquid	I	1	5	Shade from radiant heat. Segregation same as for flammable liquids
	Hydrogen cyanide, anhydrous, stabilized, absorbed in a porous inert material	6.1	UN 1614	Poison	I	1	5	Shade from radiant heat. Stow 'away from' living quarters
	Hydrogen fluoride, anhydrous	2.3	UN 1052	Poison Gas, Corrosive	—	1	5	
	Hydrogen iodide, anhydrous	2.2	UN 2197	Nonflammable Gas, Corrosive	—	1	5	Stow 'away from' living quarters
	Hydrogen iodide, solution. See Hydriodic acid solution							
	Hydrogen peroxide, aqueous solutions with not less than 8% but less than 20% hydrogen peroxide (stabilized as necessary)	5.1	UN 2984	Oxidizer	III	1,2	1	Shade from radiant heat. Stow 'away from' powdered metals and 'separated from' permanganates
	Hydrogen peroxide, aqueous solutions with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)	5.1	UN 2014	Oxidizer, Corrosive	II	1	5	Shade from radiant heat. Stow 'away from' powdered metals and 'separated from' permanganates
	Hydrogen peroxide, stabilized, or Hydrogen peroxide, aqueous solutions, stabilized, with more than 60% hydrogen peroxide	5.1	UN 2015	Oxidizer, Corrosive	I	1	5	Shade from radiant heat. Stow 'away from' powdered metals and 'separated from' permanganates
	Hydrogen, refrigerated liquid	2.1	UN 1966	Flammable Gas	—	5	5	
	Hydrogen selenide, anhydrous	2.3	UN 2202	Poison Gas, Flammable Gas	—	1	5	Stow 'away from' living quarters
	Hydrogen sulphide	2.1	UN 1053	Flammable Gas, Poison Gas	—	1	5	Stow 'away from' foodstuffs and living quarters
	Hydroquinone	6.1	UN 2662	St. Andrews Cross	III	1,2	1,2	
	Hydroxylfluoroc acid. See Fluosilicic acid							
	Hydroxylamine sulphate	8	UN 2865	Corrosive	III	1,2	1,2	Keep dry
	Hypochlorite, solutions with more than 5% available chlorine	8	UN 1791	Corrosive	II/III	1,2	1	Glass carboys in hampers prohibited under deck
	Igniter for aircraft thrust device for assisted take-off	4.1	UN 2792	Flammable Solid	II	1,2	5	
	Igniters	1.4 G	UN 0325	Explosive (1.4G)	—	1,3	1,3	
	Igniters	1.1G	UN 0121	Explosive (1.1G)	—	—	—	
	Igniters	1.2G	UN 0314	Explosive (1.2G)	—	—	—	
	Igniters	1.3G	UN 0315	Explosive (1.3G)	—	—	—	
	3,3'-Iminobispropylamine	8	UN 2269	Corrosive	III	1,2	1,2	
	Inflammable gas in lighters. See Lighters, for cigars and cigarettes, etc. with flammable gas							
	Inflammable liquid preparations, n.o.s. See Flammable liquid preparations, n.o.s.							
	Inflammable liquids, corrosive, n.o.s. See Flammable liquids, corrosive, n.o.s.							
	Inflammable liquids, n.o.s. See Flammable liquids, n.o.s.							
	Inflammable liquids, poisonous, n.o.s. See Flammable liquids, poisonous, n.o.s.							
	Inflammable solids, corrosive, n.o.s. See Flammable solids, corrosive, n.o.s.							
	Inflammable solids, n.o.s. See Flammable solids, n.o.s.							
	Inflammable solids, poisonous, n.o.s. See Flammable solids, poisonous, n.o.s.							
	Ink, printers	3.2	UN 1210	Flammable Liquid	II	1,2	1,2	
		3.3	UN 1210	Flammable Liquid	III	1,2	1,2	
	Insecticide gases, non-toxic, n.o.s.	2.1	UN 1968	Flammable Gas	—	1,2	1	
		2.2	UN 1968	Nonflammable Gas	—	1,3	1,3	
	Insecticide gases, toxic, n.o.s.	2.3	UN 1967	Poison Gas	—	1	5	Shade from radiant heat
	Iodine monochloride	8	UN 1782	Corrosive	II	1	5	Keep dry
	Iodine pentafluoride	5.1	UN 2495	Oxidizer, Poison	I	1	5	Keep dry
	2-Iodobutane	3.2	UN 2390	Flammable Liquid	II	1,2	1	
	Iodomethylpropanes	3.2	UN 2391	Flammable Liquid	II	1,2	1	
	Iodopropanes	3.2	UN 2392	Flammable Liquid	II	1,2	1	
		3.3	UN 2392	Flammable Liquid	II	1,2	1,2	
	Iron carbonyl. See Iron pentacarbonyl							
	Iron chloride. See Ferric chloride, anhydrous							
	Iron oxide, spent	4.2	UN 1376	Spontaneously Combustible	III	1,2	5	
	Iron pentacarbonyl	6.1	UN 1994	Poison, Flammable Liquid	I	1	5	Segregation same as for flammable liquids. Shade from radiant heat
	Iron sesquichloride. See Ferric chloride							
	Iron sponge, spent. See Iron oxide, spent							
	Isobutane or Isobutane mixtures	2.1	UN 1969	Flammable Gas	—	1,2	1	
	Isobutanol	3.3	UN 1212	Flammable Liquid	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Isobutyl acetate	3.2	UN 1213	Flammable Liquid	II	1,2	1	
	Isobutyl acrylate, <i>inhibited</i>	3.3	UN 2527	Flammable Liquid	II	1,2	1,2	
	Isobutyl alcohol. <i>See</i> Isobutanol							
	Isobutyl aldehyde. <i>See</i> Isobutyraldehyde							
	Isobutylamine	3.2	UN 1214	Flammable Liquid	II	1,2	1	
	Isobutylene	2.1	UN 1055	Flammable Gas	—	1,2	1	
	Isobutyl formate	3.2	UN 2393	Flammable Liquid	II	1,2	1	
	Isobutyl isobutyrate	3.3	UN 2528	Flammable Liquid	III	1,2	1,2	
	Isobutyl isocyanate	3.2	UN 2486	Flammable Liquid, Poison	II	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Isobutyl methacrylate, <i>inhibited</i>	3.3	UN 2283	Flammable Liquid	III	1,2	1,2	
	Isobutyl methyl ketone peroxide, maximum concentration 62% in solution	5.2	UN 2126	Organic Peroxide	I	1	5	
	Isobutyl propionate	3.2	UN 2394	Flammable Liquid	II	1,2	1	Keep cool
	Isobutyraldehyde	3.1	UN 2045	Flammable Liquid	II	1,3	5	
	Isobutyric acid	3.3	UN 2529	Flammable Liquid	III	1,2	1,2	
	Isobutyric anhydride	3.3	UN 2530	Flammable Liquid	III	1,2	1,2	Keep cool
	Isobutyronitrile	3.2	UN 2284	Flammable Liquid, Poison	II	1,3	5	
	Isobutyl chloride	3.2	UN 2395	Flammable Liquid, Poison	II	1	1	Keep dry. Shade from radiant heat
	Isobutyl peroxide, maximum concentration 32% in solution	5.2	UN 2182	Organic Peroxide	II	1	5	Control temperature -20 deg C. Emergency temperature -10 deg C
	Isocyanates, n.o.s. or Isocyanate solutions, n.o.s., boiling point not less than 300 deg C	6.1	UN 2207	St. Andrews Cross	III	1,2	1,2	Stow 'away from' sources of heat
	Isocyanates, n.o.s. or Isocyanate solutions, n.o.s., flashpoint not less than 23 deg C, boiling point less than 300 deg C	6.1	UN 2206	Poison, Flammable Liquid (only if flashpoint is below 61 deg C)	II	1,3	1	Shade from radiant heat. Segregation same as for flammable liquids if flashpoint below 61 deg C
	Isocyanates, n.o.s. or Isocyanate solutions, n.o.s., flashpoint not less than -18 deg C but less than 23 deg C	3.2	UN 2478	Flammable Liquid, Poison	II	1	5	Stow 'away from' sources of heat. Keep cool.
	Isocyanates, n.o.s. or Isocyanate solutions, n.o.s., flashpoint less than -18 deg C	3.1	UN 2478	Flammable Liquid, Poison	II	1	5	Shade from radiant heat. Stow 'away from' living quarters
	Isocyanatobenzotrifluorides	6.1	UN 2285	Poison	II	1,2	1	Keep cool
	Isodecane. <i>See</i> Pentanes	3.1	UN 2287	Flammable Liquid	II	1,3	5	Keep cool
	Isododecane. <i>See</i> Pentanes	3.1	UN 2288	Flammable Liquid	II	1,3	5	Keep cool
	Isododecyl peroxide. <i>See</i> Di-(3,3,5-trimethylhexanoyl) peroxide	3.2	UN 1216	Flammable Liquid	II	1,2	1	
	Isododecyl acetate	3.1	UN 2371	Flammable Liquid	I	1,3	5	Keep cool
	Isododecyl alcohol. <i>See</i> Isopropanol	8	UN 2289	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Isododecylamine	6.1	UN 2290	Poison	II	1,2	1	Stow 'away from' living quarters
	Isododecylbenzene	3.1	UN 1218	Flammable Liquid	I	1,3	5	Keep cool
	Isododecyl butyrate	3.2	UN 1219	Flammable Liquid	I	1,2	1	
	Isododecyl acetate	3.2	UN 2403	Flammable Liquid	II	1,2	1	
	Isododecylbenzene	3.3	UN 2303	Flammable Liquid	II	1,2	1,2	
	Isododecyl acetate	3.2	UN 1220	Flammable Liquid	II	1,2	1	Glass carboys in hampers prohibited under deck
	Isopropyl acid phosphatic	8	UN 1793	Corrosive	III	1,2	1,2	
	Isopropyl alcohol. <i>See</i> Isopropanol	3.1	UN 1221	Flammable Liquid	I	1,3	5	Keep cool
	Isopropylamine	3.3	UN 1918	Flammable Liquid	II	1,2	1,2	
	Isopropylbenzene	3.3	UN 2405	Flammable Liquid	II	1,2	1,2	
	Isopropyl butyrate	3.3	UN 2947	Flammable Liquid	III	1,2	1,2	
	Isopropyl chloroacetate	3.2	UN 2407	Flammable Liquid, Corrosive	II	1,2	1	
	Isopropyl chloroformate	3.3	UN 2934	Flammable Liquid	III	1,2	1,2	
	Isopropyl-2-chloropropionate	3.2	UN 2406	Flammable Liquid	II	1,2	1	Keep cool.
	Isopropyl isobutyrate	3.2	UN 2483	Flammable Liquid, Poison	I	1	5	
	Isopropyl isocyanate	3.2	UN 1222	Flammable Liquid	II	1,2	1	
	Isopropyl nitrate	3.2	UN 2409	Flammable Liquid	II	1,2	1	
	Isopropyl propionate	4.1	UN 2907	Flammable Solid	II	1,2	5	
	Isosorbide dinitrate mixture with not less than 60% lactose, mannose, starch, or calcium hydrogen phosphate	1.1D	UN 0124	Explosive (1.1D)	—	—	—	
N	Jet perforating guns, charged, oil well, without detonator							
	Jute, dry. <i>See</i> Fibres, vegetable, dry							
	Kapok, dry. <i>See</i> Fibres, vegetable, dry							
	Kerosene	3.3	UN 1223	Flammable Liquid	II	1,2	1,2	Keep cool
	Ketones, liquid, n.o.s.	3.1	UN 1224	Flammable Liquid	I/II	1,3	5	
		3.2	UN 1224	Flammable Liquid	II	1,2	1	
		3.3	UN 1224	Flammable Liquid	II	1,2	1,2	
		2.2	UN 1056	Nonflammable Gas	—	1,2	1	
		2.2	UN 1970	Nonflammable Gas	—	1,2	1	
	Krypton, compressed							
	Krypton, refrigerated liquid							
	Lacquer base. <i>See</i> Paints, etc							
	Lacquer chips. <i>See</i> Nitrocellulose, wetted with, by weight, more than 40% flammable liquids							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pass- enger vessel	(c) Other requirements
	Lacquers. See Paints, etc.							
	Lauroyl peroxide. See Di-lauroyl peroxide							
	Lead acetate	6.1	UN 1616	St. Andrews Cross	III	1,2	1,2	
	Lead arsenates	6.1	UN 1617	Poison	II	1,2	1,2	
	Lead arsenites	6.1	UN 1618	Poison	II	1,2	1,2	
	Lead azide, containing, by weight, at least 20% water or mixture of alcohol and water	1.1A	UN 0129	Explosive (1.1A)				
N	Lead compounds, soluble, n.o.s.	6.1	UN 2391	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Lead cyanide	6.1	UN 1620	Poison	II	1,2	1,2	Stow 'away from' foodstuffs
	Lead dioxide	5.1	UN 1872	Oxidizer	III	1,2	1,2	
	Lead dross. See Lead sulphate, with more than 3% free acid							
	Lead nitrate	5.1	UN 1469	Oxidizer, Poison	II	1,2	1,2	
	Lead perchlorate	5.1	UN 1470	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' powdered metals
	Lead peroxide. See Lead dioxide							
	Lead phosphite dibasic	4.1	UN 2989	Flammable Solid	II	1,2	1	Stow 'away from' foodstuffs
N	Lead styphate, containing, by weight, at least 20% water or mixture of alcohol and water	1.1A	UN 0130	Explosive (1.1A)				
	Lead sulphate, with more than 3% free acid	8	UN 1794	Corrosive	II	1,2	1,2	
	Life-rafts, inflatable	9		None		1,2	1,2	
	Lighter fuels, cigar and cigarette	3.2	UN 1226	Flammable Liquid	II	1,2	1	
	Lighters for cigars and cigarettes, etc., with flammable gas	2.1	UN 1057	Flammable Gas		1	1	
	Lighters for cigars and cigarettes, etc., with fuel	3.2	UN 1226	Flammable Liquid	II	1,2	1	
	Lighters, fuse	1.4 S	UN 0131	None. Package to be marked '1.4 S'		1,3	1,3	
	Liquefied gases, n.o.s. See Compressed or Liquefied gases, n.o.s.							
	Liquefied non-flammable gases charged with nitrogen, carbon dioxide or air	2.2	UN 1058	Nonflammable Gas		1,2	1,2	
	Lithium alkyls	4.2	UN 2445	Spontaneously Combustible	I	1	1	
	Lithium aluminium hydride	4.3	UN 1410	Dangerous When Wet	I	1,2	5	
	Lithium aluminium hydride, etheral	4.3	UN 1411	Dangerous When Wet, Flammable Liquid	I	1	5	
	Lithium amide	4.3	UN 1412	Dangerous When Wet	II	1,2	5	
	Lithium borohydride	4.3	UN 1413	Dangerous When Wet	I	1,2	5	
	Lithium ferrosilicon	4.3	UN 2830	Dangerous When Wet	II	1,2	5	
	Lithium hydride	4.3	UN 1414	Dangerous When Wet	I	1,2	5	
	Lithium hydride, fused solid	4.3	UN 2805	Dangerous When Wet	II	1,2	5	
	Lithium hydroxide monohydrate	8	UN 2680	Corrosive	II	1,2	1,2	Keep dry
	Lithium hydroxide, solution	8	UN 2679	Corrosive	II	1,2	1,2	Glass carboys not permitted under deck on passenger vessels
	Lithium hypochlorite, dry or Lithium hypochlorite mixtures containing more than 39% available chlorine (8.8% available oxygen)	5.1	UN 1471	Oxidizer	II	1,2	1,2	
	Lithium...metal	4.3	UN 1415	Dangerous When Wet	II	1,2	5	
	Lithium nitrate	5.1	UN 2722	Oxidizer	III	1,2	1,2	
	Lithium nitride	4.3	UN 2806	Dangerous When Wet	I	1,2	5	
	Lithium peroxide	5.1	UN 1472	Oxidizer	II	1,2	1,2	Keep dry
	Lithium silicon	4.3	UN 1417	Dangerous When Wet	II	1,2	1,2	
	London purple	6.1	UN 1621	Poison	II	1,2	1,2	
	Lye. See Sodium hydroxide							
	Magnesium aluminium phosphide	4.3	UN 1419	Dangerous When Wet	I	1,2	5	When stowed under deck, stow in a mechanically ventilated space
	Magnesium arsenate	6.1	UN 1622	Poison	II	1,2	1,2	
	Magnesium bromate	5.1	UN 1473	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Magnesium chlorate	5.1	UN 2723	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' finely powdered metals
	Magnesium diamide	4.2	UN 2004	Spontaneously Combustible	II	1	1	
	Magnesium diphenyl	4.2	UN 2005	Spontaneously Combustible	I	1	1	
	Magnesium granules, coated containing more than 30% magnesium, particle size not less than 149 microns	4.3	UN 2950	Dangerous When Wet	III	1,2	1,2	
	Magnesium hydride	4.3	UN 2010	Dangerous When Wet	I	1,2	5	
	Magnesium nitrate	5.1	UN 1474	Oxidizer	III	1,2	1,2	
	Magnesium or Magnesium alloys with more than 50% magnesium, in pellets, turnings or ribbon	4.1	UN 1869	Flammable Solid	III	1,2	1,2	Stow 'away from' liquid halogenated hydrocarbons
	Magnesium perchlorate	5.1	UN 1475	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Magnesium peroxide	5.1	UN 1476	Oxidizer	II	1,2	1,2	Keep dry
	Magnesium phosphide	4.3	UN 2011	Dangerous When Wet, Poison	I	1,2	5	When stowed under deck, stow in a mechanically ventilated space
	Magnesium powder or Magnesium alloys, powder containing more than 50% magnesium, non-pyrophoric	4.3	UN 1418	Dangerous When Wet	II	1,2	1,2	Stow 'away from' liquid halogenated hydrocarbons
	Magnesium silicide	4.3	UN 2624	Dangerous When Wet	II	1,2	1	
	Magnesium silicofluoride	6.1	UN 2853	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Maleic anhydride, solid or molten	8	UN 2215	None. Package to be marked 'Class 8'	III	1,2	1,2	Stow 'away from' foodstuffs

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Malononitrile	6.1	UN 2647	Poison	II	1,3	1,3	Keep cool. Stow 'away from' living quarters
	• Maneb, or Maneb preparation(s), stabilized against self-heating	4.3	UN 2968	Dangerous When Wet	III	1,2	1,2	Stow 'away from' acids, living quarters and foodstuffs
	• Maneb, or manebe preparation(s) with not less than 60% manebe	4.2	UN 2210	Spontaneously Combustible, Dangerous When Wet	III	1,2	1,2	Stow 'away from' acids, living quarters and foodstuffs. Keep cool and dry
	Manganese ethylene-bis-dithiocarbamate. See Maneb							
	Manganese nitrate	5.1	UN 2724	Oxidizer	III	1,2	1,2	
	Manganese resinate	4.1	UN 1330	Flammable Solid	III	1,2	1,2	
N	Mannitol hexanitrate, containing, by weight, at least 40% water or mixture of alcohol and water	1.1D	UN 0133	Explosive (1.1D)	—	—	—	
	Matches, fusee	4.1	UN 2254	Flammable Solid	III	1,2	1,2	
	Matches, safety	4.1	UN 1944	Flammable Solid	III	1,2	1,2	
	Matches, strike anywhere	4.1	UN 1331	Flammable Solid	III	1,2	1	
	Matches, wax 'vesta'	4.1	UN 1945	Flammable Solid	III	1,2	1	
N	Medicines, n.o.s. to be classified and labeled according to the principle hazardous constituent	—	UN 1851		—			
	MEKP. See Ethyl methyl ketone peroxide							
	p-Menthane hydroperoxide, technical pure	5.2	UN 2125	Organic Peroxide	I	1	5	
	• Mercaptans, liquid, n.o.s. or Mercaptan mixtures, liquid, n.o.s.	3.1	UN 1228	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1228	Flammable Liquid	II	1,2	1	
		3.3	UN 1228	Flammable Liquid	II	1,2	1,2	
	Mercuric acetate. See Mercury acetate							
	Mercuric arsenate	6.1	UN 1623	Poison	II	1,2	1,2	
	Mercuric bromide. See Mercury bromides							
	Mercuric chloride	6.1	UN 1624	Poison	II	1,2	1,2	
	Mercuric cyanide. See Mercury cyanide							
	Mercuric nitrate	6.1	UN 1625	Poison	II	1,2	1,2	
	Mercuric oxycyanide. See Mercury oxycyanide							
	Mercuric potassium cyanide	6.1	UN 1626	Poison	I	1,2	1,2	Stow 'away from' acids
	Mercuric sulphate	6.1	UN 1645	Poison	II	1,2	1,2	
	Mercuriol. See Mercury nucleate							
	Mercurous acetate. See Mercury acetate							
	Mercurous bromide. See Mercury bromides							
	Mercurous nitrate	6.1	UN 1627	Poison	II	1,2	1,2	
	Mercurous sulphate	6.1	UN 1628	Poison	II	1,2	1,2	
	Mercury acetate	6.1	UN 1629	Poison	II	1,2	1,2	
	Mercury ammonium chloride	6.1	UN 1630	Poison	II	1,2	1,2	
	• Mercury based pesticides, liquid, flammable, toxic, n.o.s., flashpoint below 23 deg C	3.2	UN 2778	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	• Mercury based pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3011	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3011	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3011	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	• Mercury based pesticides, liquid, toxic, n.o.s.	6.1	UN 3012	Poison	I	1	1	
		6.1	UN 3012	Poison	II	1,2	1	
		6.1	UN 3012	St. Andrews Cross	III	1,2	1,2	
	• Mercury based pesticides, solid, toxic, n.o.s.	6.1	UN 2777	Poison	I/II	1,2	1,2	
		6.1	UN 2777	St. Andrews Cross	III	1,2	1,2	
	Mercury benzoate	6.1	UN 1631	Poison	II	1,2	1,2	
	Mercury bisulphate	6.1	UN 1633	Poison	II	1,2	1,2	
	Mercury bromides	6.1	UN 1634	Poison	II	1,2	1,2	
	Mercury compounds, liquid, n.o.s.	6.1	UN 2024	Poison	I/II	1,2	1	
		6.1	UN 2024	St. Andrews Cross	III	1,2	1	
	Mercury compounds, solid, n.o.s.	6.1	UN 2025	Poison	I/II	1,2	1,2	
		6.1	UN 2025	St. Andrews Cross	III	1,2	1,2	
	Mercury cyanide	6.1	UN 1636	Poison	II	1,2	1,2	Stow 'away from' living quarters and acids
N	Mercury fulminate, containing, by weight, at least 20% water or mixture of alcohol and water	1.1A	UN 0135	Explosive (1.1A)	—	—	—	
	Mercury gluconate	6.1	UN 1637	Poison	II	1,2	1,2	
	Mercury iodide	6.1	UN 1638	Poison	II	1,2	1,2	
	Mercury, metal	8	UN 2809	Corrosive	III	1,2	1	Stow 'away from' living quarters and azides
	Mercury nucleate	6.1	UN 1639	Poison	II	1,2	1,2	
	Mercury oleate	6.1	UN 1640	Poison	II	1,2	1,2	
	Mercury oxide	6.1	UN 1641	Poison	II	1,2	1,2	
	Mercury oxycyanide	6.1	UN 1642	Poison	II	1,2	1,2	Stow 'away from' acids
	Mercury potassium iodide	6.1	UN 1643	Poison	II	1,2	1,2	
	Mercury salicylate	6.1	UN 1644	Poison	II	1,2	1,2	
	Mercury thiocyanate	6.1	UN 1646	Poison	II	1,2	1,2	
	Mesityl oxide	3.3	UN 1229	Flammable Liquid	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	* Metal alkyls, n.o.s.	4.2	UN 2003	Spontaneously Combustible	I	1	5	
	Metaldhyde	4.1	UN 1332	Flammable Solid	III	1,2	1,2	
	Methacraldehyde	3.2	UN 2396	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Methacrylic acid, inhibited	8	UN 2531	Corrosive	III	1	1	Keep cool. Glass carboys prohibited on pas- senger vessels
	Methallyl alcohol	3.3	UN 2614	Flammable Liquid	II	1,2	1,2	
	* Methane or Natural gases with a high methane content, compressed	2.1	UN 1971	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	* Methane or Natural gases with a high methane content, refrigerated liquid	2.1	UN 1972	Flammable Gas	--	1	5	Stow 'away from' living quarters
	Methanol	3.2	UN 1230	Flammable Liquid, Poison	II	1,2	1	
	Methoxymethyl isocyanate	3.2	UN 2605	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	4-Methoxy-4-methylpentan-2-one	3.3	UN 2293	Flammable Liquid	III	1,2	1,2	
	Methyl acetate	3.2	UN 1231	Flammable Liquid	II	1,2	1	
	Methyl acetone	3.2	UN 1232	Flammable Liquid	II	1,2	1	
	Methyl acetylene and propadiene mixture, stabilized	2.1	UN 1060	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	beta-Methyl acrolein. See Crotonaldehyde, inhibited							
	Methyl acrylate, inhibited	3.2	UN 1919	Flammable Liquid	II	1,2	1	
	Methylal	3.1	UN 1234	Flammable Liquid	II	1,3	5	Keep cool
	Methyl alcohol. See Methanol							
	Methyl allyl chloride	3.1	UN 2554	Flammable Liquid	II	1,3	5	Keep cool
	Methyl aluminium sesquibromide	4.2	UN 1926	Spontaneously Combustible	I	1	1	
	Methyl aluminium sesquichloride	4.2	UN 1927	Spontaneously Combustible	I	1	1	
	Methylamine, anhydrous	2.1	UN 1061	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Methylamine, aqueous solution	3.1	UN 1235	Flammable Liquid	II	1,3	5	Keep cool. Stow 'away from' mercury and its compounds
	Methylamyl acetate	3.3	UN 1233	Flammable Liquid	III	1,2	1,2	
	Methyl amyl ketone. See Amyl methyl ketone							
	N-Methylaniline	6.1	UN 2284	St. Andrews Cross	III	1,2	1,2	
	Methylbenzoate	6.1	UN 2938	St. Andrews Cross	III	1,2	1,2	
	* alpha-Methylbenzyl alcohol	6.1	UN 2937	St. Andrews Cross	III	1,2	1,2	
	* Methyl bromide	2.3	UN 1062	Poison Gas	--	1,2	5	Under deck stowage permitted only if an in- dicating substance such as chloropicrin has been added
	Methyl bromide and chloropicrin, mixtures. See Chloropicrin and methyl bromide, mixtures							
	Methyl bromide and ethylene dibromide mixtures, liquid	6.1	UN 1647	Poison	I	1	1	Stow 'away from' living quarters
	Methyl bromoacetate	6.1	UN 2643	Poison	II	1	5	Keep cool. Stow 'away from' living quarters
	2-Methyl-1,3-butadiene. See Isoprene							
	3-Methyl butan-2-one	3.2	UN 2397	Flammable Liquid	II	1,2	1	
	3-Methyl-1-butene	3.2	UN 2561	Flammable Liquid	II	1,2	1	
	2-Methyl-1-butene	3.1	UN 2459	Flammable Liquid	I	1,3	5	Keep cool
	2-Methyl-2-butene	3.1	UN 2460	Flammable Liquid	II	1,3	5	Keep cool
	* N-Methylbutylamine	3.2	UN 2945	Flammable Liquid	II	1,2	1	
	Methyl-tert-butyl ether	3.2	UN 2398	Flammable Liquid	II	1,2	1	
	Methyl butyrate	3.2	UN 1237	Flammable Liquid	II	1,2	1	
	* Methyl chloride	2.3	UN 1063	Poison Gas, Flammable Gas	--	1,2	5	
	Methyl chloride and chloropicrin, mixtures. See Chloropicrin and methyl chloride, mixtures							
	* Methyl chloride and methylene chloride, mixtures	2.1	UN 1912	Flammable Gas	--	1,2	5	
	Methyl chloroacetate	3.3	UN 2295	Flammable Liquid	II	1,2	1,2	
	Methyl chlorocarbonate. See Methyl chloroformate							
	Methyl chloroformate	3.2	UN 1238	Flammable Liquid, Poison, Corrosive	I	1,2	1	
	Methylchloromethyl ether	3.1	UN 1239	Flammable Liquid	II	1	5	Keep cool
	* Methyl-2-chloropropionate	3.3	UN 2933	Flammable Liquid	III	1,2	1,2	
	Methyl chlorosilane	3.2	UN 2534	Flammable Liquid, Corrosive	I	1,2	1	
	Methyl cyanide	3.2	UN 1648	Flammable Liquid, Poison	II	1,2	1	
	Methyl cyclohexane	3.2	UN 2296	Flammable Liquid	II	1,2	1	
	Methyl cyclohexanol	3.3	UN 2617	Flammable Liquid	III	1,2	1,2	
	Methyl cyclohexanone	3.3	UN 2297	Flammable Liquid	III	1,2	1,2	
	Methyl cyclopentane	3.1	UN 2298	Flammable Liquid	II	1,2	1	
	Methyl dichloroacetate	6.1	UN 2299	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
	Methyldichlorosilane	3.2	UN 1242	Flammable Liquid, Corrosive	I	1,2	1	
	Methylene chloride. See Dichloromethane							
	* Methylene di (phenylene isocyanate). See Diphenylmethane diisocyan- ate							
	Methyl ethyl ether. See Ethyl methyl ether							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Methyl ethyl ketone peroxide(s). See Ethyl methyl ketone peroxide							
	Methyl ethyl ketone. See Ethyl methyl ketone							
	2-Methyl-5-ethylpyridine	6.1	UN 2300	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
	Methyl fluoride	2.1	UN 2454	Flammable Gas	I	1,2	5	
	Methyl formate	3.1	UN 1243	Flammable Liquid	I	1,3	5	Keep cool
	2-Methylfuran	3.1	UN 2301	Flammable Liquid	II	1,3	5	Keep cool
	5-Methylhexan-2-one	3.3	UN 2302	Flammable Liquid	III	1,2	1,2	
	Methylhydrazine	3.2	UN 1244	Flammable Liquid, Corrosive	I	1,2	1	
	Methyl iodide	6.1	UN 2644	Poison	II	1,3	1,3	Keep cool. Stow 'away from' living quarters
	Methyl isobutyl carbinol	3.3	UN 2053	Flammable Liquid	III	1,2	1,2	
	Methyl isobutyl ketone	3.2	UN 1245	Flammable Liquid	II	1,2	1	
	Methyl isocyanate or Methyl isocyanate solutions	3.2	UN 2480	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Methyl isopropenyl ketone, inhibited	3.2	UN 1246	Flammable Liquid	II	1,2	1	
	Methyl isothiocyanate	3.2	UN 2477	Flammable Liquid, Poison	II	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Methylisovalerate	3.2	UN 2400	Flammable Liquid	II	1,2	1	
	Methyl magnesium bromide, in ethyl ether	4.2	UN 1928	Spontaneously Combustible	I	1	5	
	Methylmercaptan	2.1	UN 1064	Flammable Gas	—	1,2	1	
	Methyl methacrylate, monomer, inhibited	3.2	UN 1247	Flammable Liquid	II	1,2	1	
	Methylmorpholine	3.2	UN 2535	Flammable Liquid, Corrosive	II	1,2	1	
		3.3	UN 2535	Flammable Liquid, Corrosive	II	1,2	1,2	
	Methyl nitrite - Carriage Forbidden	3.2	UN 2606	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Methyl orthosilicate	3.1	UN 2461	Flammable Liquid	II	1,3	5	Keep cool
	Methylpentadiene	3.1	UN 2462	Flammable Liquid	II	1,3	5	Keep cool
	Methylpentanes	3.3	UN 2560	Flammable Liquid	II	1,2	1,2	
	2-Methylpentan-2-ol	3.3	UN 2437	Flammable Liquid, Corrosive	II	1	1	
	Methylphenyldichlorosilane	3.2	UN 2399	Flammable Liquid	II	1,2	1	
	1-Methylpiperidine	3.2	UN 1248	Flammable Liquid	II	1,2	1	
	Methyl propionate	3.1	UN 2612	Flammable Liquid	II	1,3	5	Keep cool
	Methyl propyl ether	3.2	UN 1249	Flammable Liquid	II	1,2	1	
	Methyl propyl ketone							
	Methyl sulphide. See Dimethyl sulfide	3.2	UN 2536	Flammable Liquid	II	1,2	1	
	Methyltetrahydrofuran	6.1	UN 2533	St. Andrews Cross	III	1,2	1,2	
	Methyl trichloroacetate	3.2	UN 1250	Flammable Liquid, Corrosive	II	1,2	1	
	Methyltrichlorosilane	3.3	UN 2367	Flammable Liquid	III	1,2	1,2	
	alpha-Methyl valeraldehyde	3.2	UN 1251	Flammable Liquid	II	1,2	1	
	Methyl vinyl ketone	1.1D	UN 0137	Explosive (1.1D)	—	—	—	
N	Mines, with bursting charge	1.2D	UN 0138	Explosive (1.2D)	—	—	—	
N	Mines, with bursting charge	1.1F	UN 0136	Explosive (1.1F)	—	—	—	
N	Mines, with bursting charge	1.2F	UN 0294	Explosive (1.2F)	—	—	—	
	Mixed acid, spent. See Acid mixtures, spent, nitrating							
	Molybdenum pentachloride	8	UN 2508	Corrosive	III	1	1	Keep dry. Glass carboys prohibited on pas- senger vessels
	Monochlorodifluoromethane. See Chlorodifluoromethane							
	Monochloropentafluoroethane. See Chloropentafluoroethane							
	Monochlorotetrafluoroethane. See Chlorotetrafluoroethane							
	Monochlorotrifluoromethane. See Chlorotrifluoromethane							
	Monoethanolamine. See Ethanolamine and solutions thereof.							
	Monoethylamine. See Ethylamine							
	Monomethylamine, anhydrous. See Methylamine, anhydrous							
	Monomethylamine, aqueous solution. See Methylamine, aqueous so- lution							
	Mononitrotoluidines	6.1	UN 2660	St. Andrews Cross	III	1,2	1,2	
	Monopropylamine	3.1	UN 1277	Flammable Liquid	II	1,2	5	
	Morpholine	3.3	UN 2054	Flammable Liquid	II	1,2	1,2	
	Motor fuel anti-knock mixtures	6.1	UN 1649	Poison, Flammable Liquid (only if flashpoint below 61 deg C)	I	1	5	If flashpoint below 61 deg C segregation same as for flammable liquids. Stow 'away from' living quarters
	Motor fuel, n.o.s.	3.1	(UN 1203)	Flammable Liquid	II	1,3	5	Keep cool
	Motor spirit. See Gasoline							
	Muriatic acid. See Hydrochloric acid	4.1	UN 1334	Flammable Solid	III	1,2	1,2	
	Naphthalene, crude or refined	3.2	UN 1255	Flammable Liquid	II	1,2	1	
	Naphtha, petroleum	3.2	UN 1256	Flammable Liquid	II	1,2	1	
	Naphtha, solvent	6.1	UN 2077	St. Andrews Cross	III	1,2	1,2	
	Naphthylamine (alpha)							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Naphthylamine (beta)	6.1	UN 1650	Poison	II	1,2	1,2	
	alpha-Naphthylthiourea	6.1	UN 1651	Poison	II	1,2	1,2	
	Naphthylurea	6.1	UN 1652	Poison	II	1,2	1,2	
	Naphthalene, molten	4.1	UN 2304	Flammable Solid	III	1	1	
	Natural gases with a high methane content. See Methane or natural gases, etc.							
	Natural gasoline. See Casinghead gasoline							
	Neohexane. See Dimethyl butane							
	Neon, compressed	2.2	UN 1065	Nonflammable Gas	-	1,2	1,2	
	Neon, refrigerated liquid	2.2	UN 1913	Nonflammable Gas	-	1,2	1	
	Nickel carbonyl	6.1	UN 1259	Poison, Flammable Liquid	I	1	5	Keep cool. Prohibited on any ship carrying explosives except explosives in Division 1.4, Compatibility Group S. Shade from radiant heat. Segregation same as for flammable liquids
	Nickel catalyst, dry precipitated on a carrier with a special activator	4.2	UN 2881	Spontaneously Combustible	I	1,2	1	
	Nickel catalyst, wetted with not less than 40% water or other suitable liquid, by weight, finely divided, activated, or spent	4.2	UN 1378	Spontaneously Combustible	II	1,2	1	
	Nickel cyanide	6.1	UN 1653	Poison	II	1,2	1,2	
	Nickel nitrate	5.1	UN 2725	Oxidizer	III	1,2	1,2	
	Nickel nitrite	5.1	UN 2726	Oxidizer	III	1,2	1,2	Stow 'separated from' ammonium compounds and cyanides and 'away from' foodstuffs
	Nicotine (and salts of), liquid	6.1	UN 1654	Poison	I	1	1	
		6.1	UN 1654	Poison	II	1,2	1	
		6.1	UN 1654	St. Andrews Cross	III	1,2	1,2	
	Nicotine (and salts of), solid	6.1	UN 1654	Poison	I/II	1,2	1,2	
		6.1	UN 1654	St. Andrews Cross	III	1,2	1,2	
	Nicotine compounds, n.o.s. or Nicotine preparations, n.o.s.	6.1	UN 1655	Poison	I/II	1,2	1,2	
		6.1	UN 1655	St. Andrews Cross	III	1,2	1,2	
	Nicotine hydrochloride, or Nicotine hydrochloride solutions	6.1	UN 1656	Poison	II	1,2	1,2	
	Nicotine salicylate	6.1	UN 1657	Poison	II	1,2	1,2	
	Nicotine sulphate, solid or solution	6.1	UN 1658	Poison	II	1,2	1,2	
	Nicotine tartrate	6.1	UN 1659	Poison	II	1,2	1,2	
	Nitrate of soda and potash, mixture. See Sodium nitrate and potash, mixture							
	Nitrates, inorganic, n.o.s.	5.1	UN 1477	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Nitrating acid, mixtures	8	UN 1796	Corrosive, Oxidizer (not required if nitric acid content not more than 50%)	I/II	1	5	Stow 'away from' fluorides
	Nitric acid, other than red fuming, all concentrations	8	UN 2031	Corrosive	I/II	1	5	Stow 'separated from' diethylene triamine. Stow 'away from' hydrazine, fluorides, and all other corrosives except sulphuric acid and sulphur trioxide
	Nitric acid, red fuming	8	UN 2032	Corrosive, Oxidizer, Poison	I	1	5	Stow 'separated from' diethylene triamine. Stow 'away from' hydrazine, fluorides and all other corrosives except sulphuric acid and sulphur trioxide
	Nitric oxide	2.3	UN 1660	Poison Gas	-	1	5	
	Nitric oxide and nitrogen tetroxide mixtures	2.3	UN 1975	Poison Gas, Oxidizer	-	1	5	Stow 'away from' organic materials
	Nitrites, inorganic, n.o.s.	5.1	UN 2627	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and cyanides and 'away from' powdered metals and foodstuffs
	Nitroanilines (o-, m-, p-)	6.1	UN 1661	Poison	II	1,2	1,2	
	Nitroanisoles	6.1	UN 2730	St. Andrews Cross	III	1,3	1,3	Keep cool
	Nitrobenzene	6.1	UN 1662	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Nitrobenzenesulphonic acid	8	UN 2305	Corrosive	II	1,2	1,2	
	Nitrobenzol. See Nitrobenzene							
	5-Nitrobenzotriazole	1.1D	UN 0385	Explosive (1.1D)	-	-	-	
	Nitrobenzotrifluorides	6.1	UN 2306	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Nitrobromobenzenes	6.1	UN 2732	St. Andrews Cross	III	1,3	1,3	Keep cool
	Nitrocellulose, containing at least 25% alcohol, by weight, and not exceeding 12.6% nitrogen by dry weight	4.1	UN 2556	Flammable Solid	I	1	5	Shade from radiant heat, keep away from heat and open flame
	Nitrocellulose, containing at least 25%, by weight, water	4.1	UN 2555	Flammable Solid	II	1	5	Shade from radiant heat. Keep away from heat and open flame
	Nitrocellulose, containing at least 18% plasticizing substance, by weight, and not exceeding 12.6% nitrogen by dry weight	4.1	UN 2557	Flammable Solid	I	1	1	Shade from radiant heat. Keep away from heat and open flame
*N	Nitrocellulose dry or wetted with less than 25% alcohol, by weight	1.1D	UN 0340	Explosive (1.1D)	-	-	-	
*N	Nitrocellulose, dry or wetted with less than 25% water, by weight	1.1D	UN 0340	Explosive (1.1D)	-	-	-	
	Nitrocellulose, in solution in flammable liquids	3.2	UN 2039	Flammable Liquid	II	1,2	1	
		3.3	UN 2040	Flammable Liquid	II	1,2	1,2	
*N	Nitrocellulose, plasticized with not less than 18% plasticizing substance, by weight	1.3C	UN 0343	Explosive (1.3C)	-	-	-	
*N	Nitrocellulose unmodified or unplasticized with less than 18% plasticizing substance, by weight	1.1D	UN 0341	Explosive (1.1D)	-	-	-	
	Nitrocellulose, wetted with, by weight, more than 40% flammable liquids	3.2	(UN 2556)	Flammable Liquid	II	1,2	1	
		3.3	(UN 2556)	Flammable Liquid	II	1,2	1,2	
*N	Nitrocellulose, wetted with not less than 25% alcohol, by weight	1.3C	UN 0342	Explosive (1.3C)	-	-	-	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	3-Nitro-4-chlorobenzotrifluoride	6.1	UN 2307	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Nitrocresols	6.1	UN 2446	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
	Nitroethane	3.3	UN 2842	Flammable Liquid	III	1,2	1,2	
	Nitrogen, compressed	2.2	UN 1066	Nonflammable Gas	—	1,2	1,2	Stow 'away from' foodstuffs, organic materials and living quarters
	Nitrogen dioxide, liquefied	2.3	UN 1067	Poison Gas, Oxidizer	—	1	5	
	Nitrogen, refrigerated liquid	2.2	UN 1977	Nonflammable Gas	—	1,3	1,3	
	Nitrogen tetroxide. See Nitrogen dioxide	2.3	UN 2451	Poison Gas	—	1	5	Stow 'away from' living quarters and organic materials
	Nitrogen trifluoride	2.3	UN 2421	Poison Gas	—	1	5	Stow 'away from' living quarters and readily combustible substances
	Nitrogen trioxide	2.3	UN 2421	Poison Gas	—	1	5	
*N	Nitroglycerine, desensitized, with not less than 40% non-volatile water-insoluble phlegmatizer, by weight	1.1D	UN 0145	Explosive (1.1D), Poison	—	—	—	
*N	Nitroglycerine, spirit of, with more than 1% but not more than 10% nitroglycerine in solution in alcohol	1.1D	UN 0144	Explosive (1.1D)	—	—	—	
*	Nitroglycerin solution, in alcohol with not more than 1% nitroglycerine	3.2	UN 1204	Flammable Liquid	II	1,2	1	
N	Nitroguanidine, dry or containing, by weight, less than 20% water	1.1D	UN 0282	Explosive (1.1D)	—	—	—	
	Nitroguanidine, wetted, with, by weight, at least 20% water	4.1	UN 1336	Flammable Solid	I	1,2	5	Stow 'away from' fluorides
	Nitrohydrochloric acid	8	UN 1798	Corrosive	I	1	5	
	Nitromethane	3.3	UN 1261	Flammable Liquid	II	1,2	1,2	
	Nitromariatic acid. See Nitrohydrochloric acid	4.1	UN 2538	Flammable Solid	III	1,2	1,2	
	Nitronaphthalene	6.1	UN 1663	St. Andrews Cross	III	1,2	1,2	
	Nitrophenols (o-, m-, p-)	3.3	UN 2608	Flammable Liquid	III	1,2	1,2	Stow 'away from' foodstuffs
	Nitropropanes	4.2	UN 1369	Spontaneously Combustible	II	1,2	5	
	p-Nitrosodimethylaniline	1.1D	UN 0146	Explosive (1.1D)	—	—	—	
N	Nitrostarch, dry or containing, by weight, less than 20% water	4.1	UN 1337	Flammable Solid	I	1	5	Stow 'away from' foodstuffs and living quarters
	Nitrostarch, wetted with, by weight, at least 20% water	2.3	UN 1069	Poison Gas, Corrosive	—	1	5	Stow 'away from' organic materials
	Nitrosyl chloride	8	UN 2308	Corrosive	II	1	5	
	Nitrosylsulphuric acid	6.1	UN 1664	Poison	II	1,2	1,2	
N	Nitrotoluenes (o-, m-, p-)	1.1D	UN 0147	Explosive (1.1D)	—	—	—	
	Nitro urea	2.2	UN 1070	Nonflammable Gas, Oxidizer	—	1,2	1,2	
	Nitrous oxide, compressed	2.2	UN 2201	Nonflammable Gas	—	1,2	1	
	Nitrous oxide, refrigerated liquid	6.1	UN 1665	Poison	II	1,2	1,2	
	Nitroxylicues (o-, m-, p-)	3.3	UN 1920	Flammable Liquid	II	1,2	1,2	Keep dry
	Nonane, and its isomers	8	UN 1799	Corrosive	II	1	1	Keep dry
	Nonyl trichlorosilane	8	UN 1800	Corrosive	II	1	1	
	Octadecyl trichlorosilane	3.2	UN 2309	Flammable Liquid	III	1,2	1,2	
	Octadecane	2.2	UN 2422	Nonflammable Gas	—	1,2	1,2	
	Octafluorobut-2-ene	2.2	UN 1976	Nonflammable Gas	—	1,2	1,2	
	Octafluorocyclobutane	2.2	UN 2424	Nonflammable Gas	—	1,2	1,2	
	Octafluoropropane	3.2	UN 1262	Flammable Liquid	II	1,2	1	
	Octane and its isomers	3.2	UN 1262	Flammable Liquid	II	1,2	1	
	n-Octanoyl peroxide. See Di-n-octanoyl peroxide	1.1D	UN 0266	Explosive (1.1D)	—	—	—	Keep dry
*N	Octalite, dry or wetted with less than 15% water, by weight	8	UN 1801	Corrosive	II	1	1	Stow 'away from' living quarters
	Octyl trichlorosilane	2.1	UN 1071	Flammable Gas, Poison Gas	—	1	5	
	Oil gas	2.1	UN 1071	Flammable Gas, Poison Gas	—	1	5	
	Oleum. See Sulphuric acid, fuming	5.2	UN 2756	Organic Peroxide	I/II	1	5	
	Organic peroxides, mixture (this description must be supplemented with the name of the primary constituent of the mixture)	5.2	UN 2255	Organic Peroxide	I/II	1	5	
	Organic peroxides, n.o.s., samples	5.2	UN 2899	Organic Peroxide	—	1	5	
	Organic peroxides, n.o.s., trial quantities	3.2	UN 2762	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Organochlorine pesticides, liquid, flammable, toxic, n.o.s., flashpoint less than 23 deg C	3.2	UN 2762	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Organochlorine pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 2995	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
	Organochlorine pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 2995	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
	Organochlorine pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 2995	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Organochlorine pesticides, liquid, toxic, n.o.s.	6.1	UN 2996	Poison	I	1	1	
	Organochlorine pesticides, liquid, toxic, n.o.s.	6.1	UN 2996	Poison	II	1,2	1	
	Organochlorine pesticides, liquid, toxic, n.o.s.	6.1	UN 2996	St. Andrews Cross	III	1,2	1,2	
	Organochlorine pesticides, solid, toxic, n.o.s.	6.1	UN 2761	Poison	I/II	1,2	1,2	
	Organochlorine pesticides, solid, toxic, n.o.s.	6.1	UN 2761	St. Andrews Cross	III	1,2	1,2	
	Organophosphorus pesticides, liquid, flammable toxic n.o.s., flash point less than 23 deg C	3.2	UN 2784	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Organophosphorus pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3017	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3017	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3017	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Organophosphorus pesticides, liquid, toxic, n.o.s.	6.1	UN 3018	Poison	I	1	1	
		6.1	UN 3018	Poison	II	1,2	1	
		6.1	UN 3018	St. Andrews Cross	III	1,2	1,2	
	Organophosphorus pesticides solid, toxic, n.o.s.	6.1	UN 2783	Poison	I/II	1,2	1,2	
		6.1	UN 2783	St. Andrews Cross	III	1,2	1,2	
	Organotin compounds, n.o.s.	6.1	UN 2788	Poison	I/II	1,2	1	Stow 'away from' living quarters
		6.1	UN 2788	St. Andrews Cross	III	1,2	1	
	Organotin pesticides, liquid, flammable, toxic, n.o.s., flashpoint below 23 deg C	3.2	UN 2787	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Organotin pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3019	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3019	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3019	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Organotin pesticides, liquid, toxic, n.o.s.	6.1	UN 3020	Poison	I	1	1	
		6.1	UN 3020	Poison	II	1,2	1	
		6.1	UN 3020	St. Andrews Cross	III	1,2	1,2	
	Organotin pesticides, solid, toxic, n.o.s.	6.1	UN 2786	Poison	I/II	1,2	1,2	
		6.1	UN 2786	St. Andrews Cross	III	1,2	1,2	
	Osmium tetroxide	6.1	UN 2471	Poison	I	1,2	1	Stow 'away from' living quarters
	Oxalates, water-soluble	6.1	UN 2449	St. Andrews Cross	III	1,2	1,2	
	Oxidizing substances, n.o.s.	5.1	UN 1479	Oxidizer	I/II/III	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' powdered metals
	Oxygen and carbon dioxide mixtures. See Carbon dioxide and oxygen mixtures							
	Oxygen, compressed	2.2	UN 1072	Nonflammable Gas, Oxidizer	-	1,2	1,2	
	Oxygen difluoride	2.3	UN 2190	Poison Gas	-	1	5	Keep dry. Stow 'away from' living quarters and readily combustible substances
	Oxygen, refrigerated liquid	2.2	UN 1073	Nonflammable Gas, Oxidizer	-	1	5	Stow 'separated from' acetylene. Do not over-stow
	Paints, enamels, lacquers, stains, shellac solutions, varnish, polishes, fillers liquid, lacquer base or thinners	3.2	UN 1263	Flammable Liquid	II/III	1,2	1,2	
		3.3	UN 1263	Flammable Liquid	II/III	1,2	1,2	
	Paper, unsaturated oil treated, incompletely dried	4.2	UN 1379	Spontaneously Combustible	III	1,2	1,2	
	Paraformaldehyde	4.1	UN 2213	None. Package to be marked 'Class 4.1'	III	1,2	1,2	
	Paraldehyde	3.3	UN 1264	Flammable Liquid	III	1,2	1,2	
	Pentaborane	4.2	UN 1380	Spontaneously Combustible, Poison	I	1	5	
	Pentachloroethane	6.1	UN 1669	Poison	II	1,2	1,2	
*N	Pentaerythrite tetranitrate, wetted with not less than 25% water, by weight, or desensitized with not less than 15% phlegmatizer, by weight	1.1D	UN 0150	Explosive (1.1D)	-	-	-	
*N	Pentaerythrite tetranitrate, with not less than 7% wax, by weight	1.1D	UN 0411	Explosive (1.1D)	-	-	-	
	Pentamethylheptane	3.3	UN 2286	Flammable Liquid	III	1,2	1,2	
	2,4-Pentanedione	3.3	UN 2310	Flammable Liquid	III	1,2	1,2	
	Pentanes	3.1	UN 1265	Flammable Liquid	I	1,3	5	Keep cool
	1-Pentol	8	UN 2705	Corrosive	II	1,2	1	Stow 'away from' all other corrosives
*N	Pentolite, dry or wetted with less than 15% water, by weight	1.1D	UN 0151	Explosive (1.1D)	-	-	-	
	Perchlorates, inorganic, n.o.s.	5.1	UN 1481	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Perchloric acid, not exceeding 50%, by weight, of acid	8	UN 1802	Corrosive, Oxidizer	II	1	1	Stow 'away from' hydrazine
	Perchloric acid, over 50% and not exceeding 72% of acid	5.1	UN 1873	Oxidizer, Corrosive	I	1	5	
	Perchloroethylene. See Tetrachloroethylene							
	Perchloromethyl mercaptan	6.1	UN 1670	Poison	I	1	5	Stow 'away from' living quarters
	Perfumery products, with flammable solvents	3.2	UN 1266	Flammable Liquid	II	1,2	1	
		3.3	UN 1266	Flammable Liquid	II	1,2	1,2	
	Permanganates, inorganic, n.o.s.	5.1	UN 1482	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Peroxides, inorganic, n.o.s.	5.1	UN 1483	Oxidizer	II	1,2	1	Stow 'away from' powdered metals. Keep dry
	Peroxyacetic acid, maximum concentration 43% in acetic acid or in a mixture of acetic acid and water, with in either case not more than 6% hydrogen peroxide and not more than 1% sulphuric acid	5.2	UN 2131	Organic Peroxide, Corrosive	I	1	5	
	Pesticides, liquid, flammable, toxic, n.o.s., flashpoint below 23 deg C	3.2	UN 3021	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
•	Pesticides, liquid, toxic, flammable, n.o.s. flashpoint between 23 deg C and 61 deg C	6.1	UN 2903	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 2903	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 2903	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
•	Pesticides, liquid, toxic, n.o.s.	6.1	UN 2902	Poison	I	1	1	
		6.1	UN 2902	Poison	II	1,2	1	
		6.1	UN 2902	St. Andrews Cross	III	1,2	1,2	
•	Pesticides, solid, toxic, n.o.s.	6.1	UN 2588	Poison	I/II	1,2	1,2	
		6.1	UN 2588	St. Andrews Cross	III	1,2	1,2	
		3.1	UN 1267	Flammable Liquid	II	1,3	5	Keep cool
	Petroleum crude oil	3.2	UN 1267	Flammable Liquid	II	1,2	1	
		3.3	UN 1267	Flammable Liquid	II	1,2	1,2	
		3.1	UN 1268	Flammable Liquid	II	1,3	5	Keep cool
	Petroleum distillates, n.o.s.	3.2	UN 1268	Flammable Liquid	II	1,2	1	
		3.3	UN 1268	Flammable Liquid	II	1,2	1,2	
		3.1	UN 1268	Flammable Liquid	II	1,3	5	Keep cool
	Petroleum ether. See Petroleum spirit	3.1	UN 1268	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1268	Flammable Liquid	II	1,2	1	
		3.3	UN 1268	Flammable Liquid	II	1,2	1,2	
•	Petroleum gases, liquefied	2.1	UN 1075	Flammable Gas	-	1,2	1	
		3.1	UN 1270	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1270	Flammable Liquid	II	1,2	1	
	Petroleum oil	3.3	UN 1270	Flammable Liquid	II	1,2	1,2	
		3.1	UN 1271	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1271	Flammable Liquid	II	1,2	1	
		3.3	UN 1271	Flammable Liquid	II	1,2	1,2	
	Petroleum spirit	3.1	UN 1271	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1271	Flammable Liquid	II	1,2	1	
		3.3	UN 1271	Flammable Liquid	II	1,2	1,2	
	Petrol. See Gasoline	6.1	UN 2645	Poison	II	1,3	1	Keep cool. Stow 'away from' living quarters
		6.1	UN 2311	St. Andrews Cross	III	1,2	1,2	
		6.1	UN 1671	Poison	II	1,2	1,2	
•	Phenetidines (o, p)	6.1	UN 2312	Poison	II	1	1	
		6.1	UN 2312	Poison	II	1,2	1,2	
		6.1	UN 2312	Poison	II	1	1	
	Phenol	6.1	UN 2312	Poison	II	1,2	1,2	
		6.1	UN 2312	Poison	II	1,2	1,2	
		6.1	UN 2312	Poison	II	1,2	1,2	
	Phenol, molten	6.1	UN 2312	Poison	II	1,2	1,2	
		6.1	UN 2312	Poison	II	1,2	1,2	
		6.1	UN 2312	Poison	II	1,2	1,2	
	Phenol solutions	6.1	UN 2312	Poison	II	1,2	1,2	
		6.1	UN 2312	Poison	II	1,2	1,2	
		6.1	UN 2312	Poison	II	1,2	1,2	
	Phenolsulphonic acid, liquid	8	UN 1803	Corrosive	II	1,2	1	Stow 'away from' living quarters
		8	UN 1803	Corrosive	II	1,2	1	
		8	UN 1803	Corrosive	II	1,2	1	
•	Phenoxyl pesticides, solid, toxic, n.o.s.	6.1	UN 2765	Poison	I/II	1,2	1,2	Metal drums only under deck
		6.1	UN 2765	St. Andrews Cross	III	1,2	1,2	
		3.2	UN 2766	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
•	Phenoxy pesticides, liquid, flammable, toxic, n.o.s., flashpoint less than 23 deg C	6.1	UN 2999	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 2999	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 2999	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
•	Phenoxy pesticides, liquid, toxic, n.o.s.	6.1	UN 3000	Poison	I	1	1	
		6.1	UN 3000	Poison	II	1,2	1	
		6.1	UN 3000	St. Andrews Cross	III	1,2	1,2	
	Phenylacetonitrile, liquid	6.1	UN 2470	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
		8	UN 2577	Corrosive	II	1	1	Keep dry
		6.1	UN 1672	Poison	I	1	5	Stow 'away from' living quarters
	Phenylacetyl chloride	6.1	UN 1672	Poison	I	1	5	Stow 'away from' living quarters
		6.1	UN 1672	Poison	I	1	5	Stow 'away from' living quarters
		6.1	UN 1672	Poison	I	1	5	Stow 'away from' living quarters
	Phenylcarbamylamine chloride	6.1	UN 1672	Poison	I	1	5	Stow 'away from' living quarters
		6.1	UN 1672	Poison	I	1	5	Stow 'away from' living quarters
		6.1	UN 1672	Poison	I	1	5	Stow 'away from' living quarters
	Phenylchloroformate	6.1	UN 2746	Poison, Corrosive	II	1,3	1,3	Keep cool and dry. Shade from radiant heat. Stow 'away from' living quarters
		6.1	UN 2746	Poison, Corrosive	II	1,3	1,3	Keep cool and dry. Shade from radiant heat. Stow 'away from' living quarters
		6.1	UN 2746	Poison, Corrosive	II	1,3	1,3	Keep cool and dry. Shade from radiant heat. Stow 'away from' living quarters
	Phenylendiamines (o, m, p)	6.1	UN 1673	St. Andrews Cross	III	1,2	1,2	
		6.1	UN 2572	Poison	II	1,2	1,2	
		6.1	UN 2487	Poison, Flammable Liquid	II	1	5	Stow 'away from' living quarters
	Phenylhydrazine	6.1	UN 2487	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
		6.1	UN 2487	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
		6.1	UN 2487	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
	Phenyl isocyanate	6.1	UN 2487	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
		6.1	UN 2487	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
		6.1	UN 2487	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Stow 'away from' living quarters. Segregation same as for flammable liquids
	Phenyl mercaptan	6.1	UN 2337	Poison, Flammable Liquid	I	1,2	1	Segregation same as for flammable liquids
		6.1	UN 2337	Poison, Flammable Liquid	I	1,2	1	Segregation same as for flammable liquids
		6.1	UN 2337	Poison, Flammable Liquid	I	1,2	1	Segregation same as for flammable liquids
	Phenylmercuric acetate	6.1	UN 1674	Poison	II	1,2	1,2	
		6.1	UN 2026	Poison	I/II	1,2	1,2	
		6.1	UN 2026	St. Andrews Cross	III	1,2	1,2	
	Phenylmercuric compounds, n.o.s.	6.1	UN 2026	St. Andrews Cross	III	1,2	1,2	
		6.1	UN 1894	Poison	II	1,2	1,2	
		6.1	UN 1894	Poison	II	1,2	1,2	
	Phenylmercuric hydroxide	6.1	UN 1894	Poison	II	1,2	1,2	
		6.1	UN 1894	Poison	II	1,2	1,2	
		6.1	UN 1894	Poison	II	1,2	1,2	
	Phenylmercuric nitrate	6.1	UN 1894	Poison	II	1,2	1,2	
		6.1	UN 1894	Poison	II	1,2	1,2	
		6.1	UN 1894	Poison	II	1,2	1,2	
	Phenyl phosphorus dichloride	8	UN 2798	Corrosive	II	1,2	1	
		8	UN 2798	Corrosive	II	1,2	1	
		8	UN 2798	Corrosive	II	1,2	1	
	Phenyl phosphorus dichloride	8	UN 2798	Corrosive	II	1,2	1	
		8	UN 2798	Corrosive	II	1,2	1	
		8	UN 2798	Corrosive	II	1,2	1	
	Phenyl trichlorosilane	8	UN 1804	Corrosive	II	1	1	Keep dry
		8	UN 1804	Corrosive	II	1	1	Keep dry
		8	UN 1804	Corrosive	II	1	1	Keep dry
•	Phenyl urea pesticides, liquid, flammable, toxic, n.o.s., flashpoint less than 23 deg C	3.2	UN 2768	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
		3.2	UN 2768	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
		3.2	UN 2768	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
•	Phenyl urea pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3001	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3001	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3001	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
•	Phenyl urea pesticides, liquid, toxic, n.o.s.	6.1	UN 3002	Poison	I	1	1	
		6.1	UN 3002	Poison	I	1	1	
		6.1	UN 3002	Poison	I	1	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
		6.1	UN 3002	Poison	II	1,2	1	
		6.1	UN 3002	St. Andrews Cross	III	1,2	1,2	
	• Phenyl urea pesticides, solid, toxic, n.o.s.	6.1	UN 2767	Poison	I/II	1,2	1,2	
		6.1	UN 2767	St. Andrews Cross	III	1,2	1,2	
	• Phosgene	2.3	UN 1076	Poison Gas, Corrosive	--	1	5	
	• 9-Phosphabicynononanes	4.2	UN 2940	Spontaneously Combustible	II	1,2	1,2	
	Phosphine	2.3	UN 2199	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' living quarters
	• Phosphoric acid, liquid	8	UN 1805	Corrosive	III	1,2	1,2	Glass carboys in hampers prohibited under deck
	• Phosphoric acid, solid	8	UN 1805	Corrosive	III	1,2	1,2	
	Phosphoric anhydride. See Phosphorus pentoxide							
	• Phosphorous acid, ortho	8	UN 2834	Corrosive	III	1,3	1,3	Stow 'away from' sources of heat. Keep dry
	Phosphorous bromide. See Phosphorus tribromide							
	Phosphorous chloride. See Phosphorus trichloride							
	Phosphorus, amorphous	4.1	UN 1338	Flammable Solid	III	1,2	1,2	
	Phosphorus heptasulphide, free from yellow or white phosphorus	4.1	UN 1339	Flammable Solid	II	1,2	1	Stow 'separated from' oxidizing substances
	Phosphorus oxybromide, molten	8	UN 2376	Corrosive	II	1	1	Keep dry
	Phosphorus oxybromide, solid	8	UN 1939	Corrosive	II	1	1	Keep cool and dry
	Phosphorus oxychloride	8	UN 1810	Corrosive	II	1	1	Keep dry
	Phosphorus pentabromide	8	UN 2691	Corrosive	II	1,3	1	Keep cool and dry
	Phosphorus pentachloride	8	UN 1806	Corrosive	II	1	1	Keep dry
	Phosphorus pentafluoride	2.3	UN 2198	Poison Gas	--	1	5	Stow 'away from' living quarters
	Phosphorus pentasulphide, free from yellow or white phosphorus	4.1	UN 1340	Flammable Solid	II	1,2	1,2	Stow 'separated from' oxidizing substances
	Phosphorus pentoxide	8	UN 1807	Corrosive	II	1,2	1,2	Glass bottles prohibited under deck
	Phosphorus sesquisulphide, free from yellow or white phosphorus	4.1	UN 1341	Flammable Solid	II	1,2	1	Stow 'separated from' oxidizing substances
	Phosphorus tribromide	8	UN 1808	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on pas- senger vessels
	Phosphorus trichloride	8	UN 1809	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on pas- senger vessels
	Phosphorus trioxide	8	UN 2578	Corrosive	III	1,3	1,3	Keep cool and dry
	Phosphorus trisulphide, free from yellow or white phosphorus	4.1	UN 1343	Flammable Solid	II	1,2	1	Stow 'separated from' oxidizing substances
	Phosphorus, white, molten	4.2	UN 2447	Spontaneously Combustible, Poison	I	1	5	
	Phosphorus, white or yellow, dry	4.2	UN 1381	Spontaneously Combustible	I	1,2	5	
	Phosphorus, white or yellow, in water	4.2	UN 1381	Spontaneously Combustible	I	1,2	5	
N	Photo-flash powder in units	1.1G	UN 0094	Explosive (1.1G)	--	--	--	
N	Photo-flash powder in units	1.2G	UN 0096	Explosive (1.2G)	--	--	--	
N	Photo-flash powder in units	1.3G	UN 0305	Explosive (1.3G)	--	--	--	
	Phthalic anhydride, solid or molten	8	UN 2214	None. Package to be marked 'Class 8'	III	1,2	1,2	Stow 'away from' foodstuffs
	• Phthalimide derivative pesticides, liquid, flammable, toxic, n.o.s., flashpoint below 23 deg C	3.2	UN 2774	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	• Phthalimide derivative pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3007	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3007	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3007	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	• Phthalimide derivative pesticides, liquid, toxic, n.o.s.	6.1	UN 3008	Poison	I	1	1	
		6.1	UN 3008	Poison	II	1,2	1	
		6.1	UN 3008	St. Andrews Cross	III	1,2	1,2	
	• Phthalimide derivative pesticides, solid, toxic, n.o.s.	6.1	UN 2773	Poison	I/II	1,2	1,2	
		6.1	UN 2773	St. Andrews Cross	III	1,2	1,2	
	Piccolines	3.3	UN 2313	Flammable Liquid	II	1,2	1,2	
	• Picric acid, wetted. See Trinitrophenol, wetted							
	• Pinanyl hydroperoxide technical pure	3.2	UN 2162	Organic Peroxide	I	1	5	
	• Pindone (and salts of), liquid	6.1	UN 2472	Poison	I	1	1	
		6.1	UN 2472	Poison	II	1,2	1	
		6.1	UN 2472	St. Andrews Cross	III	1,2	1,2	
	• Pindone (and salts of), solid	6.1	UN 2472	Poison	I/II	1,2	1,2	
		6.1	UN 2472	St. Andrews Cross	III	1,2	1,2	
	alpha-Pinene	3.3	UN 2368	Flammable Liquid	II	1,2	1,2	
	Pine oil	3.3	UN 1272	Flammable Liquid	II	1,2	1,2	
	Piperazine	8	UN 2579	Corrosive	II	1,3	1,3	Keep cool and dry
	Piperidine	3.2	UN 2401	Flammable Liquid	II	1,2	1	Keep dry
	• Plastics moulding materials evolving flammable vapours	9	UN 2211	None	III	1,2	1,2	
	• Plastics, nitrocellulose-based, spontaneously combustible, n.o.s.	4.2	UN 2006	Spontaneously Combustible	III	1	1	
	• Poisonous liquids, corrosive, n.o.s.	6.1	UN 2927	Poison, Corrosive	I/II	1,2	1	Segregation same as for corrosives
	• Poisonous liquids, flammable, n.o.s.	6.1	UN 2929	Poison, Flammable Liquid	I/II	1,2	1	Segregation same as for flammable liquids

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	• Poisonous liquids, n.o.s.	6.1	UN 2810	Poison	I/II	1,2	1	
		6.1	UN 2810	St. Andrews Cross	III	1,2	1	
	• Poisonous solids, corrosive, n.o.s.	6.1	UN 2928	Poison, Corrosive	I/II	1,2	1	Segregation same as for corrosives
	• Poisonous solids, flammable, n.o.s.	6.1	UN 2930	Poison, Flammable Solid	I/II	1,2	1	Segregation same as for flammable solids
	• Poisonous solids, n.o.s.	6.1	UN 2811	Poison	I/II	1,2	1	
		6.1	UN 2811	St. Andrews Cross	III	1,2	1	
	Polishes. See Paints, etc.							
	Polishing fluid. See Flammable liquid preparations, n.o.s.							
	Polychlorinated biphenyls	9	UN 2315	None	II	1,2	1,2	Stow in a recoverable position. Stow 'away from' foodstuffs
	• Polystyrene beads, expandable, impregnated with flammable liquid. See Plastics moulding materials evolving flammable vapours	6.1	UN 1677	Poison	II	1,2	1,2	
	Potassium arsenate	6.1	UN 1678	Poison	II	1,2	1,2	
	Potassium arsenite	8	UN 1811	Corrosive, Poison	II	1,2	1,2	
	• Potassium bifluoride, solid	8	UN 1811	Corrosive, Poison	II	1,2	1,2	
	Potassium bifluoride, solution	4.3	UN 1870	Dangerous When Wet	I	1,2	5	
	Potassium borohydride	5.1	UN 1484	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' powdered metals
	Potassium bromate	5.1	UN 1485	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' powdered metals
	Potassium chlorate	5.1	UN 1485	Oxidizer	II	1,2	1	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Potassium chlorate, aqueous solution	5.1	UN 2427	Oxidizer	II	1,2	1	
	Potassium cuprocyanide	6.1	UN 1679	Poison	II	1,2	1,2	Stow 'away from' acids
	Potassium cyanide	6.1	UN 1680	Poison	I	1,2	1,2	Stow 'away from' acids
	Potassium fluoride	6.1	UN 1812	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Potassium fluoroacetate	6.1	UN 2628	Poison	I	1,2	5	Stow 'away from' living quarters
	• Potassium hydrogen fluoride. See Potassium bifluoride	8	UN 2509	Corrosive	II	1,2	1,2	Stow 'away from' strong alkalis
	Potassium hydrogen sulphate	4.2	UN 1929	Spontaneously Combustible	II	1,2	5	Keep dry
	Potassium hydrosulphite	8	UN 1813	Corrosive	II	1,2	1,2	Keep dry
	• Potassium hydroxide, solid	8	UN 1814	Corrosive	II	1,2	1,2	
	• Potassium hydroxide, solution	8	UN 1814	Corrosive	II	1,2	1,2	
	• Potassium hypochlorite, solution. See Hypochlorite, solutions, etc.							
	Potassium metal	4.2	UN 2257	Spontaneously Combustible	II	1,2	5	
	Potassium, metal alloys	4.3	UN 1420	Dangerous When Wet	II	1,2	5	
	Potassium metavanadate	6.1	UN 2864	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Potassium nitrate	5.1	UN 1486	Oxidizer	III	1,2	1,2	
	• Potassium nitrate and sodium nitrite, mixture	5.1	UN 1487	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and cyanides, and 'away from' foodstuffs
	Potassium nitrate bags, empty. See Bags, empty and unwashed, etc.							
	Potassium nitrite	5.1	UN 1488	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and cyanides, and 'away from' foodstuffs
	Potassium oxide	8	UN 2033	Corrosive	II	1,2	1,2	Keep dry
	Potassium perchlorate	5.1	UN 1489	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Potassium permanganate	5.1	UN 1490	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Potassium peroxide	5.1	UN 1491	Oxidizer	I	1,2	1,2	Keep dry
	Potassium persulphate	5.1	UN 1492	Oxidizer	III	1,2	1,2	
	• Potassium phosphide	4.3	UN 2012	Dangerous When Wet, Poison	I	1,2	5	When stowed under deck, stow in a mechanically ventilated space
	N Potassium salts of nitro-aromatic derivatives, explosive	1.3C	UN 0158	Explosive (1.3C)	--	--	--	
	Potassium silicofluoride	6.1	UN 2655	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Potassium-sodium, alloy	4.3	UN 1422	Dangerous When Wet	I	1,2	5	
	• Potassium sulphide, anhydrous or Potassium sulphide with less than 30% water of crystallization	4.2	UN 1382	Spontaneously Combustible	II	1,2	1,2	Stow 'separated from' liquid acids
	• Potassium sulphide, hydrated, with not less than 30% water of crystallization	8	UN 1847	Corrosive	II	1,2	1,2	Stow 'away from' acids
	Potassium superoxide	5.1	UN 2466	Oxidizer	I	1,2	1	Keep dry. Stow 'away from' combustible materials including packaging of other cargo
	*N Powder cake, wetted with not less than 35% water, by weight	1.3C	UN 0159	Explosive (1.3C)	--	--	--	
	N Powder, smokeless	1.1C	UN 0160	Explosive (1.1C)	--	--	--	
	N Powder, smokeless	1.3C	UN 0161	Explosive (1.3C)	--	--	--	
	Primers, cap type	1.4B	UN 0378	Explosive (1.4B)	--	1,3	1,3	
	Primers, cap type	1.4S	UN 0044	None. Package to be marked '1.4S'	--	1,3	1,3	
	N Primers, cap type	1.1B	UN 0377	Explosive (1.1B)	--	--	--	
	Primers, tubular	1.4G	UN 0320	Explosive (1.4G)	--	1,3	1,3	
	Primers, tubular	1.4S	UN 0376	None. Package to be marked '1.4S'	--	1,3	1,3	
	N Primers, tubular	1.3G	UN 0319	Explosive (1.3G)	--	--	--	
	Projectiles, inert, with tracer	1.4 S	UN 0345	None. Package to be marked '1.4 S'	--	1,3	1,3	
	*N Projectiles, inert, with tracer	1.3G	UN 0424	Explosive (1.3G)	--	--	--	
	• Projectiles, inert, with tracer	1.4G	UN 0425	Explosive (1.4G)	--	1,3	1,3	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
N	Projectiles, with burster or expelling charge	1.2D	UN 0346	Explosive (1.2D)	--	--	--	
*N	Projectiles, with burster or expelling charge	1.2F	UN 0426	Explosive (1.2F)	--	--	--	
*N	Projectiles, with burster or expelling charge	1.4F	UN 0427	Explosive (1.4F)	--	--	--	
N	Projectiles, with burster or expelling charge	1.4D	UN 0347	Explosive (1.4D)	--	--	--	
N	Projectiles, with bursting charge	1.1D	UN 0168	Explosive (1.1D)	--	--	--	
N	Projectiles, with bursting charge	1.2D	UN 0169	Explosive (1.2D)	--	--	--	
N	Projectiles, with bursting charge	1.4D	UN 0344	Explosive (1.4D)	--	--	--	
N	Projectiles, with bursting charge	1.1F	UN 0167	Explosive (1.1F)	--	--	--	
N	Projectiles, with bursting charge	1.2F	UN 0324	Explosive (1.2F)	--	--	--	
•	Propadiene, inhibited	2.1	UN 2200	Flammable Gas	--	1	5	
•	Propane	2.1	UN 1978	Flammable Gas	--	1,2	1	
•	Propanethiols	3.1	UN 2402	Flammable Liquid	II	1,3	5	Keep cool and dry. Stow 'away from' food-stuffs and all odor absorbing cargo.
	Propanol	3.2	UN 1274	Flammable Liquid	II	1,2	1	
•	Propionaldehyde	3.1	UN 1275	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1275	Flammable Liquid	II	1,2	1	
•	Propionic acid, solution containing not less than 80% acid	8	UN 1848	Corrosive, Flammable Liquid (only if flashpoint 61 deg C or below)	III	1,2	1,2	Stow 'separated by a complete compartment or hold from' organic peroxides, and 'separated longitudinally by a complete compartment or hold from' explosives. If flashpoint is 61 deg C or below, segregation same as for flammable liquids.
	Propionic anhydride	8	UN 2496	Corrosive	III	1,2	1,2	Keep dry. Glass carboys prohibited on passenger vessels
	Propionitrile	3.2	UN 2404	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Propionyl chloride	3.2	UN 1815	Flammable Liquid, Corrosive	II	1,2	1	
	n-Propyl acetate	3.2	UN 1276	Flammable Liquid	II	1,2	1	
	sec-Propyl alcohol. See Isopropanol							
	n-Propyl alcohol. See Propanol							
	Propylamine. See Monopropylamine							
	Propyl benzene	3	UN 2364	Flammable Liquid	II	1,2	1,2	
	Propyl chloride	3.1	UN 1278	Flammable Liquid	II	1,3	5	Keep cool
	n-Propyl chloroformate	3.3	UN 2740	Flammable Liquid, Poison, Corrosive	I	1,2	1,2	
•	Propylene	2.1	UN 1077	Flammable Gas	--	1,2	1	
	Propylene chlorohydrin	6.1	UN 2611	Poison, Flammable Liquid	II	1,3	1,3	Keep cool. Shade from radiant heat. Segregation same as for flammable liquids
•	Propylenediamine	3.2	UN 2258	Flammable Liquid, Corrosive	II	1,2	1,2	
		3.3	UN 2258	Flammable Liquid, Corrosive	II	1,2	1,2	
	Propyl se dichloride	3.2	UN 1279	Flammable Liquid	II	1,2	1	
	Propyleneimine, inhibited	3.2	UN 1921	Flammable Liquid	I	1,2	1	
•	Propylene oxide	3.1	UN 1280	Flammable Liquid	I	1,3	5	Keep cool
	Propylene tetramer	3.2	UN 2850	Flammable Liquid	III	1,2	1,2	
	Propyl formates	3.2	UN 1281	Flammable Liquid	II	1,2	1	
	n-Propyl isocyanate	3.2	UN 2482	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	n-Propyl nitrate	3.2	UN 1865	Flammable Liquid	II	1,2	1	
	Propyl trichlorosilane	8	UN 1816	Corrosive, Flammable Liquid	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening compartment or hold from' explosives. Segregation same as for flammable liquids
	Pyridine	3.2	UN 1282	Flammable Liquid, Poison	II	1,2	1	
	Pyrophoric fuel, n.o.s. See Fuel, pyrophoric, n.o.s.							
	Pyrophoric liquids, n.o.s.	4.2	UN 2845	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives (except explosives in Division 1.4, Compatibility Group S)
	Pyrophoric metals, n.o.s. or Pyrophoric alloys, n.o.s.	4.2	UN 1383	Spontaneously Combustible	II	1	5	
•	Pyrophoric solids, n.o.s.	4.2	UN 2846	Spontaneously Combustible	I/II/III	1	1	
•	Pyrosulphuryl chloride	8	UN 1817	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Pyroxylin. See Nitrocellulose							
	Pyrolidine	3.2	UN 1922	Flammable Liquid	II	1,2	1	
	Quinoline	6.1	UN 2656	St. Andrews Cross, Flammable Liquid (only if flashpoint below 61 deg C)	III	1,3	1,3	Keep cool. Shade from radiant heat. If flashpoint below 61 deg C, segregation same as for flammable liquids
	Rags, oily	4.2	UN 1856	Spontaneously Combustible	III	1,2	1,2	Keep dry
	Rare gases, mixtures	2.2	UN 1979	Nonflammable Gas	--	1,2	1,2	
	Rare gases, mixtures with nitrogen	2.2	UN 1981	Nonflammable Gas	--	1,2	1,2	
	Rare gases, mixtures with oxygen	2.2	UN 1980	Nonflammable Gas	--	1,2	1,2	
•	Receptacles, small, containing flammable compressed gas, not fitted with a dispersion device, not refillable	2.1	UN 2037	Flammable Gas	--	--	--	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
N	Reducing liquid. See Flammable liquid preparation, n.o.s.	2.1	UN 1078	Flammable Gas	--	1	1	
	Refrigerant gases, n.o.s.	2.2	UN 1078	Nonflammable Gas	--	1,2	1,2	
	Refrigerant gases, n.o.s.	2.2	UN 2857	Nonflammable Gas	--	1,2	1,2	
	Refrigerating machines containing non-flammable, non-toxic liquefied gases	1.4S	UN 0173	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Release devices, explosive							
	Removing liquid. See Flammable liquid preparations, n.o.s.	3.2	UN 1866	Flammable Liquid	II	1,2	1	
	Resin solution in flammable liquid	3.3	UN 1866	Flammable Liquid	III	1,2	1,2	
	Resin solution, poisonous	6.1	UN 1896	Poison, Flammable Liquid (only if flashpoint between 23 and 61 deg C)	I/II	1,2	1,2	If flashpoint between 23 and 61 deg C, segregation same as for flammable liquids
			UN 1896	St. Andrews Cross, Flammable Liquid (only if flashpoint between 23 and 61 deg C)	III	1,2	1,2	If flashpoint between 23 and 61 deg C, segregation same as for flammable liquids
	Resorcinol	6.1	UN 2876	St. Andrews Cross	III	1,2	1,2	
N	Rivets, explosive	1.4 S	UN 0174	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Road asphalt, liquid, tars or oil. See Cut-backs, asphalt or bitumen							
	Rocket motors	1.1C	UN 0280	Explosive (1.1C)	--	--	--	
	Rocket motors	1.2C	UN 0281	Explosive (1.2C)	--	--	--	
	Rocket motors	1.3C	UN 0186	Explosive (1.3C)	--	--	--	
	Rocket motors, containing hypergolic liquids, with or without expelling charge	1.2L	UN 0322	Explosive (1.2L)	--	--	--	
	Rocket motors, containing hypergolic liquids, with or without expelling charge	1.3L	UN 0250	Explosive (1.3L)	--	--	--	
	Rocket motors, liquid fueled	1.2J	UN 0395	Explosive (1.2J)	--	--	--	
	Rocket motors, liquid fueled	1.3J	UN 0396	Explosive (1.3J)	--	--	--	
	Rockets, line throwing	1.2G	UN 0238	Explosive (1.2G)	--	--	--	
N	Rockets, line throwing	1.3G	UN 0240	Explosive (1.3G)	--	--	--	
	Rockets, liquid fueled, with bursting charge	1.1J	UN 0397	Explosive (1.1J)	--	--	--	
	Rockets, liquid fueled, with bursting charge	1.2J	UN 0398	Explosive (1.2J)	--	--	--	
	Rockets, with bursting charge	1.1E	UN 0181	Explosive (1.1E)	--	--	--	
	Rockets, with bursting charge	1.2E	UN 0182	Explosive (1.2E)	--	--	--	
	Rockets, with bursting charge	1.1F	UN 0180	Explosive (1.1F)	--	--	--	
	Rockets, with bursting charge	1.2F	UN 0295	Explosive (1.2F)	--	--	--	
	Rockets, with bursting charge	1.3C	UN 0183	Explosive (1.3C)	--	--	--	
	Rockets, with inert head							
	Rodenticides, n.o.s., liquid	6.1	UN 1681	Poison	I	1	1	
N		6.1	UN 1681	Poison	II	1,2	1	
		6.1	UN 1681	St. Andrews Cross	III	1,2	1,2	
		6.1	UN 1681	Poison	I/II	1,2	1,2	
		6.1	UN 1681	St. Andrews Cross	III	1,2	1,2	
	Resin oil	3.2	UN 1286	Flammable Liquid	III	1,2	1	
		3.3	UN 1286	Flammable Liquid	III	1,2	1,2	
	R 22. See Chlorodifluoromethane							
	R 12. See Dichlorodifluoromethane							
	Rubber scrap, powdered or granulated	4.1	UN 1345	Flammable Solid	II	1,2	1,2	
	Rubber shoddy. See Rubber scrap							
N	Rubber solution	3.2	UN 1287	Flammable Liquid	II	1,2	1	
		3.3	UN 1287	Flammable Liquid	II	1,2	1,2	
	Rubidium hydroxide, solid	8	UN 2678	Corrosive	II	1,2	1,2	Keep dry
	Rubidium hydroxide, solution	8	UN 2677	Corrosive	II	1,2	1,2	
	Rubidium, metal	4.3	UN 1423	Dangerous When Wet	I	1,2	5	
	Samples, explosive, other than initiating explosive	1	UN 0190	As directed by the competent authority	--	--	--	
	Sand acid. See Fluosilicic acid							
	Seed cake, containing vegetable oil, mechanically expelled seeds, containing more than 10% of oil or more than 20% of oil and moisture combined	4.2	UN 1386	None. Package to be marked 'Class 4.2'	III	1,2	5	
	Seed cake, containing vegetable oil, solvent extractions and expelled seeds, containing not more than 10% of oil and, when the amount of moisture is higher than 10%, not more than 20% of oil and moisture combined	4.2	UN 1386	None. Package to be marked 'Class 4.2'	III	1,2	1,2	
	Seed cake, containing vegetable oil, solvent extractions containing not more than 1.5% of oil and 11% of moisture	4.2	UN 2217	None. Package to be marked 'Class 4.2'	III	1,2	1,2	
N	Selenates, n.o.s. or Selenites, n.o.s.	6.1	UN 2630	Poison	I	1,2	5	Stow 'away from' living quarters
	Selenic acid	8	UN 1905	Corrosive	I	1,2	1,2	Keep dry
	Selenium disulphide	6.1	UN 2657	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Selenium hexafluoride	2.3	UN 2194	Poison Gas	--	1	5	Stow 'away from' living quarters
	Selenium metal powder, non-pyrophoric	6.1	UN 2658	St. Andrews Cross	III	1,2	1,2	
	Selenium oxychloride	8	UN 2879	Corrosive, Poison	I	1,2	5	Keep dry
	Shale oil	3.2	UN 1288	Flammable Liquid	II	1,2	1	
		3.3	UN 1288	Flammable Liquid	II	1,2	1,2	
	Shellac. See Paints, etc.							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Signal devices, hand	1.4S	UN 0373	None. Package to be marked '1.4S'	—	1,3	1,3	
	Signal devices, hand	1.4 G	UN 0191	Explosive (1.4G)	—	1,3	1,3	
N	Signals, distress, ship (other than water-activated)	1.1G	UN 0194	Explosive (1.1G)	—	—	—	
N	Signals, distress, ship (other than water-activated)	1.3G	UN 0195	Explosive (1.3G)	—	—	—	
N	Signals, railway track, explosive	1.1G	UN 0192	Explosive (1.1G)	—	—	—	
N	Signals, railway track, explosive	1.4S	UN 0193	None. Package to be marked '1.4S'	—	—	—	
N	Signals, smoke, with explosive sound unit	1.1G	UN 0196	Explosive (1.1G)	—	—	—	
N	Signals, smoke, with explosive sound unit	1.2G	UN 0313	Explosive (1.2G)	—	—	—	
	Signals, smoke, without explosive sound unit	1.4 G	UN 0197	Explosive (1.4G)	—	1,3	1,3	
	Silane	2.1	UN 2203	Flammable Gas	—	1	5	Shade from radiant heat. Stow 'separated from' oxidizing substances such as bromine and chlorine
	Silicofluoric acid. See Fluosilicic acid							
	Silicofluorides, n.o.s.	6.1	UN 2856	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Silicon chloride. See Silicon tetrachloride							
	Silicon powder, amorphous	4.1	UN 1346	Flammable Solid	III	1,2	1,2	
	Silicon tetrachloride	8	UN 1818	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Silicon tetrafluoride	2.3	UN 1859	Poison Gas, Corrosive	—	1	5	
	Silver arsenite	6.1	UN 1683	Poison	II	1,2	1,2	
	Silver cyanide	6.1	UN 1684	Poison	II	1,2	1,2	Stow 'away from' strong liquid acids
	Silver nitrate	5.1	UN 1493	Oxidizer	II	1,2	1,2	Stow 'away from' foodstuffs
	Silver picrate, wetted with, by weight, at least 30% water	4.1	UN 1347	Flammable Solid	I	1	5	
	Sisal, dry. See Fibre, vegetable, dry							
	Sludge acid	8	UN 1906	Corrosive	II	1,2	1	Stow 'away from' fluorides. Metal drums only under deck
	Soda lime	8	UN 1907	Corrosive	III	1,2	1,2	Keep dry
	Sodium aluminate, solution	8	UN 1819	Corrosive	II	1,2	1,2	
	Sodium aluminium hydride	4.3	UN 2835	Dangerous When Wet	II	1,2	5	
	Sodium amalgam	4.3	UN 1424	Dangerous When Wet	I	1,2	1,2	
	Sodium amide	4.3	UN 1425	Dangerous When Wet	II	1,2	5	
	Sodium ammonium vanadate	6.1	UN 2863	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Sodium arsenate	6.1	UN 2473	St. Andrews Cross	III	1,2	1,2	
	Sodium arsenite	6.1	UN 1685	Poison	II	1,2	1,2	
	Sodium arsenite, aqueous solutions	6.1	UN 1686	Poison	I/II	1,2	1,2	
	Sodium arsenite, solid	6.1	UN 1686	St. Andrews Cross	III	1,2	1,2	
	Sodium azide	6.1	UN 2027	Poison	II	1,2	1,2	
	Sodium azide	6.1	UN 1687	Poison	II	1,2	1,2	Stow 'away from' heavy metals and their compounds, 'separated from' acids
	Sodium bisulphate, solid. See Sodium hydrogen sulphate, solid							
	Sodium bisulphite, solution. See Sodium hydrogen sulphite, solution							
	Sodium borohydride	4.3	UN 1426	Dangerous When Wet	I	1,2	5	
	Sodium bromate	5.1	UN 1494	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Sodium cacodylate	6.1	UN 1688	Poison	II	1,2	1,2	Stow 'away from' acids
	Sodium chlorate	5.1	UN 1495	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Sodium chlorate, aqueous solution	5.1	UN 2428	Oxidizer	II	1,2	1	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Sodium chlorite	5.1	UN 1496	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Sodium chlorite, solution with more than 3% available chlorine	8	UN 1908	Corrosive	II	1,2	1	Glass carboys in hampers not permitted under deck
	Sodium chloroacetate	6.1	UN 2659	St. Andrews Cross	III	1,3	1,3	Keep cool and dry
	Sodium cuprocyanide, solid	6.1	UN 2316	Poison	I	1,2	1,2	Keep dry. Stow 'separated from' acids
	Sodium cuprocyanide solution	6.1	UN 2317	Poison	I	1,2	1	Stow 'away from' living quarters and 'separated from' acids
	Sodium cyanide	6.1	UN 1689	Poison	I	1,2	1,2	Stow 'away from' acids
*N	Sodium dinitro-o-cresolate, dry or wetted with less than 15% water, by weight	1.3C	UN 0234	Explosive (1.3C)	—	—	—	
	Sodium dinitro-o-cresolate, wetted with, by weight, at least 15% water	4.1	UN 1348	Flammable Solid, Poison	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Sodium dinitro-o-cresolate, wetted with, by weight, at least 10% water	4.1	UN 1348	Flammable Solid, Poison	I	1	5	Stow 'away from' heavy metals and their compounds
	Sodium dithionite	4.2	UN 1384	Spontaneously Combustible	II	1,2	1,2	Keep dry. Only metal drums permitted on passenger vessels
	Sodium fluoride, solid	6.1	UN 1690	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Sodium fluoride, solution	6.1	UN 1690	St. Andrews Cross	III	1,2	1,2	
	Sodium fluoroacetate	6.1	UN 2629	Poison	I	1,2	5	Stow 'away from' living quarters
	Sodium hydrate. See Sodium hydroxide, solution							
	Sodium hydride	4.3	UN 1427	Dangerous When Wet	I	1,2	5	
	Sodium hydrogen fluoride	8	UN 2439	Corrosive	II	1,3	1,3	Keep cool and dry
	Sodium hydrogen sulphate, solid	8	UN 1821	Corrosive	II	1,2	1,2	
	Sodium hydrogen sulphate, solution	8	UN 2837	Corrosive	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Sodium hydrogen sulphite, solution. <i>See</i> Bisulphites, inorganic, aqueous solutions, n.o.s.							
*	Sodium hydrosulphide, with less than 25% water of crystallization	4.2	UN 2318	Spontaneously Combustible	II	1,2	1,2	
*	Sodium hydrosulphide, with not less than 25% water of crystallization	8	UN 2949	Corrosive	II	1,2	1,2	Keep dry. Stow 'away from' acids
*	Sodium hydrosulphide, with not less than 25% water of crystallization	8	UN 2949	Corrosive	II	1,2	1,2	
*	Sodium hydrosulphite. <i>See</i> Sodium dithionite							
	Sodium hydroxide, solid	8	UN 1823	Corrosive	II	1,2	1,2	Keep dry
	Sodium hydroxide, solution	8	UN 1824	Corrosive	II	1,2	1,2	
*	Sodium, metal	4.3	UN 1428	Dangerous When Wet	II	1,2	5	
	Sodium metal, dispersion in organic liquids	4.3	UN 1429	Dangerous When Wet	I	1,2	5	
	Sodium methylate	4.3	UN 1431	Dangerous When Wet	I	1,2	1	
	Sodium methylate, solutions in alcohol	3.2	UN 1289	Flammable Liquid	II	1,2	1	
		3.3	UN 1289	Flammable Liquid	II	1,2	1,2	
	Sodium monoxide	8	UN 1825	Corrosive	II	1,2	1,2	Keep dry
	Sodium nitrate	5.1	UN 1498	Oxidizer	III	1,2	1,2	
*	Sodium nitrate and potash, mixtures	5.1	UN 1478	Oxidizer	II	1,2	1,2	
	Sodium nitrate and potassium nitrate, mixtures	5.1	UN 1499	Oxidizer	III	1,2	1,2	
	Sodium nitrate bags, empty. <i>See</i> Bags, empty and unwashed, etc.							
*	Sodium nitrite	5.1	UN 1500	Oxidizer	III	1,2	1,2	Stow 'separated from' ammonium compounds and cyanides and 'away from' foodstuffs
	Sodium pentachlorophenate	6.1	UN 2567	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Sodium percarbonates	5.1	UN 2467	Oxidizer	III	1,2	1,2	Keep dry
*	Sodium perchlorate	5.1	UN 1502	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Sodium permanganate	5.1	UN 1503	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Sodium peroxide	5.1	UN 1504	Oxidizer	I	1,2	1	Keep dry. Stow 'away from' powdered metals, permanganates, and combustible packagings and cargo
	Sodium persulphate	5.1	UN 1505	Oxidizer	III	1,2	1,2	
*	Sodium phenolate, solid	8	UN 2497	Corrosive	III	1,2	1,2	
*	Sodium phosphide	4.3	UN 1432	Dangerous When Wet, Poison	I	1,2	5	When stowed under deck, stow in a mechanically ventilated space
*N	Sodium picramate, dry or wetted with less than 20% water, by weight	1.3C	UN 0233	Explosive (1.3C)	-	-	-	
	Sodium picramate, wetted with, by weight, at least 20% water	4.1	UN 1349	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Sodium-potassium, alloy. <i>See</i> Potassium-sodium, alloy							
*N	Sodium salts of nitro-aromatic derivatives, n.o.s., explosive	1.3C	UN 0203	Explosive (1.3C)	-	-	-	
	Sodium silicofluoride	6.1	UN 2674	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
*	Sodium sulphide, anhydrous or Sodium sulphide with less than 30% water of crystallization	4.2	UN 1385	Spontaneously Combustible	II	1,2	1,2	Stow 'separated from' liquid acids
	Sodium sulphide, hydrated, with at least 30% water	8	UN 1849	Corrosive	II	1,2	1,2	Stow 'away from' acids
	Sodium superoxide	5.1	UN 2547	Oxidizer	I	1,2	5	Keep dry. Stow 'away from' powdered metals, permanganates and combustible packaging and cargo
N	Sounding devices, explosive	1.1E	UN 0374	Explosive (1.1E)	-	-	-	
N	Sounding devices, explosive	1.2E	UN 0375	Explosive (1.2E)	-	-	-	
N	Sounding devices, explosive	1.1F	UN 0296	Explosive (1.1F)	-	-	-	
N	Sounding devices, explosive	1.2F	UN 0204	Explosive (1.2F)	-	-	-	
	Spent mixed acid. <i>See</i> Acid mixtures, spent							
	Spirits of salts. <i>See</i> Hydrochloric acid							
	Squibs	1.4S	UN 0206	None. Package to be marked '1.4S'	-	1,3	1,3	
*	Squibs	1.4B	UN 0422	Explosive (1.4B)	-	1,3	5	
*	Squibs	1.4G	UN 0423	Explosive (1.4G)	-	1,3	5	
	Stains. <i>See</i> Paints, etc.							
*	Stannic chloride, anhydrous	8	UN 1827	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Stannic chloride pentahydrate	8	UN 2440	Corrosive	III	1,2	1,2	Keep dry
*	Stannic phosphides	4.3	UN 1433	Dangerous When Wet	I	1,2	5	When stowed under deck, stow in a mechanically ventilated space
	Stibine	2.3	UN 2676	Poison Gas, Flammable Gas	-	1	5	Stow 'away from' living quarters
	Straw	4.1	UN 1327	None	III	1,2	1,2	Stow 'away from' animal or vegetable oils
	Strike anywhere matches. <i>See</i> Matches, strike anywhere							
	Strontium, alloys, non-pyrophoric	4.3	UN 1434	Dangerous When Wet	II	1,2	5	
	Strontium arsenite	6.1	UN 1691	Poison	II	1,2	1,2	
	Strontium chloride	5.1	UN 1506	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Strontium nitrate	5.1	UN 1507	Oxidizer	III	1,2	1,2	
	Strontium perchlorate	5.1	UN 1508	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Strontium peroxide	5.1	UN 1509	Oxidizer	II	1,2	1,2	Keep dry
*	Strontium phosphide	4.3	UN 2013	Dangerous When Wet, Poison	I	1,2	5	When stowed under deck, stow in a mechanically ventilated space
*	Strychnine (and salts of), liquid	6.1	UN 1692	Poison	I	1	1	
		6.1	UN 1692	Poison	II	1,2	1	
		6.1	UN 1692	St. Andrews Cross	III	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
N	Strychnine (and salts of), solid	6.1	UN 1692	Poison	I/II	1,2	1,2	
	Styrene monomer, inhibited	6.1	UN 1692	St. Andrews Cross	III	1,2	1,2	
	Substances, explosive, n.o.s.	3.3	UN 2055	Flammable Liquid	II	1,2	1,2	
	Substances, explosive, n.o.s.	1.1L	UN 0357	Explosive (1.1L)	--	--	--	
	Substances, explosive, n.o.s.	1.2L	UN 0358	Explosive (1.2L)	--	--	--	
N	Substances, explosive, n.o.s.	1.3L	UN 0359	Explosive (1.3L)	--	--	--	
	Substances which, in contact with water, emit flammable gases, n.o.s.	4.3	UN 2813	Dangerous When Wet	I/II/III	1,2	5	
	Substituted nitrophenol pesticides, liquid, flammable, toxic, n.o.s., flashpoint below 23 deg C	3.2	UN 2780	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Substituted nitrophenol pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 3013	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 3013	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 3013	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Substituted nitrophenol pesticides, liquid, toxic, n.o.s.	6.1	UN 3014	Poison	I	1	1	
		6.1	UN 3014	Poison	II	1,2	1	
		6.1	UN 3014	St. Andrews Cross	III	1,2	1,2	
	Substituted nitrophenol pesticides, solid, toxic, n.o.s.	6.1	UN 2779	Poison	I/II	1,2	1,2	
		6.1	UN 2779	St. Andrews Cross	III	1,2	1,2	
	Succinic acid peroxide. See Dinocinnic acid peroxide							
	Sulphamic acid	8	UN 2967	Corrosive	III	1,2	1,2	
	Sulphur chlorides	8	UN 1828	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Sulphur dichloride. See Sulphur chlorides							
	Sulphur dioxide, liquefied	2.3	UN 1079	Poison Gas	--	1,2	5	Stow 'away from' living quarters
	Sulphur hexafluoride	2.2	UN 1080	Nonflammable Gas	--	1,2	1,2	
	Sulphuric acid, fuming	8	UN 1831	Corrosive, Poison	I	1,2	1	Keep dry. Stow 'away from' fluorides and all other corrosives except nitric acids and sulphur trioxide. Under deck stowage is permitted in metal drums only
	Sulphuric acid, spent	8	UN 1832	Corrosive	II	1,2	1	Stow 'away from' fluorides. For concentrations of more than 51% acid, stow 'away from' all other corrosives except nitric acids and sulphur trioxide. Under deck stowage is permitted in metal drums only
	Sulphuric acid, with more than 51% acid	8	UN 1830	Corrosive	II	1,2	1	Stow 'away from' fluorides and all other corrosives except nitric acids and sulphur trioxide. Under deck stowage is permitted in metal drums only
	Sulphuric acid, with not more than 51% acid	8	UN 2796	Corrosive	II	1,2	1	Stow 'away from' fluorides. Glass carboys in hampers not permitted under deck
	Sulphuric and hydrofluoric acid, mixtures. See Hydrofluoric acid and sulphuric acid mixtures							
	Sulphuric anhydride. See Sulphur trioxide, stabilized							
	Sulphur, lump and coarse grained powder, or fine grained powder	4.1	UN 1350	Flammable Solid	III	1,2	1,2	Protect from sparks and open flame. Stow 'separated from' oxidizing substances
	Sulphur, molten	4.1	UN 2448	Flammable Solid	III	1	1	Stow 'separated from' oxidizers, 'away from' living quarters
	Sulphurous acid	8	UN 1833	Corrosive	II	1,2	1	Glass carboys in hampers not permitted under deck
	Sulphur tetrafluoride	2.3	UN 2418	Poison Gas	--	1	5	Stow 'away from' living quarters
	Sulphur trioxide, stabilized	8	UN 1829	Corrosive	I	1,2	1,2	Keep dry. Glass bottles not permitted under deck. Stow 'away from' other corrosives except nitric and sulphuric acids
	Sulphuryl chloride	8	UN 1834	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Sulphuryl fluoride	2.3	UN 2191	Poison Gas	--	1,2	5	Stow 'away from' living quarters
	Tars, liquid. See Cut-backs, asphalt or bitumen							
	Tear gas candles, non-explosive	6.1	UN 1700	Poison, Flammable Solid	II	1	5	Segregation same as for flammable solids. Stow 'away from' living quarters
	Tear gas grenades, non-explosive. See Tear gas candles							
	Tear gas, (irritating substances, liquid or solid), n.o.s.	6.1	UN 1693	Poison	I/II	1	5	
		6.1	UN 1693	St. Andrews Cross	III	1	5	
	Tellurium hexafluoride	2.3	UN 2195	Poison Gas	--	1	5	Stow 'away from' living quarters
	T.E.L. See Motor fuel anti-knock mixtures							
	Terpene hydrocarbons n.o.s.	3.3	UN 2319	Flammable Liquid	III	1,2	1,2	
	Terpinolene	3.3	UN 2541	Flammable Liquid	III	1,2	1,2	
	Tetrabromoethane	6.1	UN 2504	St. Andrews Cross	III	1,2	1,2	
	1,1,2,2-Tetrachloroethane	6.1	UN 1702	Poison	II	1,2	1,2	
	Tetrachloroethylene	6.1	UN 1897	St. Andrews Cross	III	1,2	1,2	
	Tetraethyl dithiopyrophosphate, liquid or mixtures	6.1	UN 1704	Poison	I/II	1	5	
		6.1	UN 1704	St. Andrews Cross	III	1	5	
	Tetraethyl dithiopyrophosphate with gases, including solutions and mixtures thereof	2.3	UN 1703	Poison Gas	--	1	5	Stow 'away from' living quarters
	Tetraethylenepentamine	8	UN 2320	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Tetraethyl lead. See Motor fuel anti-knock mixtures	2.3	UN 1705	Poison Gas	—	1	5	Stow 'away from' living quarters
	Tetraethyl pyrophosphate and compressed gas, mixture	3.3	UN 1292	Flammable Liquid	II	1,2	1,2	
	Tetraethyl silicate	2.1	UN 1081	Nonflammable Gas	—	1,2	5	
	Tetrafluoroethylene, inhibited	2.3	(UN 1955)	Poison Gas	—	1	5	Stow 'away from' living quarters and readily combustible substances, 'separ. d from' hydrogen
	Tetrafluorohydrazine	2.3	(UN 1955)	Poison Gas	—	1	5	
	Tetrafluoromethane	2.2	UN 1982	Nonflammable Gas	—	1,2	1,2	
	1,2,3,6-Tetrahydrobenzaldehyde	3.3	UN 2498	Flammable Liquid	III	1,2	1,2	
	Tetrahydrofuran	3.1	UN 2036	Flammable Liquid	II	1,3	5	Keep cool
	Tetrahydrofurfurylamine	3.3	UN 2943	Flammable Liquid	III	1,2	1,2	
	Tetrahydrophthalic anhydrides	8	UN 2698	None. Package to be as marked 'Class 8'	III	1,2	1,2	Keep dry
	1,2,3,6-Tetrahydropyridine	3.2	UN 2410	Flammable Liquid	II	1,2	1	
	Tetrahydrothiophene	3.2	UN 2412	Flammable Liquid	II	1,2	1	
	Tetralin hydroperoxide, technical pure	5.2	UN 2136	Organic Peroxide	I	1	5	
	Tetramethylammonium hydroxide	8	UN 1835	Corrosive	II	1,2	1,2	
	1,1,3,3-Tetramethyl butyl hydroperoxide, technical pure	5.2	UN 2160	Organic Peroxide	II	1	5	
	1,1,3,3-Tetramethyl butyl peroxy-2-ethyl hexanoate, technical pure	5.2	UN 2161	Organic Peroxide	I	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
	Tetramethylsilane	3.1	UN 2749	Flammable Liquid	I	1	5	Keep cool. Shade from radiant heat
N	Tetranitro-aniline	1.1D	UN 0207	Explosive (1.1D)	—	—	—	
	Tetranitromethane	5.1	UN 1510	Oxidizer	I	1	5	
	Tetrapropylorthotitanate	3.3	UN 2413	Flammable Liquid	II	1,2	1,2	
N	Tetrazol-1-acetic acid	1.4C	UN 0407	Explosive (1.4C)	—	—	—	
	Textile waste, wet, n.o.s.	4.2	UN 1857	Spontaneously Combustible	III	1,2	1,2	
	Thallium chlorate	5.1	UN 2573	Oxidizer, Poison	II	1,2	1,2	Stow 'separated from' ammonium compounds and foodstuffs and 'away from' finely powdered metals
	Thallium compounds, n.o.s. liquid	6.1	UN 1707	Poison	I	1	1	
		6.1	UN 1707	Poison	II	1,2	1	
		6.1	UN 1707	St. Andrews Cross	III	1,2	1,2	
	Thallium compounds, n.o.s. solid	6.1	UN 1707	Poison	I/II	1,2	1,2	
		6.1	UN 1707	St. Andrews Cross	III	1,2	1,2	
	Thallium nitrate	6.1	UN 2727	Poison	II	1,2	1,2	Stow 'away from' living quarters
	4-Thiapentanol	6.1	UN 2785	St. Andrews Cross, Flammable Liquid (only if flashpoint below 61 deg C)	III	1	5	Segregation same as for flammable liquids flashpoint below 61 deg C. Shade from radiant heat and sunlight. Stow 'away from' living quarters, acids and bases
	Thinners. See Paints, etc.							
	Thinning liquid. See Flammable liquid preparations, n.o.s.							
	Thioacetic acid	3.2	UN 2436	Flammable Liquid	II	1,2	1	
	Thiocarbonyl chloride. See Thiophosgene							
	Thioglycol	6.1	UN 2966	Poison	II	1,2	1,2	
	Thioglycolic acid	8	UN 1940	Corrosive	II	1,2	1,2	Glass carboys in hampers prohibited under deck
	Thioctic acid	6.1	UN 2936	Poison	II	1,2	1,2	
	Thionyl chloride	8	UN 1836	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Thiophene	3.2	UN 2414	Flammable Liquid	II	1,2	1	
	Thiophosgene	6.1	UN 2474	Poison	II	1,2	1	Stow 'away from' acids and living quarters
	Thiophosphoryl chloride	8	UN 1837	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Thiourea	6.1	UN 2877	St. Andrews Cross	III	1,2	1,2	
	Tin chloride, fuming. See Stannic chloride, anhydrous							
	Tinctures, medicinal	3.2	UN 1293	Flammable Liquid	II	1,2	1	
		3.3	UN 1293	Flammable Liquid	II	1,2	1,2	
	Tin tetrachloride. See Stannic chloride, anhydrous							
	Titanium hydride	4.1	UN 1871	Flammable Solid	II	1,2	5	
	Titanium metal powder, dry mechanically produced, particle size between 3 and 33 microns; or chemically produced, particle size less than 840 microns	4.2	UN 2546	Spontaneously Combustible	II	1	5	
	Titanium metal powder, wetted with not less than 25% water (a visible excess of water must be present) mechanically produced, particle size between 3 and 33 microns; or chemically produced, particle size less than 840 microns	4.1	UN 1352	Flammable Solid	II	1,2	5	
	Titanium sponge granules or Titanium sponge powders	4.1	UN 2878	Flammable Solid	III	1	5	
	Titanium tetrachloride	8	UN 1838	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Titanium trichloride mixtures, non-pyrophoric	8	UN 2869	Corrosive	II	1,2	1,2	Keep dry
	Titanium trichloride, pyrophoric or Titanium trichloride mixtures, pyrophoric	4.2	UN 2441	Spontaneously Combustible, Corrosive	II	1,2	1,2	
	Toe puffs, nitrocellulose base	4.1	UN 1353	Flammable Solid	III	1	5	
	Toluene	3.2	UN 1294	Flammable Liquid	II	1,2	1	
	Toluene diisocyanate (T.D.I.)	6.1	UN 2078	Poison	II	1,2	1	Shade from radiant heat. Stow away from living quarters
	Toluidines (o-, m-, p-)	6.1	UN 1708	Poison	II	1,2	1,2	Stow 'away from' acids

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identi- fication Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
N	2,4-Toluylenediamine	6.1	UN 1709	St. Andrews Cross	III	1,2	1,2	
	Torpedoes, with bursting charge	1.1E	UN 0329	Explosive (1.1E)	—	—	—	
	Torpedoes, with bursting charge	1.1F	UN 0330	Explosive (1.1F)	—	—	—	
	Tracers for ammunition	1.4 G	UN 0306	Explosive (1.4G)	—	1,3	1,3	
N	Tracers for ammunition	1.3G	UN 0212	Explosive (1.3G)	—	—	—	
	Triallylamine	3.3	UN 2610	Flammable Liquid	II	1,2	1,2	
	Triallyl borate	6.1	UN 2609	St. Andrews Cross, Flammable Liquid (only if flashpoint below 61 deg C)	III	1,3	1,3	Keep cool and dry. Shade from radiant heat. If flashpoint below 61 deg C, segregation same as for flammable liquids
	Triazine pesticides, liquid, flammable, toxic, n.o.s., flashpoint below 23 deg C	3.2	UN 2764	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
	Triazine pesticides, liquid, toxic, flammable, n.o.s., flashpoint between 23 deg C and 61 deg C	6.1	UN 2997	Poison, Flammable Liquid	I	1	1	Segregation same as for flammable liquids
		6.1	UN 2997	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		6.1	UN 2997	St. Andrews Cross, Flammable Liquid	III	1,2	1,2	Segregation same as for flammable liquids
	Triazine pesticides, liquid, toxic, n.o.s.	6.1	UN 2998	Poison	I	1	1	
		6.1	UN 2998	Poison	II	1,2	1	
		6.1	UN 2998	St. Andrews Cross	III	1,2	1,2	
	Triazine pesticides, solid, toxic, n.o.s.	6.1	UN 2763	Poison	I/II	1,2	1,2	
		6.1	UN 2763	St. Andrews Cross	III	1,2	1,2	
	Tributylamine	8	UN 2542	Corrosive	III	1,2	1,2	
	Trichloroacetic acid, solid	8	UN 1839	Corrosive	II	1,2	1,2	Keep dry
	Trichloroacetic acid, solutions	8	UN 2564	Corrosive	II	1,2	1	Glass carboys in hampers prohibited under deck
	Trichloroacetyl chloride	8	UN 2442	Corrosive	II	1	5	Keep dry
	Trichlorobenzenes, liquid	6.1	UN 2321	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
	Trichlorobutene	6.1	UN 2322	Poison	II	1,2	1,2	Shade from radiant heat. Stow 'away from' living quarters
	1,1,1-Trichloroethane	6.1	UN 2831	St. Andrews Cross	III	1,2	1,2	
	Trichloroethylene	6.1	UN 1710	St. Andrews Cross	III	1,2	1,2	
	Trichloroisocyanuric acid, dry	5.1	UN 2468	Oxidizer	II	1,2	1,2	Shade from radiant heat. Keep dry. Stow 'separated from' nitrogen compounds
	Trichlorosilane	4.3	UN 1295	Dangerous When Wet, Flammable Liquid, Corrosive	I	1	5	
	Tricresylphosphate, with more than 3% ortho isomer	6.1	UN 2574	Poison	II	1,2	1,2	
	Triethylaluminum	4.2	UN 1102	Spontaneously Combustible	I	1	1	
	Triethylamine	3.2	UN 1296	Flammable Liquid	II	1,2	1	
	Triethylenetetramine	8	UN 2259	Corrosive	II	1,2	1	Stow 'separated from' nitric acid, 'away from' acids, copper and copper alloys and living quarters
	Triethyl phosphite	3.3	UN 2323	Flammable Liquid	III	1,2	1,2	Stow 'separated from' acids
	Trifluoroacetic acid	8	UN 2699	Corrosive	I	1,3	1	Keep cool. Stow 'away from' all other corro- sives
	Trifluorobromomethane. See Bromotrifluoromethane							
	Trifluorochloroethylene, inhibited	2.1	UN 1082	Flammable Gas	—	1,2	1	
	Trifluorochloromethane. See Chlorotrifluoromethane							
	Trifluoroethane	2.1	UN 2035	Flammable Gas	—	1,2	1	Stow 'away from' living quarters
	Trifluoromethane	2.2	UN 1984	Nonflammable Gas	—	1,2	1,2	
	3-Trifluoromethyl aniline	6.1	UN 2948	Poison	II	1,2	1,2	
	2-Trifluoromethyl aniline	6.1	UN 2942	St. Andrews Cross	III	1,2	1,2	
	Triisobutyl aluminum	4.2	UN 1930	Spontaneously Combustible	I	1	1	
	Triisobutylene	3.3	UN 2324	Flammable Liquid	II	1,2	1,2	
	Triisocyanatodisocyanurate of isophoronedisocyanate, solution 70% by weight	3.3	UN 2906	Flammable Liquid	III	1,2	1,2	
	Triisopropyl borate	3.3	UN 2616	Flammable Liquid	II	1,2	1,2	
	Trimethylacetyl chloride	8	UN 2438	Corrosive, Flammable Liquid	II	1	5	Shade from radiant heat. Segregation same as for flammable liquids
	Trimethylaluminum	4.2	UN 1103	Spontaneously Combustible	I	1	1	
	Trimethylamine, anhydrous	2.1	UN 1083	Flammable Gas	—	1	5	
	Trimethylamine, aqueous solutions containing not more than 30% of trimethylamine	3.2	UN 1297	Flammable Liquid	II	1,2	1	Stow 'away from' mercury and its com- pounds
	1,3,5-Trimethylbenzene	3.3	UN 2325	Flammable Liquid	III	1,2	1,2	
	Trimethyl borate	3.2	UN 2416	Flammable Liquid	II	1,2	1	
		3.3	UN 2416	Flammable Liquid	II	1,2	1,2	
	Trimethylchlorosilane	3.2	UN 1298	Flammable Liquid, Corrosive	I	1,2	1	
	Trimethylcyclohexylamine	8	UN 2326	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Trimethylhexamethylene diamines	8	UN 2327	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Trimethylhexamethylene diisocyanate	6.1	UN 2328	Poison	II	1,2	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a)	(b)	(c)
						Cargo vessel	Pass- enger vessel	Other requirements
*	2,4,4-Trimethylpentyl-2-peroxy phenoxy acetate, maximum concen- tration 27%, in solution	5.2	UN 2961	Organic Peroxide	II	1	5	Control temperature -10 deg C. Emergency temperature 0 deg C
	Trimethyl phosphite	3.3	UN 2329	Flammable Liquid	III	1,2	1,2	
N	Trinitro-aniline	1.1D	UN 0153	Explosive (1.1D)	--	--	--	
N	Trinitroanisole	1.1D	UN 0213	Explosive (1.1D)	--	--	--	
*N	Trinitrobenzene, dry or wetted with less than 30% water, by weight	1.1D	UN 0214	Explosive (1.1D)	--	--	--	
N	Trinitrobenzenesulfonic acid	1.1E	UN 0386	Explosive (1.1E)	--	--	--	
	Trinitrobenzene, wetted with, by weight, at least 10% water	4.1	UN 1354	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
	Trinitrobenzene, wetted with not less than 30% water, by weight	4.1	UN 1354	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
N	Trinitrobenzoic acid, dry or containing, by weight, less than 30% water	1.1D	UN 0215	Explosive (1.1D)	--	--	--	
	Trinitrobenzoic acid, wetted with, by weight, at least 10% water	4.1	UN 1355	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
	Trinitrobenzoic acid, wetted with not less than 30% water, by weight	4.1	UN 1355	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
N	Trinitrochlorobenzene	1.1D	UN 0155	Explosive (1.1D)	--	--	--	
N	Trinitrofluorenone	1.1D	UN 0387	Explosive (1.1D)	--	--	--	
*N	Trinitro-m-cresol	1.1D	UN 0216	Explosive (1.1D)	--	--	--	
N	Trinitronaphthalene	1.1D	UN 0217	Explosive (1.1D)	--	--	--	
N	Trinitrophenetole	1.1D	UN 0218	Explosive (1.1D)	--	--	--	
*N	Trinitrophenol, dry or wetted with less than 30% water, by weight	1.1D	UN 0154	Explosive (1.1D)	--	--	--	
	Trinitrophenol, wetted, with not less than 30% water, by weight	4.1	UN 1344	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Trinitrophenol, wetted with not less than 10% water, by weight	4.1	UN 1344	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
N	Trinitrophenylmethylnitramine	1.1D	UN 0208	Explosive (1.1D)	--	--	--	
N	Trinitroresorcinol, containing, by weight, not less than 20% water or mixture of alcohol and water	1.1D	UN 0394	Explosive (1.1D)	--	--	--	
*N	Trinitroresorcinol, dry or wetted with less than 20% water, by weight (or mixture of alcohol and water)	1.1D	UN 0219	Explosive (1.1D)	--	--	--	
*N	Trinitrotoluene and hexanitrostilbene mixtures or Trinitrotoluene and trinitrobenzene mixtures	1.1D	UN 0388	Explosive (1.1D)	--	--	--	
*N	Trinitrotoluene, dry or wetted with less than 30% water, by weight	1.1D	UN 0209	Explosive (1.1D)	--	--	--	
*N	Trinitrotoluene mixtures containing trinitrobenzene and hexanitro- stilbene	1.1D	UN 0389	Explosive (1.1D)	--	--	--	
	Trinitrotoluene, wetted with, by weight, at least 10% water	4.1	UN 1356	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
	Trinitrotoluene, wetted with not less than 30% water, by weight	4.1	UN 1356	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Tripropylaluminum	4.2	UN 2718	Spontaneously Combustible	I	1	5	
	Tripropylamine	3.3	UN 2260	Flammable Liquid, Corrosive	II	1,2	1,2	
	Tripropylene	3.2	UN 2057	Flammable Liquid	II	1,2	1	
	Tris-(1-aziridinyl)phosphine oxide, solution	3.3	UN 2057	Flammable Liquid	II	1,2	1,2	
N	Trisoma	6.1	UN 2501	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Tungsten hexafluoride	1.1D	UN 0390	Explosive (1.1D)	--	--	--	
	Turpentine	2.3	UN 2196	Poison Gas	--	1	5	
	Turpentine substitute	3.3	UN 1299	Flammable Liquid	III	1,2	1,2	
		3.2	UN 1300	Flammable Liquid	II	1,2	1	
		3.3	UN 1300	Flammable Liquid	II	1,2	1,2	
	U D M H. See Dimethylhydrazine, unsymmetrical							
	Undecane	3.3	UN 2330	Flammable Liquid	III	1,2	1,2	
	Urea hydrogen peroxide	5.1	UN 1511	Oxidizer	III	1,2	1,2	Keep dry Shade from radiant heat
N	Urea nitrate, dry or containing, by weight, less than 20% water	1.1D	UN 0220	Explosive (1.1D)	--	--	--	
	Urea nitrate, wetted with not less than 10% water, by weight	4.1	UN 1357	Flammable Solid	I	1,2	1,2	
	Urea nitrate, wetted with not less than 20% water, by weight	4.1	UN 1357	Flammable Solid	I	1,2	1,2	
	Valeraldehyde	3.2	UN 2058	Flammable Liquid	II	1,2	1	
	Valeryl chlorides	8	UN 2502	Corrosive	II	1	1	Keep dry
	Vanadium oxytrichloride	8	UN 2443	Corrosive	II	1	1	Keep dry Stow 'away from' organic com- pounds
	Vanadium pentoxide, non-fused form	6.1	UN 2862	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Vanadium tetrachloride	8	UN 2444	Corrosive	I	1	1	Keep dry Glass carboys prohibited on pas- senger vessels
	Vanadium trichloride	8	UN 2475	Corrosive	III	1,2	1,2	Keep dry
	Vanadium trioxide, non-fused form	6.1	UN 2860	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Vanadyl sulphate	6.1	UN 2931	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Varnish. See Paints, etc.							
	Vinyl acetate, inhibited	3.2	UN 1301	Flammable Liquid	II	1,2	1	
	Vinyl bromide, inhibited	2.1	UN 1085	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Vinyl butyrate, inhibited	3.2	UN 2838	Flammable Liquid	II	1,2	1	
	Vinyl chloride, inhibited	2.1	UN 1086	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Vinyl chloroacetate	6.1	UN 2539	Poison, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids
	Vinyl ethyl ether, inhibited	3.1	UN 1302	Flammable Liquid	I	1,3	5	Keep cool
	Vinyl fluoride, inhibited	2.1	UN 1860	Flammable Gas	--	1,2	1	Stow 'away from' living quarters

172,102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identifi- cation Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements		
						(a) Cargo vessel	(b) Pas- senger vessel	(c) Other requirements
	Vinylidene chloride, <i>inhibited</i>	3.1	UN 1303	Flammable Liquid	I	1,2	5	Keep cool
	Vinyl isobutyl ether, <i>inhibited</i>	3.2	UN 1304	Flammable Liquid	II	1,2	1	
	Vinyl methyl ether, <i>inhibited</i>	2.1	UN 1087	Flammable Gas	—	1,2	1	
	Vinyl toluenes (<i>mixed isomers</i>), <i>inhibited</i>	3.3	UN 2618	Flammable Liquid	III	1,2	1,2	
	Vinyl trichlorosilane, <i>inhibited</i>	3.2	UN 1305	Flammable Liquid, Corrosive	I	1,2	1	
N	Warheads, rocket, with <i>bursting or expelling charge</i>	1.4D	UN 0370	Explosive (1.4D)	—	—	—	
N	Warheads, rocket, with <i>bursting or expelling charge</i>	1.4F	UN 0371	Explosive (1.4F)	—	—	—	
N	Warheads, rocket, with <i>bursting charge</i>	1.1D	UN 0286	Explosive (1.1D)	—	—	—	
N	Warheads, rocket, with <i>bursting charge</i>	1.2D	UN 0287	Explosive (1.2D)	—	—	—	
N	Warheads, rocket, with <i>bursting charge</i>	1.1F	UN 0369	Explosive (1.1F)	—	—	—	
N	Warheads, torpedo, with <i>bursting charge</i>	1.1D	UN 0221	Explosive (1.1D)	—	—	—	
	White asbestos. See Asbestos, white							
	White phosphorus, dry. See Phosphorus, white or yellow, dry							
	White phosphorus, wet. See Phosphorus, white or yellow, in water							
	Wood alcohol. See Methanol							
	Wool waste, wet	4.2	UN 1387	Spontaneously Combustible	III	1,2	1,2	
	Xenon	2.2	UN 2036	Nonflammable Gas	—	1,2	1,2	
	Xenon, refrigerated liquid	2.2	UN 2591	Nonflammable Gas	—	1,2	1	
	Xylenes	3.2	UN 1307	Flammable Liquid	II	1,2	1	
	Xylenes	3.3	UN 1307	Flammable Liquid	III	1,2	1,2	
	Xylenols	6.1	UN 2261	Poison	II	1,2	1,2	
	Xylidines	6.1	UN 1711	Poison	II	1,2	1,2	Stow 'away from' acids
	Xylols. See Xylenes							
	Xylol bromide	6.1	UN 1701	Poison	II	1	5	
	Yellow phosphorus, dry. See Phosphorus, white or yellow, dry							
	Yellow phosphorus, wet. See Phosphorus, white or yellow, in water							
	Zinc arsenate or Zinc arsenite, or mixtures thereof, solid	6.1	UN 1712	Poison	II	1,2	1,2	
	Zinc ashes	4.3	UN 1435	Dangerous When Wet	III	1,2	1,2	
	Zinc bromate	5.1	UN 2469	Oxidizer	III	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Zinc chlorate	5.1	UN 1513	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Zinc chloride, anhydrous	8	UN 2331	Corrosive	III	1,2	1,2	Keep dry
	Zinc chloride, solution	8	UN 1840	Corrosive	III	1,2	1,2	
	Zinc cyanide	6.1	UN 1713	Poison	I	1,2	1,2	Stow 'away from' acids
	Zinc hydrosulphite	9	UN 1931	None	III	1,2	1,2	Keep dry Stow 'away from' acids
	Zinc nitrate	5.1	UN 1514	Oxidizer	II	1,2	1,2	
	Zinc permanganate	5.1	UN 1515	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Zinc peroxide	5.1	UN 1516	Oxidizer	II	1,2	1,2	Keep dry
	Zinc phosphide	4.3	UN 1714	Dangerous When Wet, Poison	I	1,2	5	When stowed under deck, stow in a mechanically ventilated space
	Zinc, powder or dust, pyrophoric. See Pyrophoric metals							
	Zinc powder or zinc dust, non-pyrophoric	4.3	UN 1436	Dangerous When Wet	II	1,2	1,2	
	Zinc resinate	4.1	UN 2714	Flammable Solid	III	1,2	1,2	
	Zinc silicofluoride	6.1	UN 2855	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Zirconium hydride	4.1	UN 1437	Flammable Solid	II	1,2	5	
	Zirconium, metal, dry, finished metal sheets, strip or coiled wire (thinner than 18 microns)	4.2	UN 2009	Spontaneously Combustible	III	1	5	
	Zirconium, metal, dry, finished sheets, strip or coiled wire (thinner than 254 microns but not thinner than 18 microns)	4.1	UN 2858	Flammable Solid	III	1,2	1,2	
	Zirconium metal powder, dry mechanically produced, particle size between 3 and 33 microns; or chemically produced, particle size between 10 and 840 microns	4.2	UN 2008	Spontaneously Combustible	II	1	5	
	Zirconium metal powder, wetted with not less than 25% water (a visible excess of water must be present), mechanically produced, having a particle size less than 33 microns; or chemically produced, having a particle size less than 840 microns	4.1	UN 1358	Flammable Solid	II	1,2	5	
	Zirconium nitrate	5.1	UN 2728	Oxidizer	III	1,2	1,2	Shade from radiant heat
N	Zirconium picramate, dry or wetted with less than 20% water, by weight	1.3C	UN 0236	Explosive (1.3C)	—	—	—	
	Zirconium picramate, wetted with, by weight, at least 20% water	5.1	UN 1517	Oxidizer	I	1	5	Stow 'away from' heavy metals and their salts
	Zirconium, scrap	4.2	UN 1932	Spontaneously Combustible	III	1	5	
	Zirconium, suspended in flammable liquid	3.1	UN 1308	Flammable Liquid	II	1	5	Keep cool
	Zirconium tetrachloride	8	UN 2503	Corrosive	III	1,2	1,2	Keep dry

[49 U.S.C. 1803, 1804, 1808, 49 CFR 1.53, App. A to Part 1]

Note.—The Materials Transportation Bureau has determined that this document does not constitute a "major rule" under terms of Executive Order 12291 or a significant regulation under DOT's regulatory policy and procedures [44 FR 11034] nor

require an environmental impact statement under the National Environmental Policy Act [49 U.S.C. 4321 *et seq.*]. I certify that this Amendment will not have a significant economic impact on a substantial number of small entities. A regulatory evaluation and environmental assessment are available for review in the docket.

Issued in Washington, D.C., on October 24, 1983.

L. D. Santman,

Director, Materials Transportation Bureau.

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