	Nitric acid (*over 40%*)	Oxidizer	UN2031	Oxidizer and Corrosive	None	173.268	Forbidden	5 pints	1	5	Segregation same as for corrosive materials. Stow away from hydrazine, separate from diethylenetriamine
	Nitric acid, 40% or less	Corrosive material	NA1760	Corrosive	None	173.268	Forbidden	5 pints	1	5	Stow away from hydrazine, separate from diethylenetriamine
	Nitric acid, fuming	Oxidizer	UN2032	Oxidizer and Poison	None	173.268	Forbidden	Forbidden	1	5	Segregation same as for corrosive materials. Stow away from hydrazine, separate from diethylenetriamine
	Nitric ether. See Ethyl nitrate										
	Nitric oxide	Poison A	UN1660	Poison gas	None	173.337	Forbidden	Forbidden	1	5	
	2-Nitro-2-methylpropanol nitrate	Forbidden									
	6-Nitro-4-diazotoluene-3-sulfonic acid (dry)	Forbidden									
	p-Nitroaniline. *See* Nitroaniline										
	N-Nitroaniline	Forbidden									
+	Nitroaniline	Poison B	UN1661	Poison	173.364	173.373	50 pounds	200 pounds	1,2	1,2	
	m-Nitrobenzene diazonium perchlorate	Forbidden									
	Nitrobenzene, liquid *or* Nitrobenzol, liquid (*oil of mirbane*)	Poison B	UN1662	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Nitro carbonitrate. See Blasting agent, n.o.s.										
	Nitrocellulose, colloided, granular *or* flake, wet with not less than 20% alcohol *or* solvent, *or* block, wet with not less than 25% alcohol	Flammable liquid	NA2059	Flammable liquid	173.118	173.127	1 quart	25 pounds	1,3	1	
	Nitrocellulose, colloided, granular *or* flake, wet with not less than 20% water	Flammable solid	NA2555	Flammable solid	173.153	173.184	25 pounds	100 pounds	1,3	1	
	Nitrocellulose, dry. See High explosive										
	Nitrocellulose, wet with not less than 30% alcohol *or* solvent	Flammable liquid	NA2556	Flammable liquid	173.118	173.127	1 quart	25 pounds	1,3	1	
	Nitrocellulose, wet with not less than 20% water	Flammable solid	NA2555	Flammable solid	173.153	173.184	25 pounds	100 pounds	1,3	1	
+	Nitrochlorobenzene, meta *or* para, solid	Poison B	UN1578	Poison	173.364	173.374	50 pounds	200 pounds	1,2	1,2	
+	Nitrochlorobenzene, ortho, liquid	Poison B	UN1578	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Nitroethane	Flammable liquid	UN2842	Flammable liquid	173.118	173.119	15 gallon	55 gallons	1,2	1	
	Nitroethylene polymer	Forbidden									
	Nitroethyl nitrate	Forbidden									
	Nitrogen *or* Nitrogen, compressed	Nonflammable gas	UN1066	Nonflammable gas	173.306	173.302 173.314	150 pounds	300 pounds	1,2	1,2	
	Nitrogen, refrigerated liquid (*cryogenic liquid*)	Nonflammable gas	UN1977	Nonflammable gas	173.320	173.316 173.318	100 pounds	1,100 pounds	1,3	1,3	
	Nitrogen dioxide, liquid	Poison A	UN1067	Poison gas and Oxidizer	None	173.336	Forbidden	Forbidden	1	5	Segregation same as for nonflammable gases. Stow away from organic materials
	Nitrogen peroxide, liquid	Poison A	NA1067	Poison gas and oxidizer	None	173.336	Forbidden	Forbidden	1	5	Segregation same as for nonflammable gases. Stow away from organic materials
	Nitrogen tetroxide, liquid	Poison A	NA1067	Poison gas and oxidizer	None	173.336	Forbidden	Forbidden	1	5	Segregation same as for nonflammable gases. Stow away from organic materials
	Nitrogen trichloride	Forbidden									
	Nitrogen trifluoride	Nonflammable gas	UN2451	Nonflammable gas	None	173.302	Forbidden	300 pounds	1	5	Stow away from living quarters and organic materials
	Nitrogen triiodide	Forbidden									
	Nitrogen triiodide monoamine	Forbidden									
	Nitroglycerin, liquid, desensitized. See High explosive, liquid										
	Nitroglycerin, liquid, not desensitized. See 173.51	Forbidden									

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Nitroglycerin, spirits of. See Spirits of nitroglycerin										
	Nitroguanidine, dry. See High explosive										
	Nitroguanidine nitrate	Forbidden									
	Nitroguanidine, wet with not less than 20% water	Flammable solid	UN1336	Flammable solid	173.153	173.184	25 pounds	100 pounds	1,2	4	
	1-Nitro hydantoin	Forbidden									
	Nitrohydrochloric acid	Corrosive material	UN1798	Corrosive	None	173.278	Forbidden	5 pints	1	5	
	Nitrohydrochloric acid, diluted	Corrosive material	UN1798	Corrosive	None	173.278	Forbidden	5 pints	1	5	
	Nitro isobutane triol trinitrate	Forbidden									
	Nitromannite. See High explosive										
	Nitromannite (dry)	Forbidden									
	Nitromethane	Flammable liquid	UN1261	Flammable liquid	173.118	173.149a	1 quart	10 gallons	1,2	1,2	
	Nitromuriatic acid. *See* Nitrohydrochloric acid										
	N-Nitro-N-methylglycolamide nitrate	Forbidden									
	Nitrophenol		UN1663	None	None	173.510	No limit	No limit	1,2	1,2	
	Nitrophenol pesticide, substituted, liquid or solid, n.o.s. (*compounds and preparations*). *See* Substituted nitrophenol pesticide, liquid *or* solid, n.o.s. (*compounds and preparations*)										
	m-Nitrophenyldinitro methane	Forbidden									
	Nitropropane	Flammable liquid	UN2608	Flammable liquid	173.118	173.119	15 gallon	55 gallons	1,2	1	
	Nitrosoguanidine. *See* Initiating explosive										
	Nitrostarch, dry. *See* High explosive										
	Nitrostarch, wet with not less than 30% alcohol *or* solvent	Flammable liquid	UN1337	Flammable liquid	173.118	173.137	1 quart	25 pounds	1,2	1	
	Nitrostarch, wet with not less than 20% water	Flammable solid	UN1337	Flammable solid	173.153	173.184	25 pounds	100 pounds	1	4	
	Nitrosugars (dry)	Forbidden									
	Nitrosyl chloride	Nonflammable gas	UN1069	Nonflammable gas	173.306	173.304 173.314	Forbidden	300 pounds	1	4	
	Nitrotoluene		UN1664	None	None	173.510	No limit	No limit	1,2	1,2	
	Nitrourea. See High explosive										
	Nitrous oxide *or* Nitrous oxide, compressed	Nonflammable gas	UN1070	Nonflammable gas	173.306	173.304	150 pounds	300 pounds	1,2	1,2	Under deck stowage must be in well-ventilated space

	Nitrous oxide, refrigerated liquid	Nonflammable gas	UN2201	Nonflammable gas	173.306	173.315	Forbidden	Forbidden	1	1	Stow away from flammables. Do not overstow with other cargo
+	Nitroxylol	Poison B	NA1665	Poison	173.345	173.346	1 quart	55 gallons	1,2	1	
	Nonflammable gas, n.o.s. *See* Compressed gas, n.o.s.										
+	Nonliquefied hydrocarbon gas. *See* Hydrocarbon gas, nonliquefied										
	Nonyltrichlorosilane	Corrosive material	UN1799	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Nordhausen acid. *See* Sulfuric acid										
	Octadecyltrichlorosilane	Corrosive material	UN1800	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	1,7-Octadiene-3,5-diyne-1,8-dimethoxy-9-octadecynoic acid	Forbidden									
	Octane	Flammable liquid	UN1262	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	n-Octanoyl peroxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2129								
	Octyltrichlorosilane	Corrosive material	UN1801	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Oil, *described as oil,* Oil, n.o.s., Petroleum oil, *or* Petroleum oil, n.o.s.	Combustible liquid	NA1270	None	173.118a	None	No limit	No limit	1,2	1,2	
	Oil, *described as oil,* Oil, n.o.s., Petroleum oil, *or* Petroleum oil, n.o.s.	Flammable liquid	NA1270	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Oil of mirbane. See Nitrobenzene, liquid										
	Oil of vitriol. See Sulfuric acid										
	Oil well cartridge	Class C explosive		Class C explosive	None	173.112	50 pounds	150 pounds	1,3	1,3	
	Oleum (*fuming sulfuric acid*)	Corrosive material	NA1831	Corrosive	None	173.272	Forbidden	5 pints	1,2	1	Under deck stowage must be in metal drums only. Keep dry.
	Organic peroxide, liquid *or* solution, n.o.s.	Flammable liquid	NA1993	Flammable liquid and Organic peroxide	None	173.119	Forbidden	1 quart	1,2	5	Stow separate from combustible materials, explosives, or acids
	Organic peroxide, liquid *or* solution, n.o.s.	Organic peroxide	NA9183	Organic peroxide	173.153	173.221	Forbidden	1 quart	1,2	1,2	Stow separate from combustible materials, explosives, or acids.
	Organic peroxide, mixture. *See* Organic peroxide, solid, n.o.s. *or* Organic peroxide, liquid *or* solution, n.o.s., *as appropriate.*		UN2756								
	Organic peroxide, sample, n.o.s. *See* Organic peroxide, solid, n.o.s. *or* Organic peroxide, liquid *or* solution, n.o.s., *as appropriate.*		UN2255								
	Organic peroxide, solid, n.o.s.	Organic peroxide	NA9187	Organic peroxide	173.153	173.154	Forbidden	25 pounds	1,2	1,2	Stow separate from combustible materials, explosives, or acids.
	Organic peroxide, trial quantity, n.o.s. *See* Organic peroxide, solid, n.o.s. *or* Organic peroxide, liquid *or* solution, n.o.s., *as appropriate.*		UN2899								
	Organic phosphate mixture, Organic phosphate compound mixture, *or* Organic phosphorus compound mixture; liquid	Poison B	NA2783	Poison	173.359	173.359	1/2 pint	1 quart	1,2	5	

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Organic phosphate mixture, Organic phosphate compound mixture, *or* Organic phosphorus compound mixture; solid *or* dry	Poison B	NA2783	Poison	173.377	173.377	50 pounds	200 pounds	1,2	4	
	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; mixed with compressed gas	Poison A	NA1955	Poison gas	None	173.334	Forbidden	Forbidden	1	5	Shade from radiant heat
	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; liquid	Poison B	NA2783	Poison	None	173.358	Forbidden	1 quart	1,2	5	
	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; solid *or* dry	Poison B	NA2783	Poison	None	173.377	Forbidden	200 pounds	1,2	4	
	Organochlorine pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2762	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Organochlorine pesticide, liquid, n.o.s.(*compounds and preparations*),	Poison B	UN2761	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Organochlorine pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2761	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Organophosphorus pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2784	Flammable liquid	None	173.119	Forbidden	1 quart	1,2	5	
	Organophosphorus pesticide, liquid, n.o.s. (*compounds and preparations*),	Poison B	UN2783	Poison	173.359	173.359	Forbidden	1 quart	1,2	5	
	Organophosphorus pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2783	Poison	173.377	173.377	Forbidden	200 pounds	1,2	4	
	Organotin pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2787	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Organotin pesticide, liquid, n.o.s. (*compounds and preparations*),	Poison B	UN2786	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Organotin pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2786	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
A	ORM-A, n.o.s.	ORM-A	NA1693	None	173.505	173.510	No limit	No limit			
A	ORM-B, n.o.s.	ORM-B	NA1760	None	173.505	173.510	No limit	No limit			
	ORM-C. See 173.500 and 176.900										
	Orthonitroaniline. *See* Nitroaniline										
	Oxidizer, corrosive, liquid, n.o.s.	Oxidizer	NA9193	Oxidizer and Corrosive	None	173.245	Forbidden	1 quart	1	5	
	Oxidizer, corrosive, solid, n.o.s.	Oxidizer	NA9194	Oxidizer and Corrosive	173.153	173.154	25 pounds	25 pounds	1	4	
	Oxidizer material packed with other articles. See 173.152										

	Oxidizer, n.o.s. *or* Oxidizing material, n.o.s.	Oxidizer	UN1479	Oxidizer	173.153	173.154	25 pounds	25 pounds	1,2	1,2	
	Oxidizer, poisonous, liquid, n.o.s.	Oxidizer	NA9189	Oxidizer and Poison	None	173.154	Forbidden	1 quart	1	5	
	Oxidizer, poisonous, solid, n.o.s.	Oxidizer	NA9200	Oxidizer and Poison	173.153	173.154	25 pounds	25 pounds	1,2	4	
	Oxygen *or* Oxygen, compressed	Nonflammable gas	UN1072	Oxidizer	173.306	173.302 173.314	150 pounds	300 pounds	1,2	1,2	Under deck stowage must be in well ventilated space
	Oxygen, refrigerated liquid (*cryogenic liquid*)	Nonflammable gas	UN1073	Oxidizer	173.320	173.316 173.318	Forbidden	Forbidden	1	1	Stow separate from flammables. Do not overstow with other cargo
	Paint	Combustible liquid	UN1263	None	173.118a	None	No limit	No limit	1,2	1,2	
	Paint	Flammable liquid	UN1263	Flammable liquid	173.118	173.128	1 quart	55 gallons	1,2	1	
	Paint *or* paint related material	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
	Paint related material	Combustible liquid	NA1263	None	173.118a	None	No limit	No limit	1,2	1,2	
	Paint related material	Flammable liquid	NA1263	Flammable liquid	173.118 173.128	173.128	1 quart	55 gallons	1,2	1	
	Paper caps. See Toy caps										
AW	Paraformaldehyde	ORM-A	UN2213	None	173.505	173.510	50 pounds	200 pounds	1,2	1,2	
	Paraldehyde	Flammable liquid	UN1264	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Paramenthane hydroperoxide	Organic peroxide	UN2125	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Paranitroaniline, solid. *See* Nitroaniline										
	Parathion and compressed gas mixture	Poison A	NA1967	Poison gas	None	173.334	Forbidden	Forbidden	1,3	5	
	Parathion, liquid	Poison B	NA2783	Poison	None	173.358	Forbidden	1 quart	1,3	1,3	
	Parathion mixture, dry	Poison B	NA2783	Poison	173.377	173.377	50 pounds	200 pounds	1,3	1,3	
	Parathion mixture, liquid	Poison B	NA2783	Poison	None	173.359	Forbidden	1 quart	1,3	1,3	
	Paris green, solid. *See* Copper acetoarsenite, solid										
	Pelargonyl peroxide, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2130								
	Pentaborane	Flammable liquid	UN1380	Flammable liquid and Poison	None	173.138	Forbidden	Forbidden	1	5	Segregation same as for flammable solids. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Pentachlorophenol		NA2020	None	None	173.510	No limit	No limit	1,2	1,2	
	Pentaerythrite tetranitrate. See Initiating explosive										
	Pentaerythrite tetranitrate, desensitized, wet. See High explosive										
	Pentaerythrite tetranitrate (dry)	Forbidden									
	Pentane	Flammable liquid	UN1265	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,3	4	
	Pentanitroaniline (dry)	Forbidden									
	Pentolite, dry. See High explosive										
	Peracetic acid solution, *not over 43% peracetic acid and not over 6% hydrogen peroxide*	Organic peroxide	NA2131	Organic peroxide	173.223	173.223	1 pint	5 pints	1	4	Shade from radiant heat
	Perchlorate, n.o.s.	Oxidizer	NA1481	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,3	1,3	Stow away from powdered metals
	Perchloric acid, *exceeding 50% but* not exceeding 72% strength	Oxidizer	UN1873	Oxidizer	None	173.269	Forbidden	5 pints	1	5	Segregation same as for corrosive materials. Stow away from hydrazine.
	Perchloric acid exceeding 72% strength	Forbidden									
	Perchloric acid, not over 50% acid	Oxidizer	UN1802	Oxidizer	173.244	173.269	Forbidden	5 pints	1	1	Segregation same as for corrosive materials. Stow away from hydrazine
+	Perchloromethyl mercaptan	Poison B	UN1670	Poison	173.345	173.360	Forbidden	10 pounds	1	4	

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	Percussion cap	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	1,3	
	Percussion fuze	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
A	Perfluoro-2-butene	ORM-A	NA2422	None	173.505	173.605	10 gallons	55 gallons			
	Permanganate, n.o.s.	Oxidizer	NA1482	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds, hydrogen peroxide, and acids
	Permanganate of potash. See Potassium permanganate										
	Peroxide, organic. See Organic Peroxide										
	Peroxyacetic acid, *not more than 43% and with not more than 6% hydrogen peroxide. See* Peracetic acid solution, *not over 43% peracetic acid and not over 6% hydrogen peroxide.*		UN2131								
	Peroxyacetic acid, more than 43% and with more than 6% hydrogen peroxide	Forbidden									
W	Pesticide, water reactive, *including but not limited to fungicides, and herbicides, etc., which contain manganese ethylenebisdithiocarbamate*	ORM-C	NA2210	None	173.505	173.1040			2	2	Keep dry
W	Petroleum coke (*uncalcined*)	ORM-C		None	173.505	173.1045			1,2	1,2	Not permitted if temperature of material is at or above 130 deg F
	Petroleum distillate	Combustible liquid	UN1268	None	173.118a	None	No limit	No limit	1,2	1,2	
	Petroleum distillate	Flammable liquid	UN1268	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Petroleum ether	Flammable liquid	UN1271	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Petroleum gas, liquefied. *See* Liquefied petroleum gas										
	Petroleum naphtha	Combustible liquid	UN1255	None	173.118a	None	No limit	No limit	1,2	1,2	
	Petroleum naphtha	Flammable liquid	UN1255	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Petroleum oil, n.o.s. *See* Oil										
A	Phencapton	ORM-A	NA2783	None	173.505	173.510	No limit	No limit			
+	Phenol	Poison B	UN1671	Poison	173.364	173.369	50 pounds	250 pounds	1,2	1,2	
	Phenol, liquid *or* solution (*liquid tar acid containing over 50% phenol*)	Poison B	NA2821	Poison	173.345	173.349	1 quart	55 gallons	1,2	1,2	

	Phenoxy pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2766	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Phenoxy pesticide, liquid, n.o.s. (*compounds and preparations*),	Poison B	UN2765	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Phenoxy pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2765	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
A	Phenylenediamine, meta *or* para, solid	ORM-A	UN1673	None	173.505	173.510	No limit	No limit			
	Phenyldichlorosarsine	Poison B	NA1556	Poison	None	173.355	Forbidden	30 gallons	1	5	
	m-Phenylene diaminediperchlorate (dry)	Forbidden									
	Phenyl mercaptan	Poison B	UN2337	Poison	173.345	173.346	Forbidden	10 gallons	1,2	1	
	Phenyltrichlorosilane	Corrosive material	UN1804	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Phenylurea pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2768	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Phenylurea pesticide, liquid, n.o.s. (*compounds and preparations*),	Poison B	UN2767	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Phenylurea pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2767	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Phosgene *(diphosgene)*	Poison A	UN1076	Poison gas	None	173.333	Forbidden	Forbidden	1	5	
	Phosphine	Poison A	UN2199	Poison gas and Flammable gas	None	173.326	Forbidden	Forbidden	1	5	Segregation same as for flammable gases
	Phosphoric acid	Corrosive material	UN1805	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	Glass carboys in hampers not permitted under deck
	Phosphoric acid triethylenetimine. *See* Tris-(1-aziridiyl) phosphine oxide										
	Phosphoric anhydride (*phosphorus pentoxide*)	Corrosive material	NA1807	Corrosive	None	173.188	Forbidden	100 pounds	1,2	1,2	Keep dry. Glass bottles not permitted under deck
	Phosphorus, amorphous, red	Flammable solid	UN1338	Flammable solid	None	173.189	Forbidden	11 pounds	1,2	1,2	
	Phosphorus bromide. *See* Phosphorus tribromide										
	Phosphorus chloride. *See* Phosphorus trichloride										
	Phosphorus heptasulfide	Flammable solid	UN1339	Flammable solid	None	173.225	Forbidden	10 pounds	1,2	1	Separate from oxidizing materials
	Phosphorus oxybromide	Corrosive material	UN1939	Corrosive	None	173.271	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Phosphorus oxychloride	Corrosive material	UN1810	Corrosive	None	173.271	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Phosphorus pentachloride, solid	Corrosive material	UN1806	Corrosive	None	173.191	Forbidden	5 pounds	1	1	Keep dry
	Phosphorus pentasulfide *(RQ–100/45.4)*	Flammable solid	UN1340	Flammable solid and Dangerous when wet	None	173.225	Forbidden	11 pounds	1,2	1,2	Separate from oxidizing material
	Phosphorus sesquisulfide	Flammable solid	UN1341	Flammable solid and Dangerous when wet	None	173.225	Forbidden	11 pounds	1,2	1	Separate from oxidizing materials
	Phosphorus tribromide	Corrosive material	UN1808	Corrosive	None	173.270	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Phosphorus trichloride *(RQ–5000/2270)*	Corrosive material	UN1809	Corrosive	None	173.271	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Phosphorus trisulfide	Flammable solid	UN1343	Flammable solid	None	173.225	Forbidden	10 pounds	1,2	1	Separate from oxidizing materials

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Phosphorus, white *or* yellow, dry	Flammable solid	UN1381	Flammable solid and Poison	None	173.190	Forbidden	Forbidden	1,2	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Phosphorus, white *or* yellow, in water	Flammable solid	UN1381	Flammable solid and Poison	None	173.190	Forbidden	25 pounds	1,2	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Phosphorus (white or red) and a chlorate, mixtures of	Forbidden									
	Phosphoryl chloride. *See* Phosphorus oxychloride										
	Photographic film. See Film										
	Photographic flash powder. See Fireworks, special *or* Low explosive										
	Phthalimide derivative pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2774	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Phthalimide derivative pesticide, liquid, n.o.s. (*compounds and preparations*),	Poison B	UN2773	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Phthalimide derivative pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2773	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Picrate, dry. See High explosive										
	Picrate of ammonia. See High explosive										
	Picric acid, dry. See High explosive										
	Picric acid, wet, with not less than 10% water	Flammable solid	NA1344	Flammable solid	173.192	173.193	1 pound	25 pounds	1	5	Under deck stowage permitted on cargo vessels if wet with more than 30% water. Stow away from heavy metals and their compounds
	Picric acid, wet with not less than 10% water, over 25 pounds. See High explosive										
	Pinane hydroperoxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2162								
	Pinane hydroperoxide solution *not over 45% peroxide.*	Organic peroxide	UN2162	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Pinene	Flammable liquid	UN2368	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Pine oil	Combustible liquid	UN1272	None	173.118a	None	No limit	No limit	1,2	1,2	
	Pinwheels. *See* Fireworks, common										
	Pivaloyl chloride. *See* Trimethylacetyl chloride										

	Poisonous liquid *or* gas, flammable, n.o.s.	Poison A	NA1953	Poison gas and Flammable gas	None	173.328	Forbidden	Forbidden	1	5	Segregation same as for flammable gas
	Poisonous liquid *or* gas, n.o.s.	Poison A	NA1955	Poison gas	None	173.328	Forbidden	Forbidden	1	5	
	Poisonous liquid, n.o.s. *or* Poison B, liquid, n.o.s.	Poison B	UN2810	Poison	173.345	173.346	1 quart	55 gallons	1,2	1	
	Poisonous solid, corrosive, n.o.s.	Poison B	UN2928	Poison and Corrosive	173.364	173.365	25 pounds	100 pounds	1	4	
	Poisonous solid, n.o.s. *or* Poison B, solid, n.o.s.	Poison B	UN2811	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1	
	Polychlorinated biphenyls		UN2315	None	None	173.510	No limit	No limit	1,2	1,2	If stowedunder deck, must be stowed in a recoverable location.
	Polymerizable material. See 173.21										
	Potassium arsenate, solid	Poison B	UN1677	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Potassium arsenite, solid	Poison B	UN1678	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Potassium bifluoride solution. *See* Potassium hydrogen fluoride solution										
	Potassium bromate	Oxidizer	UN1484	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds. Stow away from powdered metals.
	Potassium carbonyl	Forbidden									
	Potassium chlorate (*potash chlorate*)	Oxidizer	UN1485	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds. Stow away from powdered metals.
	Potassium chromate		NA9142	None	None	173.510	No limit	No limit	1,2	1,2	
	Potassium cyanide, solid	Poison B	UN1680	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Potassium cyanide solution	Poison B	UN1680	Poison	173.345	173.352	1 quart	55 gallons	1,2	1,2	Stow away from acids
	Potassium dichloro isocyanurate. See Potassium dichloro-s-triazinetrione										
	Potassium dichloro-s-triazinetrione, *dry (containing more than 39% available chlorine)*	Oxidizer	NA2465	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	
A	Potassium dichromate	ORM-A	NA1479	None	173.505	173.510	No limit	No limit	1,2	1,2	
A	Potassium fluoride	ORM-B	UN1812	None	173.505	173.510	No limit	No limit			
	Potassium fluoride solution	Corrosive material	UN1812	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
	Potassium hydrate. *See* Potassium hydroxide										
	Potassium hydrogen fluoride solution	Corrosive material	NA1811	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
A	Potassium hydrogen sulfate, solid	ORM-B	UN2509	None	173.505	173.800	25 pounds	100 pounds			
	Potassium hydroxide, dry solid, flake, bead, *or* granular	Corrosive material	UN1813	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry. Do not stow with metals or alloys such as brass, copper, tin, zinc, aluminum, solder, or lead
	Potassium hydroxide, liquid *or* solution	Corrosive material	UN1814	Corrosive	173.244	173.249	1 quart	10 gallons	1,2	1,2	
	Potassium hypochlorite solution. *See* Hypochlorite solutions containing more than 7% available chlorine by weight										
A	Potassium metabisulfite	ORM-B	NA2693	None	173.505	173.510	No limit	No limit			
	Potassium, metal *or* metallic	Flammable solid	UN2257	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Potassium, metal liquid alloy	Flammable solid	UN1420	Flammable solid and Dangerous when wet	None	173.202	Forbidden	1 pound	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Potassium nitrate	Oxidizer	UN1486	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Potassium nitrate mixed (*fused*) with sodium nitrite. *See* Sodium nitrite mixed (*fused*) with potassium nitrate										
	Potassium nitrite	Oxidizer	UN1488	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and cyanides. Stow away from foodstuffs
	Potassium perchlorate	Oxidizer	UN1489	Oxidizer	173.153	173.219	25 pounds	100 pounds	1,3	1,3	Stow away from powdered metals
	Potassium permanganate	Oxidizer	UN1490	Oxidizer	173.153	173.154 173.194	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Potassium peroxide	Oxidizer	UN1491	Oxidizer	None	173.187	Forbidden	100 pounds	1,2	1,2	Keep dry
	Potassium persulfate	Oxidizer	UN1492	Oxidizer	173.153	173.154	50 pounds	200 pounds	1,2	1,2	
	Potassium sulfide	Flammable solid	UN1382	Flammable solid	173.153	173.207	25 pounds	300 pounds	1,2	1,2	Separate from liquid acids, flammable gases or liquids, oxidizing materials or organic peroxides
	Potassium superoxide	Oxidizer	UN2466	Oxidizer	None	173.187	Forbidden	100 pounds	1,2	1	Keep dry. Stow away from powdered metals, permanganates and combustible packagings and cargo
	Pressurized product. See Compressed gas, n.o.s.										
	Primer. See Cannon primer, Combination primer, *or* Small-arms primer										
	Primer, detonating. See Detonating primers, Class A or Class C explosives										
	Projectile, explosive. See Explosive projectile										
	Projectile, gas, nonexplosive. See Chemical ammunition, nonexplosive (*containing a Poison A, Poison B or irritating material, as appropriate*)										
	Projectile, gas, smoke, or incendiary, with burster or booster with or without detonating fuze. See Explosive projectile										
	Projectile, illuminating, incendiary or smoke, with expelling charge but without bursting charge. See Fireworks, special										
	Projectile, sand-loaded, empty or solid. See 173.55										
	Propane *or* Liquefied petroleum gas. *See* Liquefied petroleum gas										
	Propargite		NA2765	None	None	173.510	No limit	No limit	1,2	1,2	

Propargyl alcohol	Flammable liquid	NA1986	Flammable liquid and Poison	None	173.119	Forbidden	1 quart	1,2	5	
Propellant explosive	Class A explosive		Explosive A	None	173.64	Forbidden	Forbidden	6	5	
Propellant explosive in water (*smokeless powder*)	Class B explosive		Explosive B	None	173.93	Forbidden	Forbidden	1,3	5	Magazine stowage authorized
Propellant explosive in water, unstable, condemned, *or* deteriorated (*smokeless powder*)	Class B explosive		Explosive B	None	173.93	Forbidden	Forbidden	1,3	5	Magazine stowage authorized
Propellant explosive, liquid	Class B explosive		Explosive B	None	173.93	Forbidden	10 pounds	1,2	5	Magazine stowage authorized
Propellant explosive, solid	Class B explosive		Explosive B	None	173.93	Forbidden	10 pounds	1,3	5	Magazine stowage authorized
Propionaldehyde	Flammable liquid	UN1275	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
Propionic acid	Corrosive material	UN1848	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	Separated by a complete compartment or hold from organic peroxides
Propionic acid solution	Corrosive material	UN1848	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	Separated by a complete compartment or hold from organic peroxides
Propionic anhydride	Corrosive material	UN2496	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1	Keep dry
Propionyl peroxide, *not more than 28% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2132								
Propionyl peroxide, more than 28% in solution	Forbidden									
Propyl acetate	Flammable liquid	UN1276	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
Propyl alcohol	Flammable liquid	UN1274	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1,2	
Propylamine	Flammable liquid	UN1277	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
Propyl chloride	Flammable liquid	UN1278	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
Propylene *or* Liquefied petroleum gas. *See* Liquefied petroleum gas										
Propylenediamine	Flammable liquid	UN2258	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
Propylene dichloride	Flammable liquid	UN1279	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
Propyleneimine, inhibited	Flammable liquid	UN1921	Flammable liquid	None	173.189	Forbidden	5 pints	1,2	1	
Propylene oxide	Flammable liquid	UN1280	Flammable liquid	173.118	173.119	Forbidden	1 gallon	1,3	4	
Propyl formate	Flammable liquid	UN1281	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	1	
Propyl mercaptan	Flammable liquid	UN2704	Flammable liquid	None	173.141	Forbidden	10 gallons	1,3	5	
Propyl trichlorosilane	Corrosive material	UN1816	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
Prussic acid. See Hydrocyanic acid, as appropriate										
Pyrethrins		NA9184	None	None	173.510	No limit	No limit	1,2	1,2	
Pyridine	Flammable liquid	UN1282	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
Pyridine perchlorate	Forbidden									

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	Pyrophoric liquid, n.o.s. *or* Pyroforic liquid, n.o.s.	Flammable liquid	UN2845	Flammable liquid	None	173.134	Forbidden	Forbidden	1	5	Shade from radiant heat. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Pyrosulfuryl chloride	Corrosive material	UN1817	Corrosive	173.244	173.247	1 quart	1 quart	1	4	Keep dry. Glass carboys not permitted on passenger vessels
	Pyroxylin plastic, scrap	Flammable solid	NA1325	Flammable solid	None	173.195	Forbidden	Forbidden	1	5	Shade from radiant heat
	Pyroxylin plastic, rods, sheets, rolls, *or* tubes	Flammable solid	NA1325	Flammable solid	173.197	173.197	50 pounds	350 pounds	1,2	1	
	Pyrrolidine	Flammable liquid	UN1922	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,2	1	
	Quebrachitol pentanitrate	Forbidden									
	Quicklime. *See* Calcium oxide										
	Quinoline		UN2656	None	None	173.510	No limit	No limit	1,2	1,2	
	Radioactive material, articles, manufactured from natural *or* depleted uranium *or* natural thorium	Radioactive material	UN2909	None	173.421–1 173.424	173.421–1 173.424			1,2	1,2	
	Radioactive material, empty packages	Radioactive material	UN2908	Empty	173.421–1 173.427	173.421–1 173.427			1,2	1,2	
	Radioactive material, fissile, n.o.s	Radioactive material	UN2918	Radioactive	173.453	173.417			1,2	1,2	
	Radioactive material, instruments and articles	Radioactive material	UN2911	None	173.421–1 173.422	173.421–1 173.422			1,2	1,2	
	Radioactive material, limited quantity, n.o.s	Radioactive material	UN2910	None	173.421 173.421–1	173–421 173.421–1			1,2	1,2	
	Radioactive material, low specific activity *or* LSA, n.o.s	Radioactive material	UN2912	Radioactive	173.421 173.422 173.424	173.425			1,2	1,2	
	Radioactive material, n.o.s	Radioactive material	UN2982	Radioactive	173.421 173.422 173.424	173.415 173.416			1,2	1,2	
	Radioactive material, special form, n.o.s	Radioactive material	UN2974	Radioactive	173.421 173.422	173.415 173.416			1,2	1,2	
	Railway Fusee. See Fusee										
	Railway torpedo. *See* Torpedo, railway										
	Refrigerant gas, n.o.s. *or* Dispersant gas n.o.s.	Nonflammable gas	UN1078	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	

Refrigerant gas, n.o.s. *or* Dispersant gas n.o.s.	Flammable gas	NA1954	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1,2	
Refrigerating machine	Nonflammable gas	UN2857	Nonflammable gas	173.306 173.307		No limit	No limit	1,3	1,3	
Refrigerating machine	Flammable gas	NA1954	Flammable gas	173.306		No limit	No limit	1,3	1,3	
Refrigerating machine	Flammable liquid	NA1993	Flammable liquid	173.130 173.306		No limit	No limit	1,2	1	
Resin solution (*resin compound, liquid*)	Flammable liquid	UN1866	Flammable liquid	173.118	173.119	1 quart	55 gallons	1,2	1	
Resorcinol *(RQ–1000/454)*		UN2876	None	None	173.510	No limit	No limit	1,2	1,2	
Rifle grenade. See Grenade, hand *or* rifle, explosive										
Rifle powder. See Propellant explosive *or* Black powder										
Road asphalt *or* tar, liquid *See* Asphalt, cut back										
Road asphalt *or* tar (*when heated to or above its flash point*). *See* Asphalt										
Rocket ammunition with empty, inert, *or* solid loaded projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
Rocket ammunition with empty projectile	Class B explosive		Explosive B	None	173.90	Forbidden	Forbidden	1,3	5	
Rocket ammunition with explosive projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
Rocket ammunition with gas projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
Rocket ammunition with illuminating projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
Rocket ammunition with incendiary projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
Rocket ammunition with inert loaded projectile	Class B explosive		Explosive B	None	173.90	Forbidden	Forbidden	1,3	5	
Rocket ammunition with smoke projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
Rocket ammunition with solid projectile	Class B explosive		Explosive B	None	173.90	Forbidden	Forbidden	1,3	5	
Rocket body, with electric primer or electric squib. See 173.55										
Rocket engine, liquid	Class B explosive		Explosive B	None	173.95	Forbidden	Forbidden	1,2	5	Magazine stowage authorized
Rocket fireworks. See Fireworks, common										
Rocket head. *See* Explosive projectile										
Rocket motor	Class A explosive		Explosive A	None	173.79	Forbidden	Forbidden	6	5	
Rocket motor	Class B explosive		Explosive B	None	173.92	Forbidden	550 pounds	1,3	5	
Roman candle. See Fireworks, common										
Rubidium metal	Flammable solid	UN1423	Flammable solid and Dangerous when wet	None	173.206	Forbidden	225 pounds	1,2	5	Segregation same as for flammable solid labeled Dangerous When Wet
Rubidium metal, in cartridges	Flammable solid	UN1423	Flammable solid and Dangerous when wet	173.206		1 pound	25 pounds	1,2	4	Segregation same as for flammable solid labeled Dangerous When Wet

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(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
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	Safety fuse. *See* Fuse, safety										
	Safety squib	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Salute. See Fireworks common *or* special										
	Samples. See 172.101(c)(12)										
	Sand acid. *See* Hydrofluorosilicic acid										
	Selenic acid, liquid	Corrosive material	UN1905	Corrosive	None	173.245	Forbidden	5 pints	1,2	1,2	
	Selenium nitride	Forbidden									
	Selenium oxide	Poison B	NA2811	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Self-lighting cigarette	Flammable solid	UN1867	Flammable solid	173.21		Fobidden	Forbidden	1,2	1,2	Keep dry
	Self propelled vehicle. *See* Motor vehicle										
	Shaped charge, commercial. See High explosive (*173.65(h)*)										
	Shaped charges (commercial) containing more than 8 ounces of explosives	Forbidden									
	Shell, fireworks. *See* Fireworks, common *or* special										
	Ship, distress signal. See Fireworks, special										
	Signal flare	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,2	1,2	
	Silicofluoric acid. *See* Hydrofluorosilicic acid										
	Silicon chloride *or* Silicon tetrachloride	Corrosive material	UN1818	Corrosive	173.244	173.247	1 quart	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Silicon chrome, exothermic. *See* Ferrochrome, exothermic										
+	Silicon tetrafluoride	Nonflammable gas	UN1859	Nonflammable gas	173.308	173.302	Forbidden	300 pounds	1	4	Stow away from foodstuffs
	Silver acetylide (dry)	Forbidden									
	Silver azide (dry)	Forbidden									
	Silver chlorite (dry)	Forbidden									
+	Silver cyanide	Poison B	UN1684	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Silver fulminate (dry)	Forbidden									
	Silver nitrate	Oxidizer	UN1493	Oxidizer	173.158	173.182	25 pounds	100 pounds	1,2	1,2	Stow away from foodstuffs
	Silver oxalate (dry)	Forbidden									
	Silver picrate (dry)	Forbidden									
	Small arms ammunition	Class C explosive		None	173.101		50 pounds	150 pounds	1,3	1,3	

	Small arms ammunition	ORM–D		None	173.101	173.1201	65 pounds gross	65 pounds gross			
	Small arms ammunition, irritating (*tear gas*) cartridge	Class C explosive		Irritant	None	173.101	Forbidden	150 pounds	1,3	1,3	
	Small arms primer	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	1,3	
	Smoke candle	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
	Smoke generator. See Chemical ammunition, nonexplosive (*containing a Poison A, Poison B, or irritating material, as appropriate*)										
	Smoke grenade	Class C explosive		Explosive C	None	173.108	50 pounds	150 pounds	1,3	1,3	
	Smokeless powder for cannon or small arms. See Propellant explosive, *Class A or B, as appropriate*										
	Smokeless powder for small arms (*100 pounds or less*)	Flammable solid	NA1325	Flammable solid	173.88	173.197a	Forbidden	Forbidden	1,3	1,3	Segregation same as for explosives
	Smoke pot	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
	Smoke projectile with bursting charge. See Explosive projectile										
	Smoke projectile with expelling charge but without bursting charge. See Fireworks, special										
	Smoke signal	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
	Soda amatol. See High explosive										
	Soda lime, solid	Corrosive material	UN1907	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Sodium acid sulfate, solid *or* solution. *See appropriate* Sodium hydrogen sulfate *entry*										
A	Sodium aluminate, solid	ORM-B	UN2812	None	173.505	173.800	25 pounds	100 pounds			
	Sodium aluminate solution	Corrosive material	UN1819	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
	Sodium aluminum hydride	Flammable solid	UN2835	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium amide	Flammable solid	UN1425	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium arsenate	Poison B	UN1685	Poison	173.364	173.365 173.368	50 pounds	200 pounds	1,2	1,2	
	Sodium arsenite, liquid, (*solution*)	Poison B	UN1686	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
+	Sodium azide	Poison B	UN1687	Poison	173.364	173.375	50 pounds	100 pounds	1,2	1,2	Stow away from heavy metals, especially lead and its compounds. Stow separate from acids
	Sodium bifluoride, solid	Corrosive material	UN2439	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
	Sodium bifluoride, solution	Corrosive material	UN2439	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	
	Sodium bisulfate, solid *or* solution. *See* Sodium hydrogen sulfate, solid *or* solution										

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Sodium bisulfite, solid, *or* solution *See* Sodium hydrogen sulfite, solid*or*solution										
	Sodium bromate	Oxidizer	UN1494	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Sodium chlorate (*soda chlorate*)	Oxidizer	UN1495	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Sodium chlorite	Oxidizer	UN1496	Oxidizer	None	173.160	Forbidden	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Sodium chlorite solution (*not exceeding 42% sodium chlorite*)	Corrosive material	UN1908	Corrosive	173.244	173.263	1 quart	4 gallons	1,2	1	Glass carboys in hampers not permitted under deck
	Sodium chromate		NA9145	None	None	173.510	No limit	No limit	1,2	1,2	
	Sodium cyanide, solid	Poison B	UN1689	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Sodium cyanide solution	Poison B	UN1689	Poison	173.345	173.352	1 quart	55 gallons	1,2	1,2	Stow away from acids
	Sodium dichloroisocyanurate. *See* Sodium dichloro-s-triazinetrione										
	Sodium dichloro-s-triazinetrione (*dry, containing more than 39% available chlorine*)	Oxidizer	UN2465	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	
A	Sodium dichromate	ORM-A	NA1479	None	173.505	173.510	No limit	No limit	1,2	1,2	
	Sodium dodecylbenzenesulfonate		NA9146	None	None	173.510	No limit	No limit	1,2	1,2	
A	Sodium fluoride, solid	ORM-B	UN1690	None	173.505	173.510	No limit	No limit	1,2	1,2	
	Sodium fluoride solution	Corrosive material	UN1690	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	Stow away from acids
	Sodium hydrate. *See* Sodium hydroxide										
	Sodium hydride	Flammable solid	UN1427	Flammable solid and Dangerous when wet	None	173.198	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
A	Sodium hydrogen sulfate, solid	ORM-B	UN1821	None	173.505	173.800	25 pounds	100 pounds			
	Sodium hydrogen sulfate solution	Corrosive material	UN2837	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
A	Sodium hydrogen sulfite, solid	ORM-B	NA2693	None	173.505	173.800	25 pounds	100 pounds	1,2	1,2	
	Sodium hydrogen sulfite, solution	Corrosive material	NA2693	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	
	Sodium hydrosulfide, solid(*with less than 25% water of crystallization*)	Flammable solid	UN2318	Flammable solid	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
	Sodium hydrosulfide, solid (*with not less than 25% water of crystalization*)	Corrosive material	NA2923	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
	Sodium hydrosulfide, solution	Corrosive material	NA2922	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	

	Sodium hydrosulfite (*sodium dithionite*)	Flammable solid	UN1384	Flammable solid	173.153	173.204	25 pounds	100 pounds	1,2	1,2	Keep dry. Below deck stowage in metal drums only. Separate from flammable gases, liquids, oxidizing materials, or organic peroxides
	Sodium hydroxide, dry solid, flake, bead, *or* granular	Corrosive material	UN1823	Corrosive	173.244	173.245b	25 pounds	200 pounds	1,2	1,2	Keep dry
	Sodium hydroxide, liquid *or* solution	Corrosive material	UN1824	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
	Sodium hypochlorite. See Hypochlorite solution *or* Hypochlorite solution containing not more than 7% available chlorine										
A	Sodium metabisulfite	ORM-B	NA2693	None	173.505	173.510	No limit	No limit			
	Sodium, metal *or* metallic	Flammable solid	UN1428	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium, metal dispersion in organic solvent	Flammable solid	UN1429	Flammable solid and Dangerous when wet	None	173.230	Forbidden	10 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium, metal liquid alloy	Flammable solid	NA1421	Flammable solid and Dangerous when wet	None	173.202	Forbidden	1 pound	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium methylate, alcohol mixture	Combustible liquid	NA1289	None	173.118a	None	No limit	No limit	1,2	1,2	
	Sodium methylate, alcohol mixture	Flammable liquid	NA1289	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Sodium methylate, alcohol mixture	Corrosive material	NA1289	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Sodium methylate, dry *(RQ–1000/454)*	Flammable solid	UN1431	Flammable solid and Dangerous when wet	173.153	173.154	25 pounds	100 pounds	1,2	1	
	Sodium monoxide, solid	Corrosive material	UN1825	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Sodium nitrate	Oxidizer	UN1498	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Sodium nitrate bags. See Bags, sodium nitrate, empty and unwashed										
	Sodium nitrite	Oxidizer	UN1500	Oxidizer	173.153	173.234	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and cyanides. Bagged material not permitted on passenger vessels
	Sodium nitrite mixed (*fused*) with potassium nitrate	Oxidizer	UN1487	Oxidizer	173.153	173.183	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and cyanides
	Sodium nitrite mixture (*sodium nitrate, sodium nitrite, and potassium nitrate*)	Oxidizer	NA1487	Oxidizer	173.153	173.234	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and cyanides
A	Sodium pentachlorophenate	ORM-A	UN2567	None	173.505	173.510	No limit	No limit			
	Sodium perchlorate	Oxidizer	UN1502	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,3	1,3	Stow away from powdered metals
	Sodium permanganate	Oxidizer	UN1503	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Sodium peroxide	Oxidizer	UN1504	Oxidizer	None	173.187	Forbidden	100 pounds	1,2	1	Keep dry. Stow away from powdered metals, permanganates, combustible packing of other cargo, and combustible foodstuffs
	Sodium persulfate	Oxidizer	UN1505	Oxidizer	173.153	173.154	50 pounds	200 pounds	1,2	1,2	
	Sodium phenolate, solid	Corrosive material	UN2497	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
	Sodium phosphate, dibasic		NA9147	None	None	173.510	No limit	No limit	1,2	1,2	

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
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	Sodium phosphate, tribasic		NA9148	None	None	173.510	No limit	No limit	1,2	1,2	
	Sodium phosphide	Flammable solid	UN1432	Flammable solid and Dangerous when wet	None	173.154	Forbidden	25 pounds	1	5	
	Sodium picramate, wet (*with at least 20% water*)	Flammable solid	UN1349	Flammable solid	None	173.205	Forbidden	25 pounds	1,2	5	Stow away from heavy metals, especially lead, and its compounds
	Sodium picryl peroxide	Forbidden									
	Sodium potassium alloy (liquid)	Flammable solid	UN1422	Flammable solid and Dangerous when wet	None	173.202	Forbidden	1 pound	1,2	5	Under deck stowage must be readily accessible. Segregation same as for flammable solid labeled Dangerous When Wet.
	Sodium potassium alloy (solid)	Flammable solid	UN1423	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Under deck stowage must be readily accessible. Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium selenite	Poison B	UN2630	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Sodium sulfide, anhydrous *or* Sodium sulfide *with less than 30% water of crystallization*	Flammable solid	UN1385	Flammable solid	173.159	173.207	25 pounds	100 pounds	1,2	1,2	Stow separated from liquid acids
	Sodium sulfide, hydrated *with not less than 30% water*	Corrosive material	UN1849	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Stow away from acids
	Sodium superoxide	Oxidizer	UN2547	Oxidizer	None	173.187	Forbidden	100 pounds	1,2	5	Keep dry. Stow away from powdered metals, permanganates and combustible packagings and cargo
	Sodium tetranitride	Forbidden									
	Sparklers. See Fireworks, common										
	Spent iron mass. See Iron mass, spent										
	Spent iron sponge. See Iron sponge, spent										
	Spent mixed acid. See Nitrating acid, spent										
	Spent sulfuric acid. See Sulfuric acid, spent										
	Spirits of nitroglycerin, (*1 to 10%*)	Flammable liquid	NA1204	Flammable liquid	None	173.133	Forbidden	6 quarts	1,2	5	Segregation same as for explosives
	Spirits of nitroglycerin, not exceeding 1% nitroglycerin by weight	Flammable liquid	NA1204	Flammable liquid	173.118	173.133	1 quart	6 quarts	1,2	1	
	Sporting powder. See Black powder *or* Propellant explosive, solid										
	Spray starting fluid. See Engine starting fluid										
	Spreader cartridge. See Fireworks, special										
	Squib, electric or safety. See Electric squib *or* Safety squib										

	Stannic phosphide	Flammable solid	UN1433	Flammable solid and Dangerous when wet	None	173.154	Forbidden	25 pounds	1	5	Segregation same as for flammable solid labeled Dangerous When Wet
A	Stannous chloride, solid	ORM-B	NA1759	None	173.505	173.510	No limit	No limit			
	Starter cartridge	Class B explosive		Explosive B	None	173.92	Forbidden	200 pounds	1,3	5	
	Starter cartridge	Class C explosive		Explosive C	None	173.102	50 pounds	150 pounds	1,3	1,3	
	Storage battery, wet. See Battery, electric storage, wet										
	Strontium arsenite, solid	Poison B	UN1691	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Strontium chlorate	Oxidizer	UN1506	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Strontium chlorate, wet	Oxidizer	UN1506	Oxidizer	173.153	173.163	25 pounds	200 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Strontium chromate		NA9149	None	None	173.510	No limit	No limit	1,2	1,2	
	Strontium nitrate	Oxidizer	UN1507	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Strontium peroxide	Oxidizer	UN1509	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Keep dry
	Strychnine salt, solid	Poison B	UN1692	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Strychnine, solid	Poison B	UN1692	Poison	173.364	173.365	Forbidden	200 pounds	1,2	1,2	
	Styphnate of lead. See Initiating explosive										
	Styrene monomer, inhibited	Flammable liquid	UN2055	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Substituted nitrophenol pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2780	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Substituted nitrophenol pesticide, liquid, n.o.s. (*compounds and preparations*),	Poison B	UN2779	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Substituted nitrophenol pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2779	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Succinic acid peroxide	Organic peroxide	UN2135	Organic peroxide	173.153	173.157 173.158	Forbidden	25 pounds	1	1	
	Succinic acid peroxide, *technically pure. See* Succinic acid peroxide.		UN2135								
	Sucrose octanitrate (dry)	Forbidden									
	Sulfur and chlorate, loose mixtures of	Forbidden									
	Sulfur chloride (*di*)	Corrosive material	UN1828	Corrosive	None	173.247	Forbidden	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Sulfur chloride (*mono*)	Corrosive material	UN1828	Corrosive	None	173.247	Forbidden	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Sulfur dioxide	Nonflammable gas	UN1079	Nonflammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	Stow away from living quarters
	Sulfur flower. *See* Sulfur, solid										
	Sulfur hexafluoride	Nonflammable gas	UN1080	Nonflammable gas	173.306	173.304	150 pounds	300 pounds	1,2	1,2	
	Sulfuric acid (*For fuming sulfuric acid, see* Oleum)	Corrosive material	UN1830	Corrosive	173.244	173.272	1 quart	1 gallon	1	1	Keep dry. Under deck stowage is permitted on cargo vessels only in metal drums
	Sulfuric acid, spent	Corrosive material	UN1832	Corrosive	None	173.248	Forbidden	1 quart	1	1	Under deck stowage is permitted on cargo vessels only in metal drums
	Sulfuric anhydride. *See* Sulfur trioxide										
	Sulfurous acid	Corrosive material	UN1833	Corrosive	173.244	173.245	2 gallons	2 gallons	1,2	1	Glass carboys in hampers not permitted under deck
W	Sulfur, solid	ORM-C	UN1350	None	173.505	173.1080			1,2	1,2	Protect from sparks and open flame. Stow separate from oxidizing materials. Segregation same as for flammable solids

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Sulfur trioxide	Corrosive material	UN1829	Corrosive	173.244	173.273	Forbidden	1 gallon	1,2	1,2	Keep dry. Glass bottles not permitted under deck
	Sulfuryl chloride	Corrosive material	UN1834	Corrosive	173.244	173.247	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Sulfuryl fluoride	Nonflammable gas	UN2191	Nonflammable gas	173.306	173.304 173.314	150 pounds	300 pounds	1,3	1	
	Sulphur. *See* Sulfur, solid										
	Supplementary charge (explosive)	Class A explosive		Explosive A	None	173.69	Forbidden	Forbidden	6	5	
A	2,4,5-T. *See* 2,4,5-Trichlorophenoxyacetic acid.										
	Tank car, containing residual phosphorus and filled with water or inert gas, See 173.190										
	Tank car, empty (previously used for a hazardous material), See 173.29										
	Tank car, empty (previously used for a Poison A material), See 172.510 and 173.29										
	Tank, portable, empty (previously used for a hazardous material). See 172.510, 172.514 and 173.29										
	Tank truck, empty. See 172.510, 172.514 and 173.29										
A	TDE (*1,1-Dichloro-2,2-bis(p-chlorophenyl) ethane*)	ORM-A	NA2761	None	173.505	173.510	50 pounds	No limit	1,2	1,2	
	Tear gas ammunition. See Chemical ammunition, nonexplosive *(containing an irritant material)*										
	Tear gas candle	Irritating material	UN1700	Irritant	None	173.385	Forbidden	75 pounds	1	5	Stow away from living quarters
	Tear gas cartridge. See Small arms ammunition, irritating (*tear gas*) cartridge										
	Tear gas device	Irritating material	NA1693	Irritant	None	173.385	Forbidden	75 pounds	1	5	Stow away from living quarters
	Tear gas grenade. See Grenade, tear gas										
	Tertiary alcohol. See Alcohol, n.o.s.										
	Tetraazido benzene quinone	Forbidden									
AW	Tetrachloroethane	ORM-A	UN1702	None	173.505	173.620	1 quart	10 gallons	1,2	1,2	
A	Tetrachloroethylene *or* Perchloroethylene	ORM-A	UN1897	None	173.505	173.605	10 gallons	55 gallons			
	Tetraethylammonium perchlorate (dry)	Forbidden									

	Tetraethyl dithiopyrophosphate and compressed gas mixture	Poison A	UN1703	Poison gas	None	173.334	Forbidden	Forbidden	1	5	Shade from radiant heat. Stow away from living quarters. Segregation same as for non-flammable gases
	Tetraethyl dithiopyrophosphate, liquid	Poison B	UN1704	Poison	None	173.358	Forbidden	1 quart	1	5	
	Tetraethyl dithiopyrophosphate mixture, dry	Poison B	UN1704	Poison	None	173.377	Forbidden	200 pounds	1	5	
	Tetraethyl dithiopyrophosphate mixture, liquid	Poison B	UN1704	Poison	None	173.359	Forbidden	1 quart	1	5	
	Tetraethyl lead, liquid (*including flash point for export shipment by water*)	Poison B	NA1649	Poison	None	173.354	Forbidden	55 gallons	1	5	If flash point is 141 deg F. or less, segregation must be the same as for flammable liquids
	Tetraethyl pyrophosphate and compressed gas mixture	Poison A	UN1705	Poison gas	None	173.334	Forbidden	Forbidden	1	5	Shade from radiant heat. Stow away from living quarters. Segregation same as for non-flammable gases
	Tetraethyl pyrophosphate, liquid	Poison B	NA2783	Poison	None	173.358	Forbidden	1 quart	1,2	5	
	Tetraethyl pyrophosphate mixture, dry	Poison B	NA2783	Poison	None	173.377	Forbidden	200 pounds	1,2	5	
	Tetraethyl pyrophosphate mixture, liquid	Poison B	NA2783	Poison	None	173.359	Forbidden	1 quart	1,2	5	
+	Tetrafluoroethylene, inhibited	Flammable gas	UN1081	Flammable gas	173.306	173.304	Forbidden	300 pounds	1,2	1,2	Stow away from living quarters
	1,2,3,6-Tetrahydrobenzaldehyde	Corrosive material	UN2498	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Tetrahydrofuran	Flammable liquid	UN2056	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Tetralin hydroperoxide, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2136								
	Tetramethylammonium hydroxide, liquid	Corrosive material	UN1835	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	1,1,3,3-Tetramethylbutyl hydroperoxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2160								
	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2161								
	Tetramethylene diperoxide dicarbamide	Forbidden									
A	Tetramethylmethylenediamine	ORM-A	NA9069	None	173.505	173.510	No limit	No limit			
	Tetranitro diglycerin	Forbidden									
	Tetranitromethane	Oxidizer	UN1510	Oxidizer	None	173.203	Forbidden	Forbidden	1	5	Shade from radiant heat. Stow away from foodstuffs
	2,3,4,6-Tetranitrophenol	Forbidden									
	2,3,4,6-Tetranitrophenyl methyl nitramine	Forbidden									
	2,3,4,6-Tetranitrophenylnitramine	Forbidden									
	Tetranitroresorcinol (dry)	Forbidden									
	2,3,5,6-Tetranitroso-1,4-dinitrobenzene	Forbidden									
	2,3,5,6-Tetranitroso nitrobenzene (dry)	Forbidden									
	Tetrazene (guanyl nitrosamino guanyltetrazene). See Initiating explosive										
	Tetrazine (dry)	Forbidden									
	Tetrazolyl azide (dry)	Forbidden									
	Tetryl. See High explosive										
	Textile treating compound *or* mixture, liquid	Corrosive material	NA1760	Corrosive		173.249a	1 quart	10 gallons	1,2	1,2	
	Thallium salt, solid, n.o.s.	Poison B	NA1707	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Thallium sulfate, solid	Poison B	NA1707	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Thinner for rust preventive coating. *See* Rust preventive coating										
	Thiocarbonylchloride. See Thiophosgene										

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	Thioglycolic acid	Corrosive material	UN1940	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	Glass carboys in hampers not permitted under deck
	Thionyl chloride	Corrosive material	UN1836	Corrosive	None	173.247	Forbidden	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Thiophenol. See Phenyl mercaptan										
+	Thiophosgene	Poison B	UN2474	Poison	None	173.356	Forbidden	1 gallon	1	5	Shade from radiant heat
	Thiophosphoryl chloride	Corrosive material	UN1837	Corrosive	None	173.271	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
A	Thiram	ORM-A	NA2771	None	173.505	173.510	No limit	No limit			
	Thorium metal, pyrophoric	Radioactive material	UN2975	Radioactive and Flammable Solid	None	173.416	Forbidden	Forbidden	1,2	1,2	
	Thorium nitrate	Radioactive material	UN2976	Radioactive and Oxidizer	None	173.419	Forbidden	25 pounds	1,2	1,2	Separate longitudinally by a complete hold or compartment from explosives
	Time fuze. See Fuze, time										
	Tin chloride, fuming. *See* Tin tetrachloride, anhydrous										
	Tin perchloride. *See* Tin tetrachloride, anhydrous										
	Tin tetrachloride, anhydrous	Corrosive material	UN1827	Corrosive	173.244	173.247	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Titanium metal powder, dry *or* wet *with less than 20% water*	Flammable solid	UN2546	Flammable solid	None	173.208	Forbidden	75 pounds	1,2	5	
	Titanium metal powder, wet with 20% or more water	Flammable solid	UN1352	Flammable solid	None	173.208	Forbidden	150 pounds	1,2	5	
	Titanium sulfate solution *containing not more than 45% sulfuric acid*	Corrosive material	NA1760	Corrosive	173.244	173.297	1 quart	1 gallon	1	4	Shade from radiant heat. Keep dry
	Titanium tetrachloride	Corrosive material	UN1838	Corrosive	173.244	173.247	1 quart	10 gallons	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Toluene (*toluol*)	Flammable liquid	UN1294	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
A	Toluenediamine	ORM-A	NA1709	None	173.505	173.510	No limit	No limit			
+	Toluene diisocyanate	Poison B	UN2078	Poison	173.345	173.346	Forbidden	55 gallons	1,3	1,3	Shade from radiant heat
	Toluene sulfonic acid, liquid	Corrosive material	UN2584	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Torch. See Fireworks, common										
	Torpedo, railway	Class B explosive		Explosive B	None	173.91	Forbidden	200 pounds	1,2	1,2	Passenger vessels in metal lockers only
A	Toxaphene	ORM-A	NA2761	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	

	Toy caps	Class C explosive		Explosive C	None	173.100 173.109	50 pounds	150 pounds	1,3	1,3	
	Toy propellant device	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,3	1,3	
	Toy smoke device	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,3	1,3	
	Toy torpedo. See Fireworks, special										
	2,4,5-TP. *See* 2,4,5-Trichlorophenoxypropionic acid										
	Tracer	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Tracer fuze	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Tractor. *See* Motor vehicle										
	Trailer *or* truck body with refrigeration *or* heating equipment. *See* Motor vehicle										
	Triazine pesticide, liquid, n.o.s. (*compounds and preparations*),	Flammable liquid	UN2764	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Triazine pesticide, liquid, n.o.s. (*compounds and preparations*), liquid	Poison B	UN2763	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Triazine pesticide, solid, n.o.s. (*compounds and preparations*),	Poison B	UN2763	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Tri-(b-nitroxyethyl)ammonium nitrate	Forbidden									
A	Trichlorfon	ORM-A	NA2783	None	173.505	173.510	50 pounds	200 pounds	1,2	1,2	
	Trichloroacetic acid, solid	Corrosive material	UN1839	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1	
	Trichloroacetic acid solution	Corrosive material	UN2564	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	Glass carboys in hampers not permitted under deck
A	1,1,1-Trichloroethane	ORM-A	UN2831	None	173.505	173.605	10 gallons	55 gallons			
A	Trichloroethylene	ORM-A	UN1710	None	173.505	173.605	10 gallons	55 gallons	1,2	1,2	
	Trichloroisocyanuric acid, dry	Oxidizer	UN2468	Oxidizer	173.153	173.217	10 pounds	50 pounds	1,2	1,2	Shade from radiant heat. Keep dry, stow separated from nitrogen compounds
	Trichloromethyl perchlorate	Forbidden									
A	Trichlorophenol	ORM-A	NA2020	None	173.505	173.510	100 pounds	No limit	1,2	1,2	
A	2,4,5-Trichlorophenoxyacetic acid	ORM-A	NA2765	None	173.505	173.510	50 pounds	No limit	1,2	1,2	
	2,4,5-Trichlorophenoxyacetic acid amine, ester, *or* salt		NA2765	None	None	173.510	No limit	No limit	1,2	1,2	
A	2,4,5-Trichlorophenoxypropionic acid	ORM-A	NA2765	None	173.505	173.510	50 pounds	No limit	1,2	1,2	
	2,4,5-Trichlorophenoxypropionic acid ester		NA2765	None	None	173.510	No limit	No limit	1,2	1,2	
	Trichlorosilane	Flammable liquid	UN1295	Flammable liquid	None	173.136	Forbidden	10 gallons	1	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Trichloro-s-triazinetrione dry, *containing over 39% available chlorine*	Oxidizer	NA2468	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	Shade from radiant heat. Keep dry. Stow separated from nitrogen compounds
	(mono-(Trichloro) tetra-(monopotassium dichloro)-penta-s-triazinetrione, dry (*containing over 39% available chlorine*)	Oxidizer	NA2468	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,3	1,3	Keep dry
	Trick matches	Class C explosive		Explosive C	None	173.111	Forbidden	Forbidden	1,3	1,3	
	Trick noise maker, explosive	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,3	1,3	
	Triethanolamine dodycylbenzenesulfonate		NA9151	None	None	173.510	No limit	No limit	1,2	1,2	
	Triethylamine	Flammable liquid	UN1296	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+	Trifluorochloroethylene	Flammable gas	UN1082	Flammable gas	173.306	173.304 173.314	Forbidden	10 gallons	1,2	1	

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Trifluoromethane and chlorotrifluoromethane mixture (*constant boiling mixture*) (*R-503*). *See* Refrigerant gas, n.o.s.										
	Triformoxime trinitrate	Forbidden									
	1,3,3-Trimethyl-2,4,6-trinitrobenzene	Forbidden									
	Trimethylacetyl chloride	Corrosive material	UN2438	Corrosive	173.244	173.247	1 quart	1 quart	1,2	1,2	
	Trimethylamine, anhydrous	Flammable gas	UN1083	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1	4	
	Trimethylamine, aqueous solution	Flammable liquid	UN1297	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	Stow away from mercury and mercury compounds
	Trimethylchlorosilane	Flammable liquid	UN1298	Flammable liquid	None	173.135	Forbidden	10 gallons	1,2	1	
	Trimethylene glycol diperchlorate	Forbidden									
	Trimethylol nitromethane trinitrate	Forbidden									
	2,4,6-Trinitro-1,3,5-triazido benzene (dry)	Forbidden									
	2,4,6-Trinitro-1,3-diazobenzene	Forbidden									
	Trinitroacetic acid	Forbidden									
	Trinitroacetonitrile	Forbidden									
	Trinitroamine cobalt	Forbidden									
	Trinitrobenzene, dry. See High explosive										
	Trinitrobenzene, wet *containing at least 10% water*	Flammable solid	UN1354	Flammable solid	173.212		1 pound	1 pound	1	4	Stow away from heavy metals and their compounds
	Trinitrobenzene, wet, containing at least 10% water, over 16 ounces in one outside packaging. See High explosive										
	Trinitrobenzoic acid, dry. See High explosive										
	Trinitrobenzoic acid, wet, *containing at least 10% water*	Flammable solid	UN1355	Flammable solid	173.192	173.193	1 pound	25 pounds	1	5	Stow away from heavy metals and their compounds
	Trinitrobenzoic acid, wet, containing at least 10% water, over 25 pounds in one outside packaging. See High explosives										
	Trinitroethanol	Forbidden									
	Trinitroethylnitrate	Forbidden									
	Trinitromethane	Forbidden									
	1,3,5-Trinitronaphthalene	Forbidden									
	2,4,6-Trinitrophenyl guanidine (dry)	Forbidden									
	2,4,6-Trinitrophenyl nitramine	Forbidden									

2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry)	Forbidden									
Trinitroresorcinol. See High explosive										
2,4,6-Trinitroso-3-methyl nitraminoanisole	Forbidden									
Trinitrotetramine cobalt nitrate	Forbidden									
Trinitrotoluene, dry. See High explosive										
Trinitrotoluene, wet *containing at least 10% water*	Flammable solid	UN1356	Flammable solid	173.212		1 pound	1 pound	1	4	Stow away from heavy metals and their compounds
Trinitrotoluene, wet, containing at least 10% water, over 16 ounces in one outside packaging. See High explosive										
Tris-(1-aziridinyl) phosphine oxide	Corrosive material	UN2501	Corrosive	173.244	173.299a	1 quart	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
Tris, bis-bifluoroamino diethoxy propane (TVOPA)	Forbidden									
Tungsten hexafluoride	Corrosive material	UN2196	Corrosive	None	173.284	Forbidden	110 pounds	1	5	Segregation same as for nonflammable gases
Turpentine	Combustible liquid	UN1299	None	173.118a	None	No limit	No limit	1,2	1,2	
Turpentine	Flammable liquid	UN1299	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
Uranium hexafluoride, fissile *(containing more than 1% U-235)*	Radioactive material	UN2977	Radioactive and Corrosive	173.453	173.417, 173.420			1,2	1,2	
Uranium hexafluoride, low specific activity	Radioactive material	UN2978	Radioactive and Corrosive	173.421–2	173.420, 173.425			1,2	1,2	
Uranium metal pyrophoric	Radioactive material	UN2979	Radioactive and Flammable solid	None	173.418	Forbidden	Forbidden	1,2	1,2	
Uranyl acetate *(RQ-5000/2270)*	Radioactive material	NA9180	Radioactive	173.421 173.425	173.415 173.416			1,2	1,2	
Uranyl nitrate hexahydrate solution *(RQ-5000/2270)*	Radioactive material	UN2980	Radioative and Corrosive	173.421 173.425	173.415 173.416 173.417			1,2	1,2	
Uranyl nitrate, solid *(RQ-5000/2270)*	Radioactive material	UN2981	Radioactive and Oxidizer	None	173.419	Forbidden	25 pounds	1,2	1,2	Separate rate longitudinally by an intervening hold or compartment from explosives
Urea nitrate, dry. See High explosive										
Urea nitrate, wet *with 10% or more water*	Flammable solid	UN1357	Flammable solid	173.192	173.193	1 pound	25 pounds	1,2	1,2	
Urea nitrate, wet with 10% or more water, over 25 pounds in one outside packaging. See High explosive										
Urea peroxide	Organic peroxide	NA1511	Organic peroxide	173.153	173.227	2 pounds	25 pounds	1	4	Keep dry. Shade from radiant heat
Valeric acid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
Valeryl chloride	Corrosive material	UN2502	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
Vanadium oxytrichloride	Corrosive material	UN2443	Corrosive	173.244	173.247a	Forbidden	1 quart	1	4	Shade from radiant heat
Vanadium oxytrichloride and titanium tetrachloride mixture	Corrosive material	NA2443	Corrosive	None	173.245 173.245a	Forbidden	1 quart	1	4	Shade from radiant heat
Vanadium pentoxide		UN2862	None	None	173.510	No limit	No limit	1,2	1,2	

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Vanadium tetrachloride	Corrosive material	UN2444	Corrosive	173.244	173.247a	Forbidden	1 quart	1	4	Shade from radiant heat
	Vanadyl sulfate		NA9152	None	None	173.510	No limit	No limit	1,2	1,2	
	Very signal cartridge	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
	Vinyl acetate	Flammable liquid	UN1301	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+	Vinyl chloride	Flammable gas	UN1086	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	Stow away from living quarters
	Vinyl ethyl ether, inhibited	Flammable liquid	UN1302	Flammable liquid	None	173.119	Forbidden	1 gallon	1,3	5	
	Vinyl fluoride, inhibited	Flammable gas	UN1860	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1	4	
	Vinylidene chloride, inhibited	Flammable liquid	UN1303	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Vinyl isobutyl ether	Flammable liquid	UN1304	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+	Vinyl methyl ether	Flammable gas	UN1087	Flammable gas	173.306	173.304 173.314	Forbidden	20 pounds	1,2	1	Stow away from living quarters
	Vinyl nitrate polymer	Forbidden									
	Vinyl trichlorosilane	Flammable liquid	UN1305	Flammable liquid	None	173.135	Forbidden	10 gallons	1,2	1	
	Vitriol, oil of. See Sulfuric acid										
	War head. See Explosive projectile										
	Waste, hazardous. See Hazardous waste, liquid *or* solid, n.o.s.										
	Water pump system *tank charged with compressed air or nitrogen*	Nonflammable gas	NA1956	None	173.306		Forbidden	Forbidden	1,2	1,2	
	Water reactive solid, n.o.s.	Flammable solid	UN2813	Flammable solid and Dangerous when wet	173.153	173.154	Forbidden	25 pounds	1,2	4	Segregation same as for flammable solids labeled Dangerous When Wet
	Wheelchair, battery equipped. See Battery, *electric storage,* wet, with wheelchair										
	White acid (*ammonium bifluoride and hydrofluoric acid mixture*)	Corrosive material	NA1760	Corrosive	173.244	173.264	1 quart	1 gallon	1	1	
	Xenon	Nonflammable gas	UN2036	Nonflammable gas	173.306	173.302	150 pounds	300 pounds	1,2	1,2	
	X-ray film. *See* Film										

	Xylene (*xylol*)	Flammable liquid	UN1307	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,	
A	Xylenol	ORM-A	UN2261	None	173.505	173.510	100 pounds	No limit	1,2	1,2	
	Xylyl bromide	Irritating material	UN1701	Irritant	None	173.382	Forbidden	75 pounds	1	5	Stow away from living quarters
	p-Xylyl diazide	Forbidden									
	Zinc acetate		NA9153	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc ammonium chloride		NA9154	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc ammonium nitrite	Oxidizer	UN1512	Oxidizer	None	173.228	25 pounds	100 pounds	1,3	5	This material may be forbidden in water transportation by certain countries
	Zinc arsenate	Poison B	UN1712	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Zinc arsenite, solid	Poison B	UN1712	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Zinc borate		NA9155	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc bromide		NA9156	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc carbonate		NA9157	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc chlorate	Oxidizer	UN1513	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and away from powdered metals
	Zinc chloride, solid		UN2331	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc chloride solution	Corrosive material	UN1840	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Zinc cyanide	Poison B	UN1713	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Zinc ethyl. See Pyrophoric liquid, n.o.s.										
	Zinc fluoride		NA9158	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc formate		NA9159	None	None	173.510	No limit	No limit	1,2	1,2	
A	Zinc hydrosulfite	ORM-A	UN1931	None	173.505	173.510	50 pounds	100 pounds	1,2	1,2	Keep dry. Stow away from acids and oxidizers
	Zinc muriate solution. *See* Zinc chloride solution										
	Zinc nitrate	Oxidizer	UN1514	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Zinc permanganate	Oxidizer	UN1515	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Zinc peroxide	Oxidizer	UN1516	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Keep dry
	Zinc phenolsulfonate		NA9160	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc phosphide	Poison B	UN1714	Poison	173.364	173.365	25 pounds	100 pounds	1,2	1,2	Stow away from acids and oxidizers
	Zinc silicofluoride		UN2855	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc sulfate		NA8161	None	None	173.510	No limit	No limit	1,2	1,2	
	Zirconium hydride	Flammable solid	UN1437	Flammable solid and Dangerous when wet	None	173.206	Forbidden	150 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Zirconium metal, dry, *chemically produced, finer than 20 mesh particle size*	Flammable solid	UN2008	Flammable solid	None	173.214	Forbidden	75 pounds	1	5	Separate from flammable gases or liquids, oxidizing materials or organic peroxides
	Zirconium metal, dry, *mechanically produced, finer than 270 mesh particle size*	Flammable solid	UN2008	Flammable solid	None	173.214	Forbidden	75 pounds	1	5	Separate from flammable gases or liquids, oxidizing materials or organic peroxides
	Zirconium, metal, liquid, suspensions	Flammable liquid	UN1308	Flammable liquid	None	173.140	Forbidden	5 gallons	1	5	
	Zirconium metal, wet, *chemically produced, finer than 20 mesh particle size*	Flammable solid	UN1358	Flammable solid	None	173.214	Forbidden	150 pounds	1,2	5	
	Zirconium metal, wet, *mechanically produced, finer than 270 mesh particle size*	Flammable solid	UN1358	Flammable solid	None	173.214	Forbidden	150 pounds	1,2	5	
	Zirconium nitrate	Oxidizer	UN2728	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Zirconium picramate, wet *with at least 20% of water*	Flammable solid	UN1517	Flammable solid	None	173.216	Forbidden	25 pounds	1	1	Stow away from heavy metals and their salts
	Zirconium potassium fluoride		NA9162	None	None	173.510	No limit	No limit	1,2	1,2	
	Zirconium scrap (*borings, clippings, shavings, sheets, or turnings*)	Flammable solid	UN1932	Flammable solid	173.153	173.220	Forbidden	Forbidden	1	4	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
A	Zirconium sulfate	ORM-B	NA9163	None	None	173.510	100 pounds	No limit	1,2	1,2	
	Zirconium tetrachloride, solid	Corrosive material	UN2503	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53, App. A to Part 1)

[Amdt. 172–58, 45 FR 34588, May 22, 1980]

EDITORIAL NOTE: For Federal Register citations affecting § 172.101, see the List of CFR Sections Affected appearing in the Finding Aids section of this volume.

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

1. This appendix lists materials and their corresponding reportable quantities (RQs) which are listed or designated as "hazardous substances" under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; Pub. L. 96–510). A material in this list is regulated as a hazardous material and a hazardous substance under this subchapter if it meets the definition of a hazardous substance in § 171.8 of this subchapter.

2. Column 1 of the list, entitled "*Hazardous substances*", contains the names of hazardous substances. Elements and compunds are listed first in alphabetical sequence. Following the listing of elements and compounds is a listing of waste streams. These waste streams appear on the list in numerical sequence and are referenced by the appropriate "F" or "K" numbers. Column 2 of the list, entitled "*Synonyms*", contains the names of synonyms for certain elements and compounds listed in Column 1. No synonyms are listed for waste streams. Synonyms are useful in identifying hazardous substances and in identifying proper shipping names. Column 3 of the list, entitled "*Reportable quantity (RQ)*", contains the reportable quantity (RQ), in pounds and kilograms, for each hazardous substance listed in Column 1.

3. The procedure for selecting a proper shipping name for a hazardous substance is set forth in § 172.101(c)(9).

4. A series of notes is used throughout the list to provide additional information concerning certain hazardous substances. These notes are explained at the end of the list.

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
Acenaphthene		100 (45.4)
Acenaphthylene		5000 (2270)
Acetaldehyde *	Ethanal	1000 (454)
Acetaldehyde, chloro-	Chloroacetaldehyde	1000 (454)
Acetaldehyde, trichloro-	Chloral	1 (0.454)
Acetamide, N-(aminothioxomethyl)-	1-Acetyl-2-thiourea	1000 (454)
Acetamide, N-(4-ethoxyphenyl)-	Phenacetin	1 (0.454)
Acetamide, N-fluoren-2-yl-	2-Acetylaminofluorene	1 (0.454)
Acetamide, 2-fluoro-	Fluoroacetamide	100 (45.4)
Acetic acid *		5000 (2270)
Acetic acid, ethyl ester	Ethyl acetate	5000 (2270)
Acetic acid, fluoro-, sodium salt	Fluoroacetic acid, sodium salt	10 (4.54)
Acetic acid, lead salt	Lead acetate	5000 (2270)
Acetic acid, thallium(I) salt	Thallium(I) acetate	100 (45.4)
Acetic anhydride *		5000 (2270)
Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-methyl ester	Methomyl	100 (45.4)
Acetone *	2-Propanone	5000 (2270)
Acetone cyanohydrin *	Propanenitrile, 2-hydroxy-2-methyl-	10 (4.54)
	2-Methyllactonitrile	
Acetonitrile *	Ethanenitrile	5000 (2270)
3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts	Warfarin	100 (45.4)
Acetophenone	Ethanone, 1-phenyl-	5000 (2270)
2-Acetylaminofluorene	Acetamide, N-fluoren-2-yl-	1 (0.454)
Acetyl bromide *		5000 (2270)
Acetyl chloride *	Ethanoyl chloride	5000 (2270)
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	1000 (454)
Acrolein *	2-Propenal	1 (0.454)
Acrylamide	2-Propenamide	5000 (2270)
Acrylic acid *	2-Propenoic acid	5000 (2270)
Acrylonitrile *	2-Propenenitrile	100 (45.4)
Adipic acid		5000 (2270)
Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-, L-	Melphalan	1 (0.454)
Aldicarb	Propanal, 2-methyl-2-(methylthio)-,	1 (0.454)
	O-[(methylamino)carbonyl]oxime	
Aldrin *	1,2,3,4,10-10-Hexachloro-1,4,4a,5,8,8a-hexahydro-	1 (0.454)
	1,4:5,8-endo,exo-dimethanonaphthalene	
Allyl alcohol *	2-Propen-1-ol	100 (45.4)
Allyl chloride *		1000 (454)
Aluminum phosphide *		100 (45.4)
Aluminum sulfate *		5000 (2270)
2-Amino-1-methyl benzene	o-Toluidine	1 (0.454)
4-Amino-1-methyl benzene	p-Toluidine	1 (0.454)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	1000 (454)
4-Aminopyridine	4-Pyridinamine	1000 (454)
Amitrole	1H-1,2,4-Triazol-3-amine	1 (0.454)
Ammonia *		100 (45.4)
Ammonium acetate		5000 (2270)
Ammonium benzoate		5000 (2270)
Ammonium bicarbonate		5000 (2270)
Ammonium bichromate	Ammonium dichromate @	1000 (454)
Ammonium bifluoride *		100 (45.4)
Ammonium bisulfite *		5000 (2270)
Ammonium carbamate *		5000 (2270)
Ammonium carbonate *		5000 (2270)
Ammonium chloride		5000 (2270)
Ammonium chromate		1000 (454)
Ammonium citrate, dibasic		5000 (2270)
Ammonium dichromate @	Ammonium bichromate	1000 (454)
Ammonium fluoborate *		5000 (2270)
Ammonium fluoride *		100 (45.4)
Ammonium hydroxide *		1000 (454)
Ammonium oxalate *		5000 (2270)
Ammonium picrate *	Phenol, 2,4,6-trinitro-, *ammonium* salt	10 (4.54)
Ammonium silicofluoride *		1000 (454)
Ammonium sulfamate		5000 (2270)
Ammonium sulfide *		100 (45.4)
Ammonium sulfite		5000 (2270)
Ammonium tartrate		5000 (2270)
Ammonium thiocyanate		5000 (2270)
Ammonium thiosulfate		5000 (2270)
Ammonium vanadate	Vanadic acid, ammonium salt	1000 (454)
Amyl acetate *		5000 (2270)
iso-Amyl acetate		
sec-Amyl acetate		
tert-Amyl acetate		
Aniline *	Benzenamine	5000 (2270)
Anthracene		5000 (2270)
Antimony ¢		5000 (2270)
Antimony pentachloride *		1000 (454)
Antimony potassium tartrate *		100 (45.4)
Antimony tribromide *		1000 (454)
Antimony trichloride *		1000 (454)
Antimony trifluoride *		1000 (454)
Antimony trioxide		1000 (454)

Aroclor 1016	POLYCHLORINATED BIPHENYLS (PCBs)	10 (4.54)
Aroclor 1221	POLYCHLORINATED BIPHENYLS (PCBs)	10 (4.54)
Aroclor 1232	POLYCHLORINATED BIPHENYLS (PCBs)	10 (4.54)
Aroclor 1242	POLYCHLORINATED BIPHENYLS (PCBs)	10 (4.54)
Aroclor 1248	POLYCHLORINATED BIPHENYLS (PCBs)	10 (4.54)
Aroclor 1254	POLYCHLORINATED BIPHENYLS (PCBs)	10 (4.54)
Aroclor 1260	POLYCHLORINATED BIPHENYLS (PCBs)	10 (4.54)
Arsenic * ¢		1 (0.454)
Arsenic acid *		1 (0.454)
Arsenic disulfide *		5000 (2270)
Arsenic(III) oxide	Arsenic trioxide *	5000 (2270)
Arsenic(V) oxide	Arsenic pentoxide *	5000 (2270)
Arsenic pentoxide *	Arsenic(V) oxide	5000 (2270)
Arsenic trichloride *		5000 (2270)
Arsenic trioxide *	Arsenic(III) oxide	5000 (2270)
Arsenic trisulfide *		5000 (2270)
Arsine, diethyl-	Diethylarsine	1 (0.454)
Asbestos * ¢¢		1 (0.454)
Auramine	Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl-	1(0.454)
Azaserine	L-Serine, diazoacetate (ester)	1 (0.454)
Aziridine	Ethylenimine	1 (0.454)
Azinphos methyl @	Guthion *	1 (0.454)
Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione,6-amino-8-[((aminocarbonyl)oxy)methyl]-1,1a,2,8,8a, 8b-hexahydro-8a-methoxy-5-methyl-.	Mitomycin C	1 (0.454)
Barium cyanide *		10 (4.54)
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	3-Methylcholanthrene	1 (0.454)
Benz[c]acridine	3,4-Benzacridine	1 (0.454)
3,4-Benzacridine	Benz[c]acridine	1 (0.454)
Benzal chloride	Benzene, dichloromethyl-	5000 (2270)
Benz[a]anthracene	Benzo[a]anthracene	1 (0.454)
1,2-Benzanthracene	1,2-Benzanthracene Benz[a]anthracene Benzo[a]anthracene	1 (0.454)
1,2-Benzanthracene, 7,12-dimethyl-	7,12-Dimethylbenz[a]anthracene	1 (0.454)
Benzenamine	Aniline *	5000 (2270)
Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl-	Auramine	1(0.454)
Benzenamine, 4-chloro-	p-Chloroaniline	1000 (454)
Benzenamine, 4-chloro-2-methyl-, hydrochloride	4-Chloro-o-toluidine, hydrochloride	1 (0.454)
Benzenamine, N,N-dimethyl-4-phenylazo-	Dimethylaminoazobenzene	1 (0.454)
Benzenamine, 4,4'-methylenebis(2-chloro-	4,4'-Methylenebis(2-chloroaniline)	1 (0.454)
Benzenamine, 2-methyl-, hydrochloride	o-Toluidine hydrochloride	1 (0.454)
Benzenamine, 2-methyl-5-nitro-	5-Nitro-o-toluidine	1 (0.454)
Benzenamine, 4-nitro-	p-Nitroaniline	5000 (2270)
Benzene *		1000 (454)
Benzene, 1-bromo-4-phenoxy-	4-Bromophenyl phenyl ether	100 (45.4)
Benzene, chloro-	Chlorobenzene *	100 (45.4)
Benzene, chloromethyl-	Benzyl chloride *	100 (45.4)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
Benzene, 1,2-dichloro-	o-Dichlorobenzene *	100 (45.4)
	1,2-Dichlorobenzene	
Benzene, 1,3-dichloro-	m-Dichlorobenzene	100 (45.4)
	1,3-Dichlorobenzene	
Benzene, 1,4-dichloro-	p-Dichlorobenzene *	100 (45.4)
	1,4-Dichlorobenzene	
Benzene, dichloromethyl-	Benzal chloride	5000 (2270)
Benzene, 2,4-diisocyanatomethyl-	Toluene diisocyanate *	100 (45.4)
Benzene, dimethyl	Xylene * (mixed)	1000 (454)
m-	m-	
o-	o-	
p-	p-	
Benzene, hexachloro-	Hexachlorobenzene	1 (0.454)
Benzene, hexahydro-	Cyclohexane *	1000 (454)
Benzene, hydroxy-	Phenol *	1000 (454)
Benzene, methyl-	Toluene *	1000 (454)
Benzene, 1-methyl-2,4-dinitro-	2,4-Dinitrotoluene	1000 (454)
Benzene, 1-methyl-2,6-dinitro-	2,6-Dinitrotoluene	1000 (454)
Benzene, 1,2-methylenedioxy-4-allyl-	Safrole	1 (0.454)
Benzene, 1,2-methylenedioxy-4-propenyl-	Isosafrole	1 (0.454)
Benzene, 1,2-methylenedioxy-4-propyl-	Dihydrosafrole	1 (0.454)
Benzene, 1-methylethyl-	Cumene	5000 (2270)
Benzene, nitro-	Nitrobenzene *	1000 (454)
Benzene, pentachloro-	Pentachlorobenzene	10 (4.54)
Benzene, pentachloronitro-	Pentachloronitrobenzene	1 (0.454)
Benzene, 1,2,4,5-tetrachloro-	1,2,4,5-Tetrachlorobenzene	5000 (2270)
Benzene, trichloromethyl-	Benzotrichloride	1 (0.454)
Benzene, 1,3,5-trinitro-	sym-Trinitrobenzene *	10 (4.54)
Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	Ethyl 4,4'-dichlorobenzilate	1 (0.454)
1,2-Benzenedicarboxylic acid anhydride	Phthalic anhydride	5000 (2270)
1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)] ester	Bis(2-ethylhexyl)phthalate	1 (0.454)
1,2-Benzenedicarboxylic acid, dibutyl ester	Di-n-butyl phthalate	10 (4.54)
	Dibutyl phthalate	
	n-Butyl phthalate	
1,2-Benzenedicarboxylic acid, diethyl ester	Diethyl phthalate	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester	Dimethyl phthalate	5000 (2270)
1,2-Benzenedicarboxylic acid, di-n-octyl ester	Di-n-octyl phthalate	5000 (2270)
1,3-Benzenediol	Resorcinol	5000 (2270)
1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]-	Epinephrine	1000 (454)
Benzenesulfonic acid chloride	Benzenesulfonyl chloride	100 (45.4)
Benzenesulfonyl chloride	Benzenesulfonic acid chloride	100 (45.4)

Benzenethiol	Phenyl mercaptan @	100 (45.4)
	Thiophenol	
Benzidine *	(1,1'-Biphenyl)-4,4'diamine	1 (0.454)
1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts	Saccharin and salts	1 (0.454)
Benzo[a]anthracene	Benz[a]anthracene	1 (0.454)
	1,2-Benzanthracene	
Benzo[b]fluoranthene		1 (0.454)
Benzo[k]fluoranthene		1 (0.454)
Benzo[j,k]fluorene	Fluoranthene	100 (45.4)
Benzoic acid		5000 (2270)
Benzonitrile *		5000 (2270)
Benzo[g,h,i]perylene		5000 (2270)
Benzo[a]pyrene	3,4-Benzopyrene	1 (0.454)
3,4-Benzopyrene	Benzo[a]pyrene	1 (0.454)
p-Benzoquinone	1,4-Cyclohexadienedione	10 (4.54)
Benzotrichloride	Benzene, trichloromethyl-	1 (0.454)
Benzoyl chloride *		1000 (454)
1,2-Benzphenanthrene	Chrysene	1 (0.454)
Benzyl chloride *	Benzene, chloromethyl-	100 (45.4)
Beryllium ¢	Beryllium dust ¢	1 (0.454)
Beryllium chloride *		5000 (2270)
Beryllium dust ¢	Beryllium ¢	1 (0.454)
Beryllium fluoride *		5000 (2270)
Beryllium nitrate *		5000 (2270)
alpha - BHC		1 (0.454)
beta - BHC		1 (0.454)
delta - BHC		1 (0.454)
gamma - BHC	Hexachlorocyclohexane (gamma isomer)	1 (0.454)
	Lindane *	
2,2'-Bioxirane	1,2:3,4-Diepoxybutane	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine	Benzidine *	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dichloro-	3,3'-Dichlorobenzidine	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethoxy-	3,3'-Dimethoxybenzidine	1 (0.454)
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethyl-	3,3'-Dimethylbenzidine	1 (0.454)
Bis(2-chloroethoxy) methane	Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	1000 (454)
Bis(2-chloroethyl) ether	Dichloroethyl ether	1 (0.454)
	Ethane, 1,1'-oxybis(2-chloro-	
Bis(2-chloroisopropyl) ether	Propane, 2,2'-oxybis(2-chloro-	1000 (454)
Bis(chloromethyl) ether	Methane, oxybis(chloro-	1 (0.454)
Bis(dimethylthiocarbamoyl) disulfide	Thiram	10 (4.54)
Bis(2-ethylhexyl)phthalate	1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)]ester	1 (0.454)
Bromine cyanide	Cyanogen bromide *	1000 (454)
Bromoacetone *	2-Propanone, 1-bromo-	1000 (454)
Bromoform	Methane, tribromo-	100 (45.4)
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	100 (45.4)
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	100 (45.4)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	Hexachlorobutadiene *	1(0.454)
1-Butanamine, N-butyl-N-nitroso-	N-Nitrosodi-n-butylamine	1 (0.454)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-	Chlorambucil	1 (0.454)
1-Butanol	n-Butyl alcohol *	5000 (2270)
2-Butanone	Ethyl methyl ketone @	5000 (2270)
	Methyl ethyl ketone *	
2-Butanone peroxide	Methyl ethyl ketone peroxide *	10 (4.54)
2-Butenal	Crotonaldehyde *	100 (45.4)
2-Butene, 1,4-dichloro-	1,4-Dichloro-2-butene	1 (0.454)
Butyl acetate *		5000 (2270)
iso-Butyl acetate		
sec-Butyl acetate		
tert-Butyl acetate		
n-Butyl alcohol *	1-Butanol	5000 (2270)
Butylamine *		1000 (454)
iso-Butylamine		
sec-Butylamine		
tert-Butylamine		
Butyl benzyl phthalate		100 (45.4)
n-Butyl phthalate	Di-n-butyl phthalate	10 (4.54)
	Dibutyl phthalate	
	1,2-Benzenedicarboxylic acid, dibutyl ester	
Butyric acid *		5000 (2270)
iso-Butyric acid		
Cacodylic acid	Hydroxydimethylarsine oxide	1 (0.454)
Cadmium ¢		1 (0.454)
Cadmium acetate		100 (45.4)
Cadmium bromide		100 (45.4)
Cadmium chloride		100 (45.4)
Calcium arsenate *		1000 (454)
Calcium arsenite *		1000 (454)
Calcium carbide *		10 (4.54)
Calcium chromate	Chromic acid, calcium salt	1000 (454)
Calcium cyanide *		10 (4.54)
Calcium dodecylbenzene sulfonate		1000 (454)
Calcium hypochlorite *		10 (4.54)
Camphene, octachloro-	Toxaphene *	1 (0.454)
Captan		10 (4.54)
Carbamic acid, ethyl ester	Ethyl carbamate (Urethan)	1 (0.454)
Carbamic acid, methylnitroso-, ethyl ester	N-Nitroso-N-methylurethane	1 (0.454)
Carbamide, N-ethyl-N-nitroso-	N-Nitroso-N-ethylurea	1 (0.454)
Carbamide, N-methyl-N-nitroso-	N-Nitroso-N-methylurea	1 (0.454)
Carbamide, thio-	Thiourea	1 (0.454)
Carbamimidoselenoic acid	Selenourea	1000 (454)

Carbamoyl chloride, dimethyl-	Dimethylcarbamoyl chloride	1 (0.454)
Carbaryl *		100 (45.4)
Carbofuran *		10 (4.54)
Carbon bisulfide *	Carbon disulfide *	100 (45.4)
Carbon disulfide *	Carbon bisulfide *	100 (45.4)
Carbonic acid, dithallium (I) salt	Thallium(I) carbonate	100(45.4)
Carbonochloridic acid, methyl ester	Methyl chlorocarbonate *	1000 (454)
	Methyl chloroformate @	
Carbon oxyfluoride	Carbonyl fluoride	1000 (454)
Carbon tetrachloride *	Methane, tetrachloro-	5000 (2270)
Carbonyl chloride	Phosgene *	10 (4.54)
Carbonyl fluoride	Carbon oxyfluoride	1000 (454)
Chloral	Acetaldehyde, trichloro-	1 (0.454)
Chlorambucil	Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-	1 (0.454)
Chlordane *	Chlordane, technical *	1 (0.454)
	4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-	
Chlordane, technical *	Chlordane *	1 (0.454)
	4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-	
Chlorine *		10 (4.54)
Chlorine cyanide	Cyanogen chloride *	10 (4.54)
Chlornaphazine	2-Naphthylamine, N,N-bis(2-chloroethyl)-	1 (0.454)
Chloroacetaldehyde	Acetaldehyde, chloro-	1000 (454)
p-Chloroaniline	Benzenamine, 4-chloro-	1000 (454)
Chlorobenzene *	Benzene, chloro-	100 (45.4)
4-Chloro-m-cresol	p-Chloro-m-cresol	5000 (2270)
	Phenol, 4-chloro-3-methyl-	
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	5000 (2270)
	4-Chloro-m-cresol	
Chlorodibromomethane		100 (45.4)
1-Chloro-2,3-epoxypropane	Epichlorohydrin *	1000 (454)
	Oxirane, 2-(chloromethyl)-	
Chloroethane	Ethyl chloride @	100 (45.4)
2-Chloroethyl vinyl ether	Ethene, 2-chloroethoxy-	1000 (454)
Chloroform *	Methane, trichloro-	5000 (2270)
Chloromethane	Methane, chloro-	1 (0.454)
	Methyl chloride *	
Chloromethyl methyl ether	Methane, chloromethoxy-	1 (0.454)
	Methylchloromethyl ether @	
beta-Chloronaphthalene	Naphthalene, 2-chloro-	5000 (2270)
	2-Chloronaphthalene	
2-Chloronaphthalene	beta-Chloronaphthalene	5000 (2270)
	Naphthalene, 2-chloro-	
2-Chlorophenol	o-Chlorophenol	100 (45.4)
	Phenol, 2-chloro-	
o-Chlorophenol	Phenol, 2-chloro-	100 (45.4)
	2-Chlorophenol	
4-Chlorophenyl phenyl ether		5000 (2270)
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	100 (45.4)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
3-Chloropropionitrile	Propanenitrile, 3-chloro-	1000 (454)
Chlorosulfonic acid *		1000 (454)
4-Chloro-o-toluidine, hydrochloride	Benzenamine, 4-chloro-2-methyl-, hydrochloride	1 (0.454)
Chlorpyrifos *		1 (0.454)
Chromic acetate		1000 (454)
Chromic acid *		1000 (454)
Chromic acid, calcium salt	Calcium chromate	1000 (454)
Chromic sulfate		1000 (454)
Chromium ¢		1 (0.454)
Chromous chloride		1000 (454)
Chrysene	1,2-Benzphenanthrene	1 (0.454)
Cobaltous bromide		1000 (454)
Cobaltous formate		1000 (454)
Cobaltous sulfamate		1000 (454)
Coke Oven Emissions		1 (0.454)
Copper ¢		5000 (2270)
Copper cyanide *		10 (4.54)
Coumaphos *		10 (4.54)
Creosote		1 (0.454)
Cresols *	Cresylic acid	1000 (454)
m-Cresols	m-Cresylic acid	
o-Cresols	o-Cresylic acid	
p-Cresols	p-Cresylic acid	
Cresylic acid	Cresols *	1000 (454)
m-Cresols	m-Cresylic acid	
o-Cresols	o-Cresylic acid	
p-Cresols	p-Cresylic acid	
Crotonaldehyde *	2-Butenal	100 (45.4)
Cumene	Benzene, 1-methylethyl-	5000 (2270)
Cupric acetate		100 (45.4)
Cupric acetoarsenite *		100 (45.4)
Cupric chloride *		10 (4.54)
Cupric nitrate *		100 (45.4)
Cupric oxalate		100 (45.4)
Cupric sulfate		10 (4.54)
Cupric sulfate ammoniated		100 (45.4)
Cupric tartrate		100 (45.4)
Cyanides (soluble cyanide salts), not elsewhere specified *		10 (4.54)
Cyanogen *		100 (45.4)
Cyanogen bromide *	Bromine cyanide	1000 (454)
Cyanogen chloride *	Chlorine cyanide	10 (4.54)
1,4-Cyclohexadienedione	p-Benzoquinone	10 (4.54)

Cyclohexane *	Benzene, hexahydro-	1000 (454)
Cyclohexanone		5000 (2270)
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	Hexachlorocyclopentadiene *	1 (0.454)
Cyclophosphamide	2H-1,3,2-Oxazaphosphorine,2-[bis(2-chloroethyl)amino] tetrahydro-2-oxide	1 (0.454)
2,4-D Acid	2,4-D *, salts and esters	100 (45.4)
	2,4-Dichlorophenoxyacetic acid *, salts and esters	
2,4-D Esters		100 (45.4)
2,4-D *, salts and esters	2,4-D Acid	100 (45.4)
	2,4-Dichlorophenoxyacetic acid *, salts and esters	
Daunomycin	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-.	1 (0.454)
DDD	Dichlorodiphenyl dichloroethane	1(0.454)
	TDE *	
	4,4'-DDD	
4,4'-DDD	DDD	1(0.454)
	Dichlorodiphenyl dichloroethane	
	TDE *	
DDE	4,4'-DDE	1 (0.454)
4,4'-DDE	DDE	1 (0.454)
DDT *	Dichlorodiphenyl trichloroethane *	1 (0.454)
	4,4'-DDT	
4,4'-DDT	DDT *	1 (0.454)
	Dichlorodiphenyl trichloroethane *	
Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one	Kepone *	1 (0.454)
Diallate	S-(2,3-Dichloroallyl) diisopropylthiocarbamate	1 (0.454)
Diamine	Hydrazine *	1 (0.454)
Diaminotoluene	Toluenediamine *	1 (0.454)
Diazinon *		1 (0.454)
Dibenz[a,h]anthracene	Dibenzo[a,h]anthracene	1 (0.454)
	1,2:5,6-Dibenzanthracene	
1,2:5,6-Dibenzanthracene	Dibenz[a,h]anthracene	1 (0.454)
	Dibenzo[a,h]anthracene	
Dibenzo[a,h]anthracene	Dibenz[a,h]anthracene	1 (0.454)
	1,2:5,6-Dibenzanthracene	
1,2:7,8-Dibenzopyrene	Dibenz[a,l]pyrene	1 (0.454)
Dibenz[a,l]pyrene	1,2:7,8-Dibenzopyrene	1 (0.454)
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	1(0.454)
Dibutyl phthalate	Di-n-butyl phthalate	10 (4.54)
	n-Butyl phthalate *	
	1,2-Benzenedicarboxylic acid, dibutyl ester	
Di-n-butyl phthalate	Dibutyl phthalate	10 (4.54)
	n-Butyl phthalate *	
	1,2-Benzenedicarboxylic acid, dibutyl ester	
Dicamba		1000 (454)
Dichlobenil		100 (45.4)
Dichlone		1 (0.454)
S-(2,3-Dichloroallyl) diisopropylthiocarbamate	Diallate	1 (0.454)
3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide	Pronamide	5000 (2270)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
Dichlorobenzene (mixed)		100 (45.4)
1,2-Dichlorobenzene	Benzene, 1,2-dichloro-	100 (45.4)
	o-Dichlorobenzene *	
1,3-Dichlorobenzene	Benzene, 1,3-dichloro-	100 (45.4@
	m-Dichlorobenzene	
1,4-Dichlorobenzene	Benzene, 1,4-dichloro-	100 (45.4)
	p-Dichlorobenzene *	
m-Dichlorobenzene	Benzene, 1,3-dichloro-	100 (45.4)
	1,3-Dichlorobenzene	
o-Dichlorobenzene *	Benzene, 1,2-dichloro-	100 (45.4)
	1,2-Dichlorobenzene	
p-Dichlorobenzene *	Benzene, 1,4-dichloro-	100 (45.4)
	1,4-Dichlorobenzene	
3,3'-Dichlorobenzidine	(1,1'-Biphenyl)-4,4'-diamine,3,3'-dichloro-	1 (0.454)
Dichlorobromomethane		5000 (2270)
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	1 (0.454)
Dichlorodifluoromethane *	Methane, dichlorodifluoro-	5000 (2270)
Dichlorodiphenyl dichloroethane	DDD	1(0.454)
	TDE *	
	4,4'-DDD	
Dichlorodiphenyl trichloroethane *	DDT *	1 (0.454)
	4,4'-DDT	
1,1-Dichloroethane	Ethane, 1,1-dichloro-	1000 (454)
	Ethylidene dichloride	
1,2-Dichloroethane	Ethane, 1,2-dichloro-	5000 (2270)
	Ethylene dichloride *	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	5000 (2270)
	Vinylidene chloride *	
1,2-trans-Dichloroethylene	Ethene, trans-1,2-dichloro-	1000 (454)
Dichloroethyl ether	Bis (2-chloroethyl) ether	1 (0.454)
	Ethane, 1,1'-oxybis(2-chloro-	
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	100 (45.4)
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	100 (45.4)
2,4-Dichlorophenoxyacetic acid *, salts and esters	2,4-D Acid	100 (45.4)
	2,4-D *, salts and esters	
Dichlorophenylarsine	Phenyl dichlorarsine *	1 (0.454)
Dichloropropane *		1000 (454)
1,1-Dichloropropane		
1,3-Dichloropropane		
1,2-Dichloropropane	Propylene dichloride *	1000 (454)
Dichloropropane - Dichloropropene (mixture)		100 (45.4)
Dichloropropene(s) *		100 (45.4)

2,3-Dichloropropene (isomer)		
1,3-Dichloropropene	Propene, 1,3-dichloro-	100 (45.4)
2,2-Dichloropropionic acid *		5000 (2270)
Dichlorvos *		10 (4.54)
Dieldrin *	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4:5,8-dimethanonaphthalene.	1 (0.454)
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1 (0.454)
Diethylamine *		100 (45.4)
Diethylarsine	Arsine, diethyl-	1 (0.454)
1,4-Diethylene dioxide	1,4-Dioxane	1 (0.454)
O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate	Disulfoton *	1 (0.454)
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1 (0.454)
O,O-Diethyl S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	5000 (2270)
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl p-nitrophenyl ester	100 (45.4)
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	1000 (454)
O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	100 (45.4)
Diethylstilbestrol	4,4'-Stilbenediol, alpha,alpha'-diethyl-	1 (0.454)
1,2-Dihydro-3,6-pyridazinedione	Maleic hydrazide	5000 (2270)
Dihydrosafrole	Benzene, 1,2-methylenedioxy-4-propyl-	1 (0.454)
Diisopropyl fluorophosphate	Phosphorofluoridic acid, bis(1-methylethyl) ester	100 (45.4)
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	10 (4.54)
3,3'-Dimethoxybenzidine	(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethoxy-	1 (0.454)
Dimethylamine *	Methanamine, N-methyl-	1000 (454)
Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-phenylazo-	1 (0.454)
7,12-Dimethylbenz[a]anthracene	1,2-Benzanthracene, 7,12-dimethyl-	1 (0.454)
3,3'-Dimethylbenzidine	(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethyl-	1 (0.454)
alpha,alpha-Dimethylbenzylhydroperoxide	Hydroperoxide, 1-methyl-1-phenylethyl-	10 (4.54)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino)carbonyl] oxime	Thiofanox	100 (45.4)
Dimethylcarbamoyl chloride	Carbamoyl chloride, dimethyl-	1 (0.454)
Dimethylhydrazine, unsymmetrical @	1,1-Dimethylhydrazine	1 (0.454)
	Hydrazine, 1,1-dimethyl-	
1,1-Dimethylhydrazine	Dimethylhydrazine, unsymmetrical @	1 (0.454)
	Hydrazine, 1,1-dimethyl-	
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	1 (0.454)
O,O-Dimethyl O-p-nitrophenyl phosphorothioate	Methyl parathion *	100 (45.4)
Dimethylnitrosamine	N-Nitrosodimethylamine	1 (0.454)
alpha,alpha-Dimethylphenethylamine	Ethanamine, 1,1-dimethyl-2-phenyl-	5000 (2270)
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	100 (45.4)
Dimethyl phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	5000 (2270)
Dimethyl sulfate *	Sulfuric acid, dimethyl ester	1 (0.454)
Dinitrobenzene * (mixed)		100 (45.4)
m-Dinitrobenzene		
o-Dinitrobenzene		
p-Dinitrobenzene		
4,6-Dinitro-o-cresol and salts	Phenol, 2,4-dinitro-6-methyl-, and salts	10 (4.54)
4,6-Dinitro-o-cyclohexylphenol	Phenol, 2-cyclohexyl-4,6-dinitro-	100 (45.4)
Dinitrophenol		10 (4.54)
2,5-Dinitrophenol		

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
2,6-Dinitrophenol		
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	10 (4.54)
Dinitrotoluene		1000 (454)
3,4-Dinitrotoluene		
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	1000 (454)
2,6-Dinitrotoluene	Benzene, 1-methyl-2,6-dinitro-	1000 (454)
Dinoseb	Phenol, 2,4-dinitro-6-(1-methylpropyl)-	1000 (454)
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, di-n-octyl ester	5000 (2270)
1,4-Dioxane	1,4-Diethylene dioxide	1 (0.454)
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	1 (0.454)
Diphosphoramide, octamethyl-	Octamethylpyrophosphoramide	100(45.4)
Dipropylamine	1-Propanamine, N-propyl-	5000 (2270)
Di-n-propylnitrosamine	N-Nitrosodi-n-propylamine	1 (0.454)
Diquat		1000 (454)
Disulfoton *	O,O-Diethyl S-[2-(ethylthio)ethyl]phosphorodithioate	1 (0.454)
2,4-Dithiobiuret	Thioimidodicarbonic diamide	100 (45.4)
Dithiopyrophosphoric acid, tetraethyl ester	Tetraethyldithiopyrophosphate	100 (45.4)
Diuron		100 (45.4)
Dodecylbenzenesulfonic acid *		1000 (454)
Endosulfan *	5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro,cyclic sulfite	1 (0.454)
alpha - Endosulfan		1 (0.454)
beta - Endosulfan		1 (0.454)
Endosulfan sulfate		1 (0.454)
Endothall	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	1000 (454)
Endrin *	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene.	1 (0.454)
Endrin aldehyde		1 (0.454)
Epichlorohydrin *	1-Chloro-2,3-epoxypropane Oxirane, 2-(chloromethyl)-	1000 (454)
Epinephrine	1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]	1000 (454)
Ethanal	Acetaldehyde *	1000 (454)
Ethanamine, 1,1-dimethyl-2-phenyl-	alpha,alpha-Dimethylphenethylamine	5000 (2270)
Ethanamine, N-ethyl-N-nitroso-	N-Nitrosodiethylamine	1 (0.454)
Ethane, 1,2-dibromo-	Ethylene dibromide *	1000 (454)
Ethane, 1,1-dichloro-	Ethylidene dichloride 1,1-Dichloroethane	1000 (454)
Ethane, 1,2-dichloro-	Ethylene dichloride * 1,2-Dichloroethane	5000 (2270)
Ethane, 1,1,1,2,2,2-hexachloro-	Hexachloroethane *	1 (0.454)
Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	Bis(2-chloroethoxy)methane	1000 (454)
Ethane, 1,1'-oxybis-	Ethyl ether *	100 (45.4)

Ethane, 1,1'-oxybis(2-chloro-	Bis (2-chloroethyl) ether	1 (0.454)
	Dichloroethyl ether	
Ethane, pentachloro-	Pentachloroethane	1 (0.454)
Ethane, 1,1,1,2-tetrachloro-	1,1,1,2-Tetrachloroethane	1 (0.454)
Ethane, 1,1,2,2-tetrachloro-	1,1,2,2-Tetrachloroethane	1 (0.454)
Ethane, 1,1,2-trichloro-	1,1,2-Trichloroethane	1 (0.454)
Ethane, 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)-	Methoxychlor	1 (0.454)
1,2-Ethanediylbiscarbamodithioic acid	Ethylenebis(dithiocarbamic acid)	5000 (2270)
Ethanenitrile	Acetonitrile *	5000 (2270)
Ethanethioamide	Thioacetamide	1 (0.454)
Ethanol, 2,2'-(nitrosoimino)bis-	N-Nitrosodiethanolamine	1 (0.454)
Ethanone, 1-phenyl-	Acetophenone	5000 (2270)
Ethanoyl chloride	Acetyl chloride *	5000 (2270)
Ethenamine, N-methyl-N-nitroso-	N-Nitrosomethylvinylamine	1 (0.454)
Ethene, chloro-	Vinyl chloride *	1 (0.454)
Ethene, 2-chloroethoxy-	2-Chloroethyl vinyl ether	1000 (454)
Ethene, 1,1-dichloro-	Vinylidene chloride *	5000 (2270)
	1,1-Dichloroethylene	
Ethene, 1,1,2,2-tetrachloro-	Perchloroethylene	1 (0.454)
	Tetrachloroethene	
	Tetrachloroethylene	
Ethene, trans-1,2-dichloro-	1,2-trans-Dichloroethylene	1000 (454)
Ethion *		10 (4.54)
2-Ethoxyethanol	Ethylene glycol monoethyl ether *	1 (0.454)
Ethyl acetate	Acetic acid, ethyl ester	5000 (2270)
Ethyl acrylate *	2-Propenoic acid, ethyl ester	1000 (454)
Ethylbenzene *		1000 (454)
Ethyl carbamate (Urethan)	Carbamic acid, ethyl ester	1 (0.454)
Ethyl chloride @	Chloroethane	100 (45.4)
Ethyl cyanide	Propanenitrile	10 (4.54)
Ethyl 4,4'-dichlorobenzilate	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	1 (0.454)
Ethylene dibromide *	Ethane, 1,2-dibromo-	1000 (454)
Ethylene dichloride *	1,2-Dichloroethane	5000 (2270)
	Ethane, 1,2-dichloro-	
Ethylene glycol monoethyl ether *	2-Ethoxyethanol	1 (0.454)
Ethylene oxide *	Oxirane	1 (0.454)
Ethylenebis(dithiocarbamic acid)	1,2-Ethanediylbiscarbamodithioicacid	5000 (2270)
Ethylenediamine *		5000 (2270)
Ethylenediamine tetraacetic acid (EDTA)		5000 (2270)
Ethylenethiourea	2-Imidazolidinethione	1 (0.454)
Ethylenimine	Aziridine	1 (0.454)
Ethyl ether *	Ethane, 1,1'-oxybis-	100 (45.4)
Ethylidene dichloride	Ethane, 1,1-dichloro-	1000 (454)
	1,1-Dichloroethane	
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	1000 (454)
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	1 (0.454)
Ethyl methyl ketone @	2-Butanone	5000 (2270)
	Methyl ethyl ketone *	

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
Famphur	Phosphorothioic acid, O,O-dimethyl O-[p-[(dimethylamino)-sulfonyl] phenyl] ester	1000 (454)
Ferric ammonium citrate		1000 (454)
Ferric ammonium oxalate		1000 (454)
Ferric chloride		1000 (454)
Ferric dextran	Iron dextran	5000 (2270)
Ferric fluoride		100 (45.4)
Ferric nitrate *		1000 (454)
Ferric sulfate		1000 (454)
Ferrous ammonium sulfate		1000 (454)
Ferrous chloride *		100 (45.4)
Ferrous sulfate		1000 (454)
Fluoranthene	Benzo[j,k]fluorene	100 (45.4)
Fluorene		5000 (2270)
Fluorine *		10 (4.54)
Fluoroacetamide	Acetamide, 2-fluoro-	100 (45.4)
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	10 (4.54)
Formaldehyde *	Methylene oxide	1000 (454)
Formic acid *	Methanoic acid	5000 (2270)
Fulminic acid, mercury(II)salt	Mercury fulminate	10 (4.54)
Fumaric acid		5000 (2270)
Furan *	Furfuran	100 (45.4)
Furan, tetrahydro-	Tetrahydrofuran *	1000 (454)
2-Furancarboxaldehyde	Furfural *	5000 (2270)
2,5-Furandione	Maleic anhydride *	5000 (2270)
Furfural *	2-Furancarboxaldehyde	5000 (2270)
Furfuran	Furan *	100 (45.4)
D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	Streptozotocin	1 (0.454)
Glycidylaldehyde	1-Propanal, 2,3-epoxy-	1 (0.454)
Guanidine, N-nitroso-N-methyl-N'-nitro-	N-Methyl-N'-nitro-N-nitrosoguanidine	1 (0.454)
Guthion *	Azinphos methyl @	1 (0.454)
Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	1 (0.454)
Heptachlor epoxide		1 (0.454)
Hexachlorobenzene	Benzene, hexachloro-	1 (0.454)
Hexachlorobutadiene *	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1(0.454)
Hexachlorocyclohexane (gamma isomer)	gamma - BHC Lindane *	1 (0.454)
Hexachlorocyclopentadiene *	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	1 (0.454)
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene.	Endrin *	1 (0.454)
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4:5,8-dimethanonaphthalene.	Dieldrin *	1 (0.454)
Hexachloroethane *	Ethane, 1,1,1,2,2,2-hexachloro-	1 (0.454)

Hexachlorohexahydro-endo,endo-dimethanonaphthalene	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo,endo-dimethanonaphthalene.	1 (0.454)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo,endo-dimethanonaphthalene.	Hexachlorohexahydro-endo,endo-dimethanonaphthalene	1 (0.454)
1,2,3,4,10-10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene.	Aldrin *	1 (0.454)
Hexachlorophene	2,2'-Methylenebis(3,4,6-trichlorophenol)	100(45.4)
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1000 (454)
Hexaethyl tetraphosphate *	Tetraphosphoric acid, hexaethyl ester	100 (45.4)
Hydrazine *	Diamine	1 (0.454)
Hydrazine, 1,2-diethyl-	N,N'-Diethylhydrazine	1 (0.454)
Hydrazine, 1,1-dimethyl-	1,1-Dimethylhydrazine	1 (0.454)
	Dimethylhydrazine, unsymmetrical @	
Hydrazine, 1,2-dimethyl-	1,2-Dimethylhydrazine	1 (0.454)
Hydrazine, 1,2-diphenyl-	1,2-Diphenylhydrazine	1 (0.454)
Hydrazine, methyl-	Methyl hydrazine *	10 (4.54)
Hydrazinecarbothioamide	Thiosemicarbazide	100 (45.4)
Hydrochloric acid *		5000 (2270)
Hydrocyanic acid *	Hydrogen cyanide	10 (4.54)
Hydrofluoric acid *	Hydrogen fluoride *	100 (45.4)
Hydrogen cyanide	Hydrocyanic acid *	10 (4.54)
Hydrogen fluoride *	Hydrofluoric acid *	100 (45.4)
Hydrogen phosphide	Phosphine *	100 (45.4)
Hydrogen sulfide *	Hydrosulfuric acid	100 (45.4)
	Sulfur hydride	
Hydroperoxide, 1-methyl-1-phenylethyl-	alpha,alpha-Dimethylbenzylhydroperoxide	10 (4.54)
Hydrosulfuric acid	Hydrogen sulfide *	100 (45.4)
	Sulfur hydride	
Hydroxydimethylarsine oxide	Cacodylic acid	1 (0.454)
2-Imidazolidinethione	Ethylenethiourea	1 (0.454)
Indeno(1,2,3-cd)pyrene	1,10-(1,2-Phenylene)pyrene	1 (0.454)
Iron dextran	Ferric dextran	5000 (2270)
Isobutyl alcohol	1-Propanol, 2-methyl-	5000 (2270)
Isocyanic acid, methyl ester	Methyl isocyanate *	1 (0.454)
Isophorone		5000 (2270)
Isoprene *		100 (45.4)
Isopropanolamine dodecylbenzene sulfonate		1000 (454)
Isosafrole	Benzene, 1,2-methylenedioxy-4-propenyl-	1 (0.454)
3(2H)-Isoxazolone, 5-(aminomethyl)-	5-(Aminomethyl)-3-isoxazolol	1000 (454)
Kelthane		10 (4.54)
Kepone	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one	1 (0.454)
Lasiocarpine		1 (0.454)
Lead ¢		1 (0.454)
Lead acetate	Acetic acid, lead salt	5000 (2270)
Lead arsenate *		5000 (2270)
Lead chloride *		100 (45.4)
Lead fluoborate *		100 (45.4)
Lead fluoride *		100 (45.4)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
Lead iodide		100 (45.4)
Lead nitrate *		100 (45.4)
Lead phosphate	Phosphoric acid, lead salt	1 (0.454)
Lead stearate		5000 (2270)
Lead subacetate		1 (0.454)
Lead sulfate *		100 (45.4)
Lead sulfide		5000 (2270)
Lead thiocyanate		100 (45.4)
Lindane *	gamma - BHC	1 (0.454)
	Hexachlorocyclohexane (gamma isomer)	
Lithium chromate		1000 (454)
Malathion *		100 (45.4)
Maleic acid *		5000 (2270)
Maleic anhydride *	2,5-Furandione	5000 (2270)
Maleic hydrazide	1,2-Dihydro-3,6-pyridazinedione	5000 (2270)
Malononitrile	Propanedinitrile	1000 (454)
Melphalan	Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-, L-	1 (0.454)
Mercaptodimethur		10 (4.54)
Mercuric cyanide *		1 (0.454)
Mercuric nitrate *		10 (4.54)
Mercuric sulfate *		10 (4.54)
Mercuric thiocyanate		10 (4.54)
Mercurous nitrate *		10 (4.54)
Mercury *		1 (0.454)
Mercury fulminate	Fulminic acid, mercury(II)salt	10 (4.54)
Mercury, (acetato-O)phenyl-	Phenylmercuric acetate	100 (45.4)
Methacrylonitrile	2-Propenenitrile, 2-methyl-	1000 (454)
Methanamine, N-methyl-	Dimethylamine *	1000 (454)
Methane, bromo-	Methyl bromide *	1000 (454)
Methane, chloro-	Chloromethane	1 (0.454)
	Methyl chloride *	
Methane, chloromethoxy-	Chloromethyl methyl ether	1 (0.454)
	Methylchloromethyl ether @	
Methane, dibromo-	Methylene bromide	1000 (454)
Methane, dichloro-	Methylene chloride *	1000 (454)
Methane, dichlorodifluoro-	Dichlorodifluoromethane *	5000 (2270)
Methane, iodo-	Methyl iodide	1 (0.454)
Methane, oxybis(chloro-	Bis(chloromethyl) ether	1 (0.454)
Methane, tetrachloro-	Carbon tetrachloride *	5000 (2270)
Methane, tetranitro-	Tetranitromethane *	10 (4.54)
Methane, tribromo-	Bromoform	100 (45.4)
Methane, trichloro-	Chloroform *	5000 (2270)

Methane, trichlorofluoro-	Trichloromonofluoromethane	5000 (2270)
Methanesulfenyl chloride, trichloro-	Perchloromethyl mercaptan @	100 (45.4)
	Trichloromethanesulfenyl chloride	
Methanesulfonic acid, ethyl ester	Ethyl methanesulfonate	1 (0.454)
Methanethiol	Methyl mercaptan *	100 (45.4)
	Thiomethanol	
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-a,4,7,7a-tetrahydro-	Heptachlor	1 (0.454)
Methanoic acid	Formic acid *	5000 (2270)
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-	Chlordane *	1 (0.454)
	Chlordane, technical *	
Methanol *	Methyl alcohol *	5000 (2270)
Methapyrilene	Pyridine, 2-[(2-(dimethylamino)ethyl)-2-thenylamino]-	5000 (2270)
Methomyl	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester	100 (45.4)
Methoxychlor	Ethane, 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)-	1 (0.454)
Methyl alcohol *	Methanol *	5000 (2270)
Methylamine @	Monomethylamine	100 (45.4)
2-Methylaziridine	1,2-Propylenimine	1 (0.454)
Methyl bromide *	Methane, bromo-	1000 (454)
1-Methylbutadiene	1,3-Pentadiene	100 (45.4)
Methyl chloride *	Chloromethane	1 (0.454)
	Methane, chloro-	
Methyl chlorocarbonate *	Carbonochloridic acid, methyl ester	1000 (454)
	Methyl chloroformate @	
Methyl chloroform *	1,1,1-Trichloroethane *	1000 (454)
Methyl chloroformate @	Carbonochloridic acid, methyl ester	1000 (454)
	Methyl chlorocarbonate *	
Methylchloromethyl ether @	Chloromethyl methyl ether	1 (0.454)
	Methane, chloromethoxy-	
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	1 (0.454)
4,4'-Methylenebis(2-chloroaniline)	Benzenamine, 4,4'-methylenebis(2-chloro-	1 (0.454)
2,2'-Methylenebis(3,4,6-trichlorophenol)	Hexachlorophene	100(45.4)
Methylene bromide	Methane, dibromo-	1000 (454)
Methylene chloride *	Methane, dichloro-	1000 (454)
Methylene oxide	Formaldehyde *	1000 (454)
Methyl ethyl ketone *	2-Butanone	5000 (2270)
	Ethyl methyl ketone @	
Methyl ethyl ketone peroxide *	2-Butanone peroxide	10 (4.54)
Methyl hydrazine *	Hydrazine, methyl-	10 (4.54)
Methyl iodide	Methane, iodo-	1 (0.454)
Methyl isobutyl ketone	4-Methyl-2-pentanone	5000 (2270)
Methyl isocyanate *	Isocyanic acid, methyl ester	1 (0.454)
2-Methyllactonitrile	Acetone cyanohydrin *	10 (4.54)
	Propanenitrile, 2-hydroxy-2-methyl-	
Methyl mercaptan *	Methanethiol	100 (45.4)
	Thiomethanol	
Methyl methacrylate *	2-Propenoic acid, 2-methyl-, methyl ester	1000 (454)
N-Methyl-N'-nitro-N-nitrosoguanidine	Guanidine, N-nitroso-N-methyl-N'-nitro-	1 (0.454)
Methyl parathion *	O,O-Dimethyl O-p-nitrophenyl phosphorothioate	100 (45.4)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
4-Methyl-2-pentanone	Methyl isobutyl ketone	5000 (2270)
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	1 (0.454)
Mevinphos *		10 (4.54)
Mexacarbate *		1000 (454)
Mitomycin C	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione,6-amino-8-[((aminocarbonyl)oxy) methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-.	1 (0.454)
Monoethylamine *		100 (45.4)
Monomethylamine	Methylamine @	100 (45.4)
Naled		10 (4.54)
5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl) oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-.	Daunomycin	1 (0.454)
Naphthalene *		100 (45.4)
Naphthalene, 2-chloro-	beta-Chloronaphthalene	5000 (2270)
	2-Chloronaphthalene	
1,4-Naphthalenedione	1,4-Naphthoquinone	5000 (2270)
2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt.	Trypan blue	1 (0.454)
Naphthenic acid		100 (45.4)
1,4-Naphthoquinone	1,4-Naphthalenedione	5000 (2270)
alpha-Naphthylamine	1-Naphthylamine	1 (0.454)
beta-Naphthylamine	2-Naphthylamine	1 (0.454)
1-Naphthylamine	alpha-Naphthylamine	1 (0.454)
2-Naphthylamine	beta-Naphthylamine	1 (0.454)
2-Naphthylamine, N,N-bis(2-chloroethyl)-	Chlornaphazine	1 (0.454)
alpha-Naphthylthiourea	Thiourea, 1-naphthalenyl-	100 (45.4)
Nickel ¢		1 (0.454)
Nickel ammonium sulfate		5000 (2270)
Nickel carbonyl *	Nickel tetracarbonyl	1 (0.454)
Nickel chloride		5000 (2270)
Nickel cyanide *	Nickel(II) cyanide	1 (0.454)
Nickel(II) cyanide	Nickel cyanide *	1 (0.454)
Nickel hydroxide		1000 (454)
Nickel nitrate *		5000 (2270)
Nickel sulfate		5000 (2270)
Nickel tetracarbonyl	Nickel carbonyl *	1 (0.454)
Nicotine * and salts *	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts	100 (45.4)
Nitric acid *		1000 (454)
Nitric oxide *	Nitrogen(II) oxide	10 (4.54)
p-Nitroaniline *	Benzenamine, 4-nitro-	5000 (2270)
Nitrobenzene *	Benzene, nitro-	1000 (454)
Nitrogen dioxide *	Nitrogen(IV) oxide	10 (4.54)
Nitrogen(II) oxide	Nitric oxide *	10 (4.54)

Nitrogen(IV) oxide	Nitrogen dioxide *	10 (4.54)
Nitroglycerine *	1,2,3-Propanetriol, trinitrate-	10 (4.54)
Nitrophenol (mixed)		100 (45.4)
m-		
o-	2-Nitrophenol	
p-	4-Nitrophenol	
	Phenol, 4-nitro	
o-Nitrophenol	2-Nitrophenol	100 (45.4)
p-Nitrophenol	Phenol, 4-nitro-	100 (45.4)
	4-Nitrophenol	
2-Nitrophenol	o-Nitrophenol	100 (45.4)
4-Nitrophenol	p-Nitrophenol	100 (45.4)
	Phenol, 4-nitro-	
2-Nitropropane	Propane, 2-nitro-	1 (0.454)
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	1 (0.454)
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1 (0.454)
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	1 (0.454)
N-Nitrosodimethylamine	Dimethylnitrosamine	1 (0.454)
N-Nitrosodiphenylamine		100 (45.4)
N-Nitrosodi-n-propylamine	Di-n-propylnitrosamine	1 (0.454)
N-Nitroso-N-ethylurea	Carbamide, N-ethyl-N-nitroso-	1 (0.454)
N-Nitroso-N-methylurea	Carbamide, N-methyl-N-nitroso-	1 (0.454)
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	1 (0.454)
N-Nitrosomethylvinylamine	Ethanamine, N-methyl-N-nitroso-	1 (0.454)
N-Nitrosopiperidine	Pyridine, hexahydro-N-nitroso-	1 (0.454)
N-Nitrosopyrrolidine	Pyrrole, tetrahydro-N-nitroso-	1 (0.454)
Nitrotoluene		1000 (454)
m-Nitrotoluene		
o-Nitrotoluene		
p-Nitrotoluene		
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	1 (0.454)
5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro,cyclic sulfite	Endosulfan *	1 (0.454)
Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	100(45.4)
Osmium oxide	Osmium tetroxide	1000 (454)
Osmium tetroxide	Osmium oxide	1000 (454)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	Endothall	1000 (454)
1,2-Oxathiolane, 2,2-dioxide	1,3-Propane sultone	1 (0.454)
2H-1,3,2-Oxazaphosphorine,2-[bis(2-chloroethyl) amino] tetrahydro-2-oxide	Cyclophosphamide	1 (0.454)
Oxirane	Ethylene oxide *	1 (0.454)
Oxirane, 2-(chloromethyl)-	Epichlorohydrin *	1000 (454)
	1-Chloro-2,3-epoxypropane	
Paraformaldehyde *		1000 (454)
Paraldehyde *	1,3,5-Trioxane, 2,4,6-trimethyl-	1000 (454)
Parathion *	Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl)ester	1 (0.454)
Pentachlorobenzene	Benzene, pentachloro-	10 (4.54)
Pentachloroethane	Ethane, pentachloro-	1 (0.454)
Pentachloronitrobenzene	Benzene, pentachloronitro-	1 (0.454)
Pentachlorophenol	Phenol, pentachloro-	10 (4.54)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
1,3-Pentadiene	1-Methylbutadiene	100 (45.4)
Perchloroethylene *	Ethene, 1,1,2,2-tetrachloro	1 (0.454)
	Tetrachloroethene	
	Tetrachloroethylene *	
Perchloromethyl mercaptan @	Methanesulfenyl chloride, trichloro-	100 (45.4)
	Trichloromethanesulfenyl chloride	
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	1 (0.454)
Phenanthrene		5000 (2270)
Phenol *	Benzene, hydroxy-	1000 (454)
Phenol, 2-chloro-	o-Chlorophenol	100 (45.4)
	2-Chlorophenol	
Phenol, 4-chloro-3-methyl-	p-Chloro-m-cresol	5000 (2270)
	4-Chloro-m-cresol	
Phenol, 2-cyclohexyl-4,6-dinitro-	4,6-Dinitro-o-cyclohexylphenol	100 (45.4)
Phenol, 2,4-dichloro-	2,4-Dichlorophenol	100 (45.4)
Phenol, 2,6-dichloro-	2,6-Dichlorophenol	100 (45.4)
Phenol, 2,4-dimethyl-	2,4-Dimethylphenol	100 (45.4)
Phenol, 2,4-dinitro-	2,4-Dinitrophenol	10 (4.54)
Phenol, 2,4-dinitro-6-(1-methylpropyl)-	Dinoseb	1000 (454)
Phenol, 2,4-dinitro-6-methyl-, and salts	4,6-Dinitro-o-cresol and salts	10 (4.54)
Phenol, 4-nitro-	p-Nitrophenol *	100 (45.4)
	4-Nitrophenol *	
Phenol, pentachloro-	Pentachlorophenol	10 (4.54)
Phenol, 2,3,4,6-tetrachloro-	2,3,4,6-Tetrachlorophenol	10 (4.54)
Phenol, 2,4,5-trichloro-	2,4,5-Trichlorophenol	10 (4.54)
Phenol, 2,4,6-trichloro-	2,4,6-Trichlorophenol	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt	Ammonium picrate *	10 (4.54)
Phenyl dichloroarsine *	Dichlorophenylarsine	1 (0.454)
1,10-(1,2-Phenylene)pyrene	Indeno(1,2,3-cd)pyrene	1 (0.454)
Phenyl mercaptan @	Benzenethiol	100 (45.4)
	Thiophenol *	
Phenylmercuric acetate	Mercury, (acetato-O)phenyl-	100 (45.4)
N-Phenylthiourea	Thiourea, phenyl-	100 (45.4)
Phorate	Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methylester	10 (4.54)
Phosgene *	Carbonyl chloride	10 (4.54)
Phosphine *	Hydrogen phosphide	100 (45.4)
Phosphoric acid *		5000 (2270)
Phosphoric acid, diethyl p-nitrophenyl ester	Diethyl-p-nitrophenyl phosphate	100 (45.4)
Phosphoric acid, lead salt	Lead phosphate	1 (0.454)
Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	Phorate	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester	O,O-Diethyl S-methyl dithiophosphate	5000 (2270)
Phosphorodithioic acid, O,O-dimethyl S-[2 (methylamino)-2-oxoethyl] ester	Dimethoate	10 (4.54)

Phosphorofluoridic acid, bis(1-methylethyl) ester	Diisopropyl fluorophosphate	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester	Parathion *	1 (0.454)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	O,O-Diethyl O-pyrazinyl phosphorothioate	100 (45.4)
Phosphorothioic acid, O,O-dimethyl O-[p-[(dimethylamino)-sulfonyl] phenyl] ester	Famphur	1000 (454)
Phosphorus *		1 (0.454)
Phosphorus oxychloride *		1000 (454)
Phosphorus pentasulfide *	Phosphorus sulfide	100 (45.4)
	Sulfur phosphide	
Phosphorus sulfide	Phosphorus pentasulfide *	100 (45.4)
	Sulfur phosphide	
Phosphorus trichloride *		1000 (454)
Phthalic anhydride	1,2-Benzenedicarboxylic acid anhydride	5000 (2270)
2-Picoline	Pyridine, 2-methyl-	5000 (2270)
Plumbane, tetraethyl-	Tetraethyl lead *	10 (4.54)
POLYCHLORINATED BIPHENYLS (PCBs)	Aroclor 1016	10 (4.54)
	Aroclor 1221	
	Aroclor 1232	
	Aroclor 1242	
	Aroclor 1248	
	Aroclor 1254	
	Aroclor 1260	
Potassium arsenate *		1000 (454)
Potassium arsenite *		1000 (454)
Potassium bichromate	Potassium dichromate @	1000 (454)
Potassium chromate		1000 (454)
Potassium cyanide *		10 (4.54)
Potassium dichromate @	Potassium bichromate	1000 (454)
Potassium hydroxide *		1000 (454)
Potassium permanganate *		100 (45.4)
Potassium silver cyanide		1 (0.454)
Pronamide	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide	5000 (2270)
1-Propanal, 2,3-epoxy-	Glycidylaldehyde	1 (0.454)
Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime	Aldicarb	1 (0.454)
1-Propanamine	n-Propylamine *	5000 (2270)
1-Propanamine, N-propyl-	Dipropylamine	5000 (2270)
Propane, 1,2-dibromo-3-chloro-	1,2-Dibromo-3-chloropropane	1(0.454)
Propane, 2-nitro-	2-Nitropropane	1 (0.454)
Propane, 2,2'-oxybis(2-chloro-	Bis(2-chloroisopropyl) ether	1000 (454)
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1 (0.454)
Propanedinitrile	Malononitrile	1000 (454)
Propanenitrile	Ethyl cyanide	10 (4.54)
Propanenitrile, 3-chloro-	3-Chloropropionitrile	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl-	Acetone cyanohydrin *	10 (4.54)
	2-Methyllactonitrile	
1,2,3-Propanetriol, trinitrate-	Nitroglycerine *	10 (4.54)
1-Propanol, 2,3-dibromo-, phosphate (3:1)	Tris(2,3-dibromopropyl)phosphate	1 (0.454)
1-Propanol, 2-methyl-	Isobutyl alcohol	5000 (2270)
2-Propanone	Acetone *	5000 (2270)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
2-Propanone, 1-bromo-	Bromoacetone *	1000 (454)
Propargite		10 (4.54)
Propargyl alcohol *	2-Propyn-1-ol	1000 (454)
2-Propenal	Acrolein *	1 (0.454)
2-Propenamide	Acrylamide	5000 (2270)
Propene, 1,3-dichloro-	1,3-Dichloropropene	100 (45.4)
1-Propene, 1,1,2,3,3,3-hexachloro-	Hexachloropropene	1000 (454)
2-Propenenitrile	Acrylonitrile *	100 (45.4)
2-Propenenitrile, 2-methyl-	Methacrylonitrile	1000 (454)
2-Propenoic acid	Acrylic acid *	5000 (2270)
2-Propenoic acid, ethyl ester	Ethyl acrylate *	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	Ethyl methacrylate	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	Methyl methacrylate *	1000 (454)
2-Propen-1-ol	Allyl alcohol *	100 (45.4)
Propionic acid *		5000 (2270)
Propionic acid, 2-(2,4,5-trichlorophenoxy)-	Silvex	100 (45.4)
	2,4,5-TP @	
	2,4,5-TP acid	
Propionic anhydride		5000 (2270)
n-Propylamine *	1-Propanamine	5000 (2270)
Propylene dichloride *	1,2-Dichloropropane	1000 (454)
Propylene oxide *		100 (45.4)
1,2-Propylenimine *	2-Methylaziridine	1 (0.454)
2-Propyn-1-ol	Propargyl alcohol *	1000 (454)
Pyrene		5000 (2270)
Pyrethrins		1 (0.454)
4-Pyridinamine	4-Aminopyridine	1000 (454)
Pyridine *		1000 (454)
Pyridine, 2-[(2-(dimethylamino)ethyl)-2- thenylamino]-	Methapyrilene	5000 (2270)
Pyridine, hexahydro-N-nitroso-	N-Nitrosopiperidine	1 (0.454)
Pyridine, 2-methyl-	2-Picoline	5000 (2270)
Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts	Nicotine * and salts *	100 (45.4)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	Methylthiouracil	1 (0.454)
Pyrophosphoric acid, tetraethyl ester	Tetraethyl pyrophosphate *	10 (4.54)
Pyrrole, tetrahydro-N-nitroso-	N-Nitrosopyrrolidine	1 (0.454)
Quinoline		5000 (2270)
RADIONUCLIDES		1 (0.454)
Reserpine	Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester.	5000 (2270)
Resorcinol	1,3-Benzenediol	5000 (2270)
Saccharin and salts	1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts	1 (0.454)
Safrole	Benzene, 1,2-methylenedioxy-4-allyl-	1 (0.454)

Selenious acid		10 (4.54)
Selenium ¢		100 (45.4)
Selenium dioxide	Selenium oxide *	10 (4.54)
Selenium disulfide	Sulfur selenide	1 (0.454)
Selenium oxide *	Selenium dioxide	10 (4.54)
Selenourea	Carbamimidoselenoic acid	1000 (454)
L-Serine, diazoacetate (ester)	Azaserine	1 (0.454)
Silver ¢		1000 (454)
Silver cyanide *		1 (0.454)
Silver nitrate *		1 (0.454)
Silvex	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	100 (45.4)
	2,4,5-TP @	
	2,4,5-TP acid	
Sodium *		10 (4.54)
Sodium arsenate *		1000 (454)
Sodium arsenite *		1000 (454)
Sodium azide *		1000 (454)
Sodium bichromate	Sodium dichromate @	1000 (454)
Sodium bifluoride *		100 (45.4)
Sodium bisulfite *		5000 (2270)
Sodium chromate		1000 (454)
Sodium cyanide *		10 (4.54)
Sodium dichromate @	Sodium bichromate	1000 (454)
Sodium dodecylbenzene sulfonate		1000 (454)
Sodium fluoride *		1000 (454)
Sodium hydrosulfide *		5000 (2270)
Sodium hydroxide *		1000 (454)
Sodium hypochlorite *		100 (45.4)
Sodium methylate *		1000 (454)
Sodium nitrite *		100 (45.4)
Sodium phosphate, dibasic		5000 (2270)
Sodium phosphate, tribasic		5000 (2270)
Sodium selenite *		100 (45.4)
4,4'-Stilbenediol, alpha,alpha'-diethyl-	Diethylstilbestrol	1 (0.454)
Streptozotocin	D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	1 (0.454)
Strontium chromate		1000 (454)
Strontium sulfide		100 (45.4)
Strychnidin-10-one, and salts	Strychnine * and salts *	10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	Brucine	100 (45.4)
Strychnine * and salts *	Strychnidin-10-one, and salts	10 (4.54)
Styrene		1000 (454)
Sulfur hydride	Hydrogen sulfide *	100 (45.4)
	Hydrosulfuric acid	
Sulfur monochloride		1000 (454)
Sulfur phosphide	Phosphorus pentasulfide *	100 (45.4)
	Phosphorus sulfide	
Sulfur selenide	Selenium disulfide	1 (0.454)
Sulfuric acid		1000 (454)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
Sulfuric acid, dimethyl ester	Dimethyl sulfate *	1 (0.454)
Sulfuric acid, thallium(I) salt	Thallium(I) sulfate *	100 (45.4)
2,4,5-T *	2,4,5-T acid	1000 (454)
	2,4,5-Trichlorophenoxyacetic acid *	
2,4,5-T acid	2,4,5-T *	1000 (454)
	2,4,5-Trichlorophenoxyacetic acid *	
2,4,5-T amines		5000 (2270)
2,4,5-T esters		1000 (454)
2,4,5-T salts		1000 (454)
TDE *	DDD	1(0.454)
	Dichlorodiphenyl dichloroethane	
	4,4'-DDD	
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)		1 (0.454)
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	1 (0.454)
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	1 (0.454)
Tetrachloroethene	Ethene, 1,1,2,2-tetrachloro-	1 (0.454)
	Perchloroethylene *	
	Tetrachloroethylene *	
Tetrachloroethylene *	Ethene, 1,1,2,2-tetrachloro-	1 (0.454)
	Perchloroethylene *	
	Tetrachloroethene	
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	10 (4.54)
Tetraethyl lead *	Plumbane, tetraethyl-	10 (4.54)
Tetraethyl pyrophosphate *	Pyrophosphoric acid, tetraethyl ester	10 (4.54)
Tetraethyldithiopyrophosphate	Dithiopyrophosphoric acid, tetraethyl ester	100 (45.4)
Tetrahydrofuran *	Furan, tetrahydro-	1000 (454)
Tetranitromethane *	Methane, tetranitro-	10 (4.54)
Tetraphosphoric acid, hexaethyl ester	Hexaethyl tetraphosphate *	100 (45.4)
Thallic oxide	Thallium(III) oxide	100 (45.4)
Thallium ¢		1000 (454)
Thallium(I) acetate	Acetic acid, thallium(I) salt	100 (45.4)
Thallium(I) carbonate	Carbonic acid, dithallium (I) salt	100(45.4)
Thallium(I) chloride		100 (45.4)
Thallium(I) nitrate		100 (45.4)
Thallium(III) oxide	Thallic oxide	100 (45.4)
Thallium(I) selenide		1000 (454)
Thallium(I) sulfate *	Sulfuric acid, thallium(I) salt	100 (45.4)
Thioacetamide	Ethanethioamide	1 (0.454)
Thiofanox	3,3-Dimethyl-1-(methylthio)-2-butanone,O-[(methylamino)carbonyl] oxime	100 (45.4)
Thiomidodicarbonic diamide	2,4-Dithiobiuret	100 (45.4)

Thiomethanol	Methanethiol	100 (45.4)
	Methyl mercaptan *	
Thiophenol *	Benzenethiol	100 (45.4)
	Phenyl mercaptan @	
Thiosemicarbazide	Hydrazinecarbothioamide	100 (45.4)
Thiourea	Carbamide, thio-	1 (0.454)
Thiourea, (2-chlorophenyl)-	1-(o-Chlorophenyl)thiourea	100 (45.4)
Thiourea, 1-naphthalenyl-	alpha-Naphthylthiourea	100 (45.4)
Thiourea, phenyl-	N-Phenylthiourea	100 (45.4)
Thiram	Bis(dimethylthiocarbamoyl) disulfide	10 (4.54)
Toluene *	Benzene, methyl-	1000 (454)
Toluenediamine *	Diaminotoluene	1 (0.454)
Toluene diisocyanate *	Benzene, 2,4-diisocyanatomethyl-	100 (45.4)
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	1 (0.454)
o-Toluidine	2-Amino-1-methyl benzene	1 (0.454)
p-Toluidine	4-Amino-1-methyl benzene	1 (0.454)
Toxaphene *	Camphene, octachloro-	1 (0.454)
2,4,5-TP @	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	100 (45.4)
	Silvex	
	2,4,5-TP acid	
2,4,5-TP acid esters		100 (45.4)
2,4,5-TP acid	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	100 (45.4)
	Silvex	
	2,4,5-TP @	
1H-1,2,4-Triazol-3-amine	Amitrole	1 (0.454)
Trichlorfon		100 (45.4)
1,2,4-Trichlorobenzene		100 (45.4)
1,1,1-Trichloroethane *	Methyl chloroform *	1000 (454)
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	1 (0.454)
Trichloroethene	Trichloroethylene *	1000 (454)
Trichloroethylene *	Trichloroethene	1000 (454)
Trichloromethanesulfenyl chloride	Methanesulfenyl chloride, trichloro-	100 (45.4)
	Perchloromethyl mercaptan @	
Trichloromonofluoromethane	Methane, trichlorofluoro-	5000 (2270)
Trichlorophenol *		10 (4.54)
2,3,4-Trichlorophenol		
2,3,5-Trichlorophenol		
2,3,6-Trichlorophenol		
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	
3,4,5-Trichlorophenol		
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	10 (4.54)
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	10 (4.54)
2,4,5-Trichlorophenoxyacetic acid *	2,4,5-T *	1000 (454)
	2,4,5-T acid	
Triethanolamine dodecylbenzene sulfonate		1000 (454)
Triethylamine		5000 (2270)
Trimethylamine *		100 (45.4)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
sym-Trinitrobenzene *	Benzene, 1,3,5-trinitro-	10 (4.54)
1,3,5-Trioxane, 2,4,6-trimethyl-	Paraldehyde	1000 (454)
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	1 (0.454)
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(l,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	1 (0.454)
Unlisted Hazardous Wastes Characteristic of Corrosivity D002		100(45.4)
Unlisted Hazardous Wastes Characteristic of EP Toxicity		
Arsenic D004		1 (0.454)
Barium D005		1000 (454)
Cadmium D006		1 (0.454)
Chromium D007		1 (0.454)
Lead D008		1 (0.454)
Mercury D009		1 (0.454)
Selenium D010		10 (4.54)
Silver D011		1 (0.454)
Endrin D012		1 (0.454)
Lindane D013		1 (0.454)
Methoxychlor D014		1 (0.454)
Toxaphene D015		1 (0.454)
2,4-D D016		100 (45.4)
2,4,5-TP D017		100 (45.4)
Unlisted Hazardous Wastes Characteristic of Ignitability D001		100 (45.4)
Unlisted Hazardous Wastes Characteristic of Reactivity D003		100 (45.4)
Uracil, 5-[bis(2-chloroethyl)amino]-	Uracil mustard	1 (0.454)
Uracil mustard	Uracil, 5-[bis(2-chloroethyl)amino]-	1 (0.454)
Uranyl acetate *		100 (45.4)
Uranyl nitrate *		100 (45.4)
Vanadic acid, ammonium salt	Ammonium vanadate	1000 (454)
Vanadium(V) oxide	Vanadium pentoxide	1000 (454)
Vanadium pentoxide	Vanadium(V) oxide	1000 (454)
Vanadyl sulfate		1000 (454)
Vinyl acetate *		5000 (2270)
Vinyl chloride *	Ethene, chloro-	1 (0.454)
Vinylidene chloride *	Ethene, 1,1-dichloro-	5000 (2270)
	1,1-Dichloroethylene	
Warfarin	3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts	100 (45.4)
Xylene * (mixed)	Benzene, dimethyl	1000 (454)
m-	m-	
o-	o-	
p-	p-	
Xylenol *		1000 (454)

Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester.	Reserpine	5000 (2270)
Zinc ¢		1000 (454)
Zinc acetate		1000 (454)
Zinc ammonium chloride		1000 (454)
Zinc borate		1000 (454)
Zinc bromide		1000 (454)
Zinc carbonate		1000 (454)
Zinc chloride		1000 (454)
Zinc cyanide *		10 (4.54)
Zinc fluoride		1000 (454)
Zinc formate		1000 (454)
Zinc hydrosulfite *		1000 (454)
Zinc nitrate *		1000 (454)
Zinc phenolsulfonate		5000 (2270)
Zinc phosphide *		100 (45.4)
Zinc silicofluoride		5000 (2270)
Zinc sulfate		1000 (454)
Zirconium nitrate *		5000 (2270)
Zirconium potassium fluoride		1000 (454)
Zirconium sulfate *		5000 (2270)
Zirconium tetrachloride *		5000 (2270)
F001		1 (0.454)
The following spent halogenated solvents used in degreasing and sludges from the recovery of these solvents in degreasing operations:.		
(a) Tetrachloroethylene		1 (0.454)
(b) Trichloroethylene		1000 (454)
(c) Methylene chloride		1000 (454)
(d) 1,1,1-Trichloroethane		1000 (454)
(e) Carbon tetrachloride		5000 (2270)
(f) Chlorinated fluorocarbons		5000 (2270)
F002		1 (0.454)
The following spent halogenated solvents and the still bottoms from the recovery of these solvents:.		
(a) Tetrachloroethylene		1 (0.454)
(b) Methylene chloride		1000 (454)
(c) Trichloroethylene		1000 (454)
(d) 1,1,1-Trichloroethane		1000 (454)
(e) Chlorobenzene		100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane		5000 (2270)
(g) o-Dichlorobenzene		100 (45.4)
(h) Trichlorofluoromethane		5000 (2270)
F003		100 (45.4)
The following spent non-halogenated solvents and solvents:		
(a) Xylene		1000 (454)
(b) Acetone		5000 (2270)
(c) Ethyl acetate		5000 (2270)
(d) Ethylbenzene		1000 (454)

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
(e) Ethyl ether		100 (45.4)
(f) Methyl isobutyl ketone		5000 (2270)
(g) n-Butyl alcohol		5000 (2270)
(h) Cyclohexanone		5000 (2270)
(i) Methanol		5000 (2270)
F004		1000 (454)
The following spent non-halogenated solvents and the stillbottoms from the recovery of these solvents:.		
(a) Cresols/Cresylic acid		1000 (454)
(b) Nitrobenzene		1000 (454)
F005		100 (45.4)
The following spent non-halogenated solvents and the stillbottoms from the recovery of these solvents:.		
(a) Toluene		1000 (454)
(b) Methyl ethyl ketone		5000 (2270)
(c) Carbon disulfide		100 (45.4)
(d) Isobutanol		5000 (2270)
(e) Pyridine		1000 (454)
F006		1 (0.454)
Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum,(2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbonsteel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum.		
F007		10 (4.54)
Spent cyanide plating bath solutions from electroplating operations		
F008		10 (4.54)
Plating bath sludges from the bottom of plating baths fromelectroplating operations where cyanides are used in the process (except for precious metals electroplating plating bath sludges).		
F009		10 (4.54)
Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for precious metals electroplating spent stripping and cleaning bath solutions).		
F010		10 (4.54)
Quenching bath sludge from oil baths from metal heat treating operations where cyanides are used in the process (except for precious metals heat-treating quenching bath sludges).		

F011		10 (4.54)
Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning).		
F012		10 (4.54)
Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching wastewater treatment sludges).		
F019		1 (0.454)
Wastewater treatment sludges from the chemical conversion coating of aluminum...		
F020		1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.).		
F021		1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives..		
F022		1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions..		
F023		1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the productionor use of hexachlorophene from highly purified 2,4,5-trichlorophenol.).		
F024		1 (0.454)
Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants(sic), wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in 40 CFR 261.32.).		
F026		1 (0.454)
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions..		

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
F027		1 (0.454)
Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derivedfrom these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.).		
F028		1 (0.454)
Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F028, and F027..		
K001		1 (0.454)
Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.		
K002		1 (0.454)
Wastewater treatment sludge from the production of chrome yellow and orange pigments.		
K003		1 (0.454)
Wastewater treatment sludge from the production of molybdate orange pigments		
K004		1 (0.454)
Wastewater treatment sludge from the production of zinc yellow pigments		
K005		1 (0.454)
Wastewater treatment sludge from the production of chrome green pigments		
K006		1 (0.454)
Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).		
K007		1 (0.454)
Wastewater treatment sludge from the production of iron blue pigments		
K008		1 (0.454)
Oven residue from the production of chrome oxide green pigments		
K009		1 (0.454)
Distillation bottoms from the production of acetaldehyde from ethylene		
K010		1 (0.454)
Distillation side cuts from the production of acetaldehydefrom ethylene		
K011		1 (0.454)
Bottom stream from the wastewater stripper in the production of acrylonitrile		
K013		1 (0.454)
Bottom stream from the acetonitrile column in the production of acrylonitrile		
K014		5000 (2270)
Bottoms from the acetonitrile purification column in the production of acrylonitrile		
K015		1 (0.454)
Still bottoms from the distillation of benzyl chloride		
K016		1 (0.454)
Heavy ends or distillation residues from the production of carbon tetrachloride		

K017		1 (0.454)
Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.		
K018		1 (0.454)
Heavy ends from the fractionation column in ethyl chloride production		
K019		1 (0.454)
Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.		
K020		1 (0.454)
Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.		
K021		1 (0.454)
Aqueous spent antimony catalyst waste from fluoromethanes production		
K022		1 (0.454)
Distillation bottom tars from the production of phenol/acetone from cumene		
K023		5000 (2270)
Distillation light ends from the production of phthalic anhydride from naphthalene		
K024		5000 (2270)
Distillation bottoms from the production of phthalic anhydride from naphthalene		
K025		1 (0.454)
Distillation bottoms from the production of nitrobenzene by the nitration of benzene.		
K026		1000 (454)
Stripping still tails from the production of methyl ethyl pyridines		
K027		1 (0.454)
Centrifuge and distillation residues from toluene diisocyanate production		
K028		1 (0.454)
Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.		
K029		1 (0.454)
Waste from the product steam stripper in the production of 1,1,1-trichloroethane		
K030		1 (0.454)
Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.		
K031		1 (0.454)
By-product salts generated in the production of MSMA and cacodylic acid		
K032		1 (0.454)
Wastewater treatment sludge from the production of chlordane		
K033		1 (0.454)
Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.		
K034		1 (0.454)
Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.		
K035		1 (0.454)
Wastewater treatment sludges generated in the production of creosote		
K036		1 (0.454)
Still bottoms from toluene reclamation distillation in the production of disulfoton		

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
K037		1 (0.454)
Wastewater treatment sludges from the production of disulfoton		1 (0.454)
K038		
Wastewater from the washing and stripping of phorate production		10 (4.54)
K039		
Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.		1 (0.454)
K040		
Wastewater treatment sludge from the production of phorate		1 (0.454)
K041		
Wastewater treatment sludge from the production of toxaphene		1 (0.454)
K042		
Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.		1 (0.454)
K043		
2,6-dichlorophenol waste from the production of 2,4-D		10 (4.54)
K044		
Wastewater treatment sludges from the manufacturing and processing of explosives.		10 (4.54)
K045		
Spent carbon from the treatment of wastewater containing explosives		100 (45.4)
K046		
Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.		10 (4.54)
K047		
Pink/red water from TNT operations		1 (0.454)
K048		
Dissolved air flotation (DAF) float from the petroleum refining industry		1 (0.454)
K049		
Slop oil emulsion solids from the petroleum refining industry		1 (0.454)
K050		
Heat exchanger bundle cleaning sludge from the petroleum refining industry		1 (0.454)
K051		
API separator sludge from the petroleum refining industry		10 (4.54)
K052		
Tank bottoms (leaded) from the petroleum refining industry		1 (0.454)
K060		
Ammonia still lime sludge from coking operations		1 (0.454)
K061		
Emission control dust/sludge from the primary production of steel in electric furnaces.		

K062		1 (0.454)
Spent pickle liquor from steel finishing operations		
K069		1 (0.454)
Emission control dust/sludge from secondary lead smelting		
K071		1(0.454)
Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.		
K073		1 (0.454)
Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.		
K083		100 (45.4)
Distillation bottoms from aniline extraction		
K084		1 (0.454)
Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.		
K085		1 (0.454)
Distillation or fractionation column bottoms from the production of chlorobenzenes		
K086		1 (0.454)
Solvent washes and sludges, caustic washes and sludges, onwater washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.		
K087		100 (45.4)
Decanter tank tar sludge from coking operations		
K093		5000 (2270)
Distillation light ends from the production of phthalic anhydride from ortho-xylene		
K094		5000 (2270)
Distillation bottoms from the production of phthalic anhydride from ortho-xylene		
K095		1 (0.454)
Distillation bottoms from the production of 1,1,1-trichloroethane		
K096		1 (0.454)
Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.		
K097		1 (0.454)
Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.		
K098		1 (0.454)
Untreated process wastewater from the production of toxaphene		
K099		1 (0.454)
Untreated wastewater from the production of 2,4-D		
K100		1 (0.454)
Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.		
K101		1 (0.454)
Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.		

LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES—Continued

Hazardous Substance	Synonyms	Reportable Quantity(RQ) Pounds(Kilograms)
K102		1 (0.454)
Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.		
K103		100 (45.4)
Process residues from aniline extraction from the production of aniline		
K104		1 (0.454)
Combined wastewater streams generated from nitrobenzene/aniline chlorobenzenes.		
K105		1 (0.454)
Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.		
K106		1 (0.454)
Wastewater treatment sludge from the mercury cell process in chlorine production..		
K111		1 (0.454)
Product washwaters from the production of dinitrotoluene via nitration of toluene.		
K112		1 (0.454)
Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene..		
K113		1 (0.454)
Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene..		
K114		1 (0.454)
Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene..		
K115		1 (0.454)
Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene..		

K116 Organic condensate from the solvent recovery column in theproduction of toluene diisocyanate via phosgenation of toluenediamine..		1 (0.454)
K117 Wastewater from the reaction vent gas scrubber in the production of ethylene bromide via bromination of ethene..		1 (0.454)
K118 Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide..		1 (0.454)
K136 Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene..		1 (0.454)

Footnotes:

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

¢¢ - the RQ for asbestos is limited to friable forms only

* - indicates that this material appears by name in the Hazardous Materials Table

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

[Amdt. 172-108, 52 FR 4825, Feb. 17, 1987]

§ 172.102 Purpose and use of Optional Hazardous Materials Table for international shipments.

(a) The Optional Hazardous Materials Table (Optional Table) set forth in this section provides descriptions, classifications, labeling and vessel stowage requirements which may be used for international shipments as authorized by § 171.12 of this subchapter. The Optional Table provides alternatives to corresponding requirements in § 172.101 subject to conditions set forth in this section. The provisions of this section do not apply to materials designated as hazardous materials under this subchapter that are not subject to the requirements of the IMDG Code. This section does not designate materials as hazardous materials and it does not specify packaging requirements, exceptions or limitations. They are made only in § 172.101. A number of materials listed in the Optional Table may not be subject to the requirements of this subchapter, but they are subject to regulation under widely applied international standards. They are listed in this section in the interest of providing consistency with those standards and to alert persons offering or accepting these materials for transportation that the materials may be subject to regulation in international transport.

(1) A shipping description and any associated entry which is listed in the current edition of the IMDG Code but is not listed in the Optional Table may be used as if it was listed in the Optional Table, if approved by the Director, OHMT.

(b) A material described, classed and labeled in accordance with this section must be in conformance with all additional defining or limiting conditions prescribed for the description in the appropriate schedule of the IMDG Code.

(c) When a material is transported by aircraft, motor vehicle, or rail transport vehicle under the description and IMO class or division provided in the Optional Table, the shipping paper required by § 172.202(a) must include the class name from Part 173 of this subchapter which most closely corresponds to the IMO class indicated for the material in the Optional Table. For example, the IMO proper shipping name, class and identification number for Ethylene oxide are "Ethylene oxide, 2.1, UN1040". While Ethylene oxide would be classed as a Flammable liquid under § 172.101, the class in Part 173 of this subchapter that most closely corresponds to the IMO class provided in the Optional Table is "Flammable gas". The proper shipping paper description would be "Ethylene oxide, 2.1, Flammable gas, UN 1040".

(d) When appropriate, the entries "IMO" or "IMO Class" may be entered immediately before or immediately following the class entry in the basic description. For example: "Ethylene oxide, IMO Class 2.1, Flammable gas, UN 1040."

(e) When an appropriate shipping name from the Optional Table is used to describe a hazardous material which is also a hazardous substance, the additional description requirements for hazardous substances in §§ 172.203(c) and 172.324 are applicable.

(f) Column 1 contains the letter "N" immediately adjacent to certain entries. The letter "N" means that the entry is not an acceptable alternative and the material must be transported under the appropriate entry in § 172.101.

(g) Column 2 lists the optional proper shipping names for hazardous materials. Proper shipping names are limited to those shown in Roman type (not italics). In the selection of a proper shipping name to describe a particular material, if the correct technical name is not shown, or is not appropriate, selection must be made from the general description or "n.o.s." entries corresponding to the specific hazard class of the material being shipped. The name that most appropriately describes the material must be used; e.g., an alcohol not listed by name in the Optional Table must be shipped as an "Alcohol n.o.s." rather than "Flammable liquid n.o.s." unless the technical name of the alcohol is listed, e.g., Methanol. Some mixtures may be more appropriately de-

scribed by their application, such as "Paint" or "Cleaning compound".

(1) Shipping names may be entered in either upper or lower case letters.

(2) The words in italics are not part of the proper shipping name but may be used in addition to the proper shipping name. The word "or" in italics indicates that any terms in the sequence may be used as the proper shipping name, as appropriate.

(3) When one entry references another entry by use of a "*see*" and both names are in Roman type, either name may be used as a proper shipping name (e.g., Methyl alcohol. *See* Methanol).

(4) If not included in the proper shipping name in the Optional Table, the proper shipping name for a hazardous material that is a hazardous waste must include the word "Waste" preceding the name of the material. For example: Waste turpentine.

(h) Column 3 contains the hazard class or division designated for the material in the IMDG Code. In the case of explosives, a letter designating the "compatibility group" of the substance or article is also included immediately following the division. Detailed definitions of the classes, divisions, and compatibility groups are provided in the IMDG Code. Basic definitions of the IMO classes and divisions (with corresponding DOT classes shown in italics) are follows:

(1) Class 1—Explosives.

(i) Division 1.1—Substances and articles which have a mass explosion hazard. (*Explosive A*)

(ii) Division 1.2—Substances and articles which have a projection hazard but not a mass explosion hazard. (*Explosive A* or *B*)

(iii) Division 1.3—Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. (*Explosive B*)

(iv) Division 1.4—Substances and articles which present no significant hazard. (*Explosive C*)

(v) Division 1.5—Very insensitive substances. (*Blasting Agent*)

(2) Class 2—Gases (compressed, liquefied or dissolved under pressure).

(i) Division 2.1—Flammable gases. (*Flammable gas*)

(ii) Division 2.2—Nonflammable gases. (*Nonflammable gas*)

(iii) Division 2.3—Poison gases. (*Poison A*)

(3) Class 3—Flammable liquids.

(i) Division 3.1-Low flash point group (liquids with flash points below 0° F.). *Flammable liquid*

(ii) Division 3.2—Intermediate flash point group (liquids with flash points of 0° F. or above but less than 73° F.). *Flammable liquid*

(iii) Division 3.3—High flash point group (liquids with flash points of 73° F. or above up to and including 141° F.). *Flammable liquid or Combustible liquid*

(4) Class 4—Flammable solids or substances.

(i) Division 4.1—Flammable solids. *Flammable solid*

(ii) Division 4.2—Substances liable to spontaneous combustion. *Flammable solid* or, for pyroforic liquids, *Flammable liquid*

(iii) Division 4.3—Substances emitting flammable gases when wet. *Flammable solid*

(5) Class 5—Oxidizing substances.

(i) Division 5.1—Oxidizing substances or agents. *Oxidizer*

(ii) Division 5.2—Organic peroxides. *Organic peroxide*

(6) Class 6— Poisonous and infectious substances.

(i) Division 6.1—Poisonous substances. *Poison B*

(ii) Division 6.2—Infectious substances. *Etiologic agent*

(7) Class 7—Radioactive substances. *Radioactive material*

(8) Class 8—Corrosives. *Corrosive material*

(9) Class 9—Miscellaneous dangerous substances. *Other regulated material*

(i) Column 4 contains the United Nations number listed for the substance or article in the IMDG Code. A number of substances or articles have no UN number provided for them in the IMDG Code. For some of these entries, the UN number of the article or substance which most appropriately corresponds to that particular entry is shown in parentheses.

(j) Column 5 specifies the labels to be applied to each package. Specifications for labels for domestic and export shipments shall be either as

provided in this subchapter or as provided in the IMDG Code, except that color shall be as prescribed in § 172.407(d). The label referred to as the "St. Andrews Cross" label is the "Harmful-Stow Away From Foodstuffs" label provided by IMO for materials of Class 6.1 Packaging Group III.

(k) Column 6 provides the packaging group specified for the material in the IMDG Code.

(l) Column 7 specifies each of the authorized stowage locations on board cargo vessels and passenger vessels and certain additional requirements for shipments of listed hazardous materials. Section 176.63 of this subchapter sets forth the physical requirements for each of the authorized stowage locations listed in Column 7. The authorized stowage locations are defined as follows:

(1) "1" means the material must be stowed "on deck."

(2) "2" means the material must be stowed "under deck."

(3) "3" means the material must be stowed "under deck away from heat."

(4) "1,2" means the material may be stowed either "on deck" or "under deck"; however, "under deck" stowage should be used if available.

(5) "1,3" means the material may be stowed either "on deck" or "under deck away from heat"; however, "under deck away from heat" stowage should be used if it is available.

(6) "5" means the material is forbidden and may not be offered or accepted for transportation by vessel.

(7) "6" means the material is authorized to be transported in a magazine subject to the requirements of §§ 176.135 through 176.144 of this subchapter.

§ 172.102 Optional Hazardous Materials Table

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) 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 2332	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 1541	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 carbinol	3.3	UN 2621	Flammable Liquid	III	1,2	1,2	
	Acetyl peroxide, *maximum concentration 27% 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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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
		3.2	UN 1133	Flammable Liquid	II	1,2	1	
		3.3	UN 1133	Flammable Liquid	II	1,2	1,2	
	Adiponitrile	6.1	UN 2205	St. Andrews Cross	III	1,2	1,2	Shade from radiant heat
	Aerosol dispensers, *with a capacity below 1400 cubic cm.:*							
	(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	
		3.2	UN 1950	Flammable Liquid	–	1,3	1,3	
		3.3	UN 1950	Flammable Liquid	–	1,3	1,3	
	(4) more than 10% by weight of toxic substances in the liquid concentrate	6.1	UN 1950	Poison	I/II	1,3	1,3	
		6.1		St. Andrews Cross	III	1,3	1,3	
	(5) more than 5% by weight of corrosive substances in the liquid concentrate	8	UN 1950	Corrosive	–	1,3	1,3	
	(6) as specified under Group 2 on page 9011 of IMCO Code	9	UN 1950	None	–			
N	Aerosol dispensers, *with a capacity of 1400 cubic cm. or more*	2	UN 1950		–			
	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 overstow
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	
	Alcohols, toxic, n.o.s.	3.1	UN 1986	Flammable Liquid, Poison	I/II	1,3	5	Keep cool
		3.2	UN 1986	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1986	Flammable Liquid, Poison	II	1,2	1,2	
	Aldehydes, n.o.s.	3.1	UN 1989	Flammable Liquid	I/II	1,3	5	Keep cool
		3.2	UN 1989	Flammable Liquid	II	1,2	1	
		3.3	UN 1989	Flammable Liquid	II	1,2	1,2	
	Aldehydes, toxic, n.o.s.	3.1	UN 1988	Flammable Liquid, Poison	I/II	1,3	5	Keep cool
		3.2	UN 1988	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1988	Flammable Liquid, Poison	II	1,2	1,2	
	Aldol	6.1	UN 2839	Poison	II	1,3	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	UN 1544	Poison	I/II	1,2	1,2	
		6.1	UN 1544	St. Andrews Cross	III	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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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.							
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 0.957 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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 metalic 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 metalic powders
	(2) Uniform non-segrating 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 metalic 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 metalic 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 metalic 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	
	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 add 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 metalic 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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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-fuzed*	6.1	UN 2017	Poison, Corrosive	II	1,2	5	Keep dry. Stow 'away from' living quarters. Segregation same as for corrosives
N	Ammunition, tear producing, *with burster, expelling charge or propelling charge*	1.2G	UN 0018	Explosive (1.2G), Poison, Corrosive	–	–	–	
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	
	Ammunition, *toxic, non-explosive, with neither burster nor expelling charge, non-fuzed*	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 3.3	UN 1104 UN 1104	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Amyl acid phosphate	8	UN 2819	Corrosive	III	1,2	1,2	
	Amyl alcohols	3.2 3.3	UN 1105 UN 1105	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Amylamine	3.2	UN 1106	Flammable Liquid	II	1,2	1	
	Amyl butyrates	3.3	UN 2620	Flammable Liquid	III	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	
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	Keep cool
tert-Amyl peroxy-2-ethylhexanoate, *technical pure*	5.2	UN 2898	Organic Peroxide	II	1	5	Control temperature 20 deg C. Emergency temperature 25 deg C
tert-Amyl peroxyneodecanoate *with at least 25% phlegmatizer*	5.2	UN 2891	Organic Peroxide	II	1	5	Control temperature 0 deg C. Emergency temperature 10 deg C
tert-Amyl peroxypivalate *maximum concentration 77% in solution*	5.2	UN 2957	Organic Peroxide	II	1	5	Control temperature 10 deg C. Emergency temperature 15 deg C
Amyl trichlorosilane	8	UN 1728	Corrosive	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
Aniline	6.1	UN 1547	Poison	II	1,2	1,2	Stow 'away from' acids and oxidizers
Aniline hydrochloride	6.1	UN 1548	St. Andrews Cross	III	1,2	1,2	Stow 'away from' alkalis
Aniline oil. *See* Aniline							
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 passenger 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 passenger 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							

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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	
	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'-hexahydrobenzonitrile)	4.1	UN 2954	Flammable Solid	II	1,2	1	Shade from radiant heat
	Azodiisobutyronitrile	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 6.1	UN 1564 UN 1564	Poison St. Andrews Cross	I/II III	1,2 1,2	1,2 1,2	
	Barium cyanide	6.1	UN 1565	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 1884	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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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	1,3	5	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	
	Benzotrichloride	8	UN 2226	Corrosive	II	1,2	1,2	Stow 'away from' living quarters
	Benzotrifluoride	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	
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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Bisulphites, inorganic, aqueous solution, n.o.s.	8	UN 2693	Corrosive	III	1,2	1,2	Stow 'away from' all 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*							
	Borneol	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	
	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	Bursters, *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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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*	5.2	UN 2094	Organic Peroxide	I	1	5	

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 solution*	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 nitrite	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 50% inert inorganic solid*	5.2	UN 2890	Organic Peroxide	II	1	5	
tert-Butyl peroxycrotonate, *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 -15 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 dec C. Emergency temperature 10 deg C
tert-Butyl peroxydiethylacetate, *(in a maximum concentration of 33%)*, with tert-butyl peroxybenzoate, *(in a maximum concentration 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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 solution*	5.2	UN 2562	Organic Peroxide	II	1	5	Emergency temperature 15 deg C. Emergency 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 solution*	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 peroxypivalate, *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 flammable liquids
	Butyl trichlorosilane	8	UN 1747	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
	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	
	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
	6.1	UN 2570	St. Andrews Cross	III	1,2	1,2	Stow 'away from' living quarters
Caesium hydroxide, solid	8	UN 2682	Corrosive	II	1,2	1,2	Keep dry
Caesium hydroxide, solution	8	UN 2681	Corrosive	II	1,2	1,2	
Caesium, *metal*	4.3	UN 1407	Dangerous When Wet	I	1,2	5	
Caesium nitrate	5.1	UN 1451	Oxidizer	III	1,2	1,2	
Caesium, *powdered. See* Pyrophoric metals							
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 0.5% 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 hypochlorate, hydrated *or* Calcium hypochlorite, hydrated mixtures *with not less than 5.5% 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 silicon	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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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
	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. *See* 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 S). 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. See Paper, *treated with unsaturated oils, incompletely dried*							
	Carbon remover, *liquid*	3.2	UN 1132	Flammable Liquid	II	1,2	1	
	Carbon sulphide. *See* 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. See 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. See 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	1.4 C	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	1.4 S	UN 0014	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Cartridges for weapons, *other than blank*	1.4 S	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	1.4 C	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	1.4 C	UN 0278	Explosive (1.4C)	--	1,3	1,3	
N	Cartridges, oil well	1.3C	UN 0277	Explosive (1.3C)	--	--	--	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Cartridges, power device	1.4 C	UN 0276	Explosive (1.4C)	--	1,3	1,3	
	Cartridges, power device	1.4 S	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. *See* Cartidges for weapons, *other than blank (UN 0012) or* Cartridges for weapons, blank *(UN 0014)*							
	Cartridges, signal	1.4 G	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	1.4 S	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. *See* Potassium hydroxide, *solution*							
	Caustic potash, solid. *See* 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. See* 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
	Cerium, crude, *slabs or ingots*	4.1	UN 1333	Flammable Solid	III	1,2	1,2	Stow 'separated from' flammable substances and oxidizers
	Charcoal, activated. *See* Carbon, activated							
	Charcoal, non-activated, of animal or vegetable origin. See Carbon, *of animal or vegetable origin*							
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 cannon	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)	--	--	--	
	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 1695	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. *See* Di-(4-chlorobenzoyl) peroxide				--	--	--	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 2745	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	
	Chloropentafluoroethane	2.2	UN 1020	Nonflammable Gas	--	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	Keep dry
	Chloropicrin	6.1	UN 1580	Poison	I	1	5	Stow 'away from' living quarters
	Chloropicrin and methyl bromide, *mixtures*	2.3	UN 1581	Poison Gas	--	1	5	Shade from radiant heat. 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	Stow 'away from' living quarters
	6.1	UN 1583	St. Andrews Cross	III	1	1	
Chloroplatinic acid, solid	8	UN 2507	Corrosive	III	1,2	1,2	
Chloroprene, inhibited	3.2	UN 1991	Flammable Liquid, Poison	I	1,2	1	
2-Chloropropane	3.1	UN 2356	Flammable Liquid	I	1,3	5	Keep cool
3-Chloropropanol-1	6.1	UN 2849	St. Andrews Cross	III	1,2	1,2	
2-Chloropropene	3.1	UN 2456	Flammable Liquid	I	1,3	5	Keep cool
Chloropropionic acid	8	UN 2511	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
2-Chloropyridine	6.1	UN 2822	Poison	II	1,2	1,2	Stow 'away from' living quarters
Chlorosulphonic acid, *with or without sulphur trioxide*	8	UN 1754	Corrosive	I	1	1	Glass carboys prohibited on passenger vessels
Chlorotetrafluoroethane	2.2	UN 1021	Nonflammable Gas	--	1,2	1,2	
Chlorotoluenes *(o-, m-, p-)*	3.3	UN 2238	Flammable Liquid	III	1,2	1,2	
4-Chloro-o-toluidine hydrochloride	6.1	UN 1579	St. Andrews Cross	III	1,2	1,2	
Chlorotoluidines	6.1	UN 2239	St. Andrews Cross	III	1,2	1,2	
Chlorotrifluoroethane	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 trifluormethane 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	Keep dry. Glass carboys prohibited on passenger vessels
Chromium trioxide, anhydrous	5.1	UN 1463	Oxidizer, Corrosive	II	1,2	1,2	Stow 'separated from' flammable substances and 'away from' foodstuffs
Chromosulphuric acid	8	UN 2240	Corrosive	I	1,2	1	Carboys not permitted on passenger vessels and permitted only on deck on cargo vessels
Chrysotile. See Asbestos, white							
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	
	3.3	UN 1136	Flammable Liquid	III	1,2	1,2	
Coal tar naphtha	3.2	UN 2553	Flammable Liquid	II	1,2	1	
Coal tar oil. *See* Coal tar distillate							

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Coating solution	3.2 3.3	UN 1139 UN 1139	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Cobalt naphthenates, *powder*	4.1	UN 2001	Flammable Solid	III	1,2	1,2	
	Cobalt resinate, *precipitated*	4.1	UN 1318	Flammable Solid	III	1,2	1,2	
	Cocculus, *solid*	6.1	UN 1584	Poison	II	1,2	1,2	
	Cologne spirits. *See* Ethanol							
	Columbian spirits. *See* Methanol							
	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	
N	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
N	Contrivances, water-activated, *with burster, expelling charge or propelling charge*	1.2L	UN 0248	Explosive (1.2L), Dangerous When Wet	--	--	--	
N	Contrivances, water-activated, *with burster, expelling charge or propelling charge*	1.3L	UN 0249	Explosive (1.3L), Dangerous When Wet	--	--	--	
	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	Segregatimn 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)	–	–	–	
	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	
	Crotonic acid	8	UN 2823	Corrosive	III	1,3	1,3	Keep cool
	Crotonylene	3.1	UN 1144	Flammable Liquid	I	1,3	5	Keep cool
	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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Cumyl peroxypivalate, *maximum concentration 77% in solution*	5.2	UN 2964	Organic Peroxide	II	1	5	Control temperature −5 deg C. Emergency temperature 5 deg C
	Cupric cyanide. See Copper cyanide							
	Cuprietylenediamine, solution	8	UN 1761	Corrosive, Poison	II	1,2	1,2	
	Cut-backs, *asphalt or bitumen*	3.2 3.3	UN 1999 UN 1999	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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 6.1	UN 1588 UN 1588	Poison St. Andrews Cross	I/II III	1,2 1,2	1,2 1,2	Stow 'away from' acids. Stow 'away from' acids
	Cyanide, solutions	6.1	UN 1935	Poison	I	1,2	1,2	Stow 'away from' living quarters and acids
	Cyanogen	2.3	UN 1026	Poison Gas, Flammable Gas	–	1	5	Stow 'away from' foodstuffs and living quarters
	Cyanogen bromide	6.1	UN 1889	Poison, Corrosive	I	1	5	Shade from radiant heat. Segregation same as for corrosives
	Cyanogen chloride, *inhibited*	2.3	UN 1589	Poison Gas	–	1	5	
	Cyanuric chloride	8	UN 2670	Corrosive	III	1,3	1,3	Keep dry and cool
	Cyclobutane	2.1	UN 2601	Flammable Gas	–	1,2	1	
	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 containing not more than 9% available oxygen, in solution*	5.2	UN 2118	Organic Peroxide	I	1	5	
	Cyclohexanone peroxides, *maximum concentration 72% and containing 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 3.3	UN 2357 UN 2357	Flammable Liquid, Corrosive Flammable Liquid, Corrosive	II II	1,2 1,2	1 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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
N	Detonators for ammunition	1.1B	UN 0073	Explosive (1.1B)	--	--	--	
N	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 maximum 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. Segregation 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)	--	--	--	
	Dibenzyldichlorosilane	8	UN 2434	Corrosive	II	1	1	Keep dry
	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
Dibutyl 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 2895	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	1,3	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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 2249	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
	Dichloromonofluoromethane	2.2	UN 1029	Nonflammable Gas	–	1,2	1,2	
	1,1-Dichloro-1-nitroethane	6.1	UN 2650	Poison	II	1,3	1,3	Keep cool. Stow 'away from' living quarters
	Dichloropentanes	3.3	UN 1152	Flammable Liquid	II	1,2	1,2	
	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	
	Dicumyl peroxide, *technical pure or with inert solid*	5.2	UN 2121	Organic Peroxide	II	1	5	
	Dicyclohexylamine	8	UN 2565	Corrosive	III	1	5	Keep dry
	Dicyclohexylammonium nitrite	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	
	Diethylaluminium 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-Diethylethylene 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% nonvolatile 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 S)
	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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 S)
	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
	Difluoromonochloroethane. *See* Chlorodifluoroethanes							
	Difluorophosphoric acid, *anhydrous*	8	UN 1768	Corrosive	II	1,2	1,2	
	2,2-Dihydroperoxy propane, *maximum concentration 25% with inert inorganic solid*	5.2	UN 2178	Organic Peroxide	II	1	5	
	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	III	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 3.2	UN 2377 UN 2377	Flammable Liquid Flammable Liquid	II II	1,3 1,2	5 1	Keep cool
1,2-Dimethoxyethane	3.2	UN 2252	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	
Dimethylcyclohexanes	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 2051	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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 S)
	Dimethyl-p-nitrosoaniline. *See* p-Nitrosodimethylaniline							
	2,2-Dimethylpropane *other than pentane and isopentane*	2.1	UN 2044	Flammable Gas	–	1,2	1	
	Dimethyl-N-propylamine	3.2	UN 2266	Flammable Liquid, Corrosive	II	1,2	1	
	Dimethyl sulphate	6.1	UN 1595	Poison	I	1	5	Stow 'away from' living quarters
	Dimethyl sulphide	3.1	UN 1164	Flammable Liquid	I	1,3	5	Keep cool
	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 S)
	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	Dinitroresorcinol, *dry or wetted withless than 15% water*	1.1D	UN 0078	Explosive (1.1D)	--	--	--	
	Dinitroresorcinol, 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-nonanoyl 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 13% 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
	Diphenylaminechloroarsine	6.1	UN 1698	Poison	I	1	5	
	Diphenylchloroarsine	6.1	UN 1699	Poison	I	1	5	Stow 'away from' living quarters
	Diphenyl dichlorosilane	8	UN 1769	Corrosive	II	1	1	Keep dry
	Diphenylmethane-4,4'diisocyanate	6.1	UN 2489	St. Andrews Cross	III	1,2	1,2	Stow 'away from' sources of heat
	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 2852	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 6.1 6.1	UN 1601 UN 1601 UN 1601	Poison Poison St. Andrews Cross	I II III	1,2 1,2 1,2	1 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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Dithiocarbamate pesticides, liquid, flammable, toxic, n.o.s., *flashpoint 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., *flashpoint 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	
		6.1	UN 3006	St. Andrews Cross	III	1,2	1,2	
	Dithiocarbamate pesticides, solid, toxic, n.o.s.	6.1	UN 2771	Poison	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	1,3	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	
	Driers, *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-ethyloxy 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 3.3	UN 1170 UN 1170	Flammable Liquid Flammable Liquid	II III	1,2 1,2	1 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 aluminium dichloride	4.2	UN 1924	Spontaneously Combustible	I	1	1	
Ethyl aluminium 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 3.2 3.3	UN 2270 UN 2270 UN 2270	Flammable Liquid Flammable Liquid Flammable Liquid	II II III	1,3 1,2 1,2	5 1,2 1,2	Keep cool
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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 chlorothioformate	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
	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
	Ethyldichlorosilane	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	8	UN 1604	Corrosive, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids
	Ethylene dibromide	6.1	UN 1605	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Ethylene dichloride	3.2	UN 1184	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 liquids

	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	
	Ethylenimine, *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	
	Ethyl formate	3.1	UN 1190	Flammable Liquid	II	1,3	5	Keep cool
	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%, containing not more than 10% available oxygen*	5.2	UN 2550	Organic Peroxide	I	1	5	
N	Ethyl methyl ketone peroxide(s), *maximum concentration 50%, containing 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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	N-Ethyltoluidines *(o,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)	--	--	--	
	Explosives, blasting, Type B	1.5 D	UN 0331	Explosive (1.5D)	--	6	5	
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)	--	--	--	
	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 3.3	UN 1169 UN 1169	Flammable Liquid Flammable Liquid	II/III III	1,2 1,2	1 1,2	
	Extracts, flavouring, liquid	3.2 3.3	UN 1197 UN 1197	Flammable Liquid Flammable Liquid	II/III III	1,2 1,2	1 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	
	Ferrocerium	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 5% 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)	--	--	--	
	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* fishscrap, *antioxidant treated, moisture content greater than 5% 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* fishscrap, *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 fishscrap*	4.2	UN 1374	Spontaneously Combustible	II	1,2	1,2	
	Fishmeal *or* fishscrap, *not antioxidant treated, moisture content greater than 5% 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 3.3	UN 1142 UN 1142	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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
		3.2	UN 2924	Flammable Liquid, Corrosive	I/II	1,2	1	
	Flammable liquids, n.o.s.	3.1 3.2 3.3	UN 1993 UN 1993 UN 1993	Flammable Liquid Flammable Liquid Flammable Liquid	I/II II II	1,3 1,2 1,2	5 1 1,2	Keep cool
	Flammable liquids, poisonous, n.o.s.	3.1 3.2 3.3	UN 1992 UN 1992 UN 1992	Flammable Liquid, Poison Flammable Liquid, Poison Flammable Liquid, Poison	I/II II II	1,3 1,2 1,2	5 1 1,2	Keep cool

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 4.1	UN 1325 UN 1325	Flammable Solid Flammable Solid	I II/III	1,2 1,2	5 1	
	Flammable solids, poisonous, n.o.s.	4.1 4.1	UN 2926 UN 2926	Flammable Solid Flammable Solid	I II	1,2 1,2	5 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)	--	--	--	
	Flares, aerial	1.4G	UN 0403	Explosive (1.4G)	--	1,3	1,3	
	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 Fibres, *vegetable, dry*							
	Fluoboric acid	8	UN 1775	Corrosive	II	1,2	1,2	
	Fluoric acid. *See* Hydrofluoric acid, solution							
	Fluorine, *compressed*	2.3	UN 1045	Poison Gas, Oxidizer	--	1	5	Stow 'away from' foodstuffs, organic materials, 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 3.3	UN 2388 UN 2388	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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* Formaldehyde							
	Formic acid	8	UN 1779	Corrosive	II	1,2	1,2	Glass carboy in hampers prohibited under deck
N	Fracturing devices, explosive, *for oil wells*	1.1D	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, Compatibility Group S)
	Fumaryl chloride	8	UN 1780	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger 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 0367	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)	–	–	–	
	Fuzes, igniting	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 acids
	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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
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-compounds and chlorates
N	Guanyl nitrosamino guanylidene hydrazine, *containing, by weight, at least 30% water*	1.1A	UN 0113	Explosive (1.1A)	–	–	–	
N	Guanyl nitrosamino guanyl tetrazene, *containing, by weight, at least 30% water or mixture of alcohol and water*	1.1A	UN 0114	Explosive (1.1A)	–	–	–	
	Gutta percha solution	3.2	UN 1205	Flammable Liquid	II	1,2	1	
		3.3	UN 1205	Flammable Liquid	II	1,2	1,2	
	Hafnium *metal* powder, dry	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 flashpoint 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 flashpoint 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-Heptene	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	
	Hexamethylenediisocyanate	6.1	UN 2281	Poison	II	1,2	1	Keep dry
	Hexamethyleneimine	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	Hexatonal, 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 perchloric 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 vessels. Stow 'away from' fluorides
	Hydrocarbon gases, compressed, n.o.s. *or* Hydrocarbon gases, mixtures, compressed, n.o.s.	2.1	UN 1964	Flammable Gas	--	1,2	1	

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 vessels. Stow 'away from' fluorides
	Hydrocyanic acid, anhydrous, stabilized. See Hydrogen cyanide, anhydrous, stabilized							
	Hydrocyanic acid, aqueous solutions, *with not more than 20% hydrocyanic acid*	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	
	Hydrosilicofluoric 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	
N	Igniters	1.1G	UN 0121	Explosive (1.1G)	–	–	–	
N	Igniters	1.2G	UN 0314	Explosive (1.2G)	–	–	–	
N	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 3.3	UN 1210 UN 1210	Flammable Liquid Flammable Liquid	II III	1,2 1,2	1 1,2	
	Insecticide gases, *non-toxic*, n.o.s.	2.1 2.2	UN 1968 UN 1968	Flammable Gas Nonflammable Gas	– –	1,2 1,3	1 1,3	
	Insecticide gases, *toxic*, n.o.s.	2.3	UN 1967	Poison Gas	–	1	5	Shade from radiant heat
	Iodine monochloride	8	UN 1792	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 3.3	UN 2392 UN 2392	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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	
	Isobutyl acetate	3.2	UN 1213	Flammable Liquid	II	1,2	1	
	Isobutyl acrylate, *inhibited*	3.3	UN 2527	Flammable Liquid	II	1,2	1,2	
	Isobutyl alcohol. *See* Isobutanol							
	Isobutyl aldehyde. *See* 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, *inhibited*	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	
	Isobutyraldehyde	3.1	UN 2045	Flammable Liquid	II	1,3	5	Keep cool
	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	
	Isobutyronitrile	3.2	UN 2284	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Isobutyryl chloride	3.2	UN 2395	Flammable Liquid, Poison	II	1	1	Keep dry. Shade from radiant heat
	Isobutyryl peroxide, *maximum concentration 52% 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	
	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	Stow 'away from' sources of heat. Keep cool.
	Isocyanatobenzotrifluorides	6.1	UN 2285	Poison	II	1,2	1	Shade from radiant heat. Stow 'away from' living quarters
	Isoheptene	3.1	UN 2287	Flammable Liquid	II	1,3	5	Keep cool
	Isohexene	3.1	UN 2288	Flammable Liquid	II	1,3	5	Keep cool
	Isononanoyl peroxide. *See* Di-(3,3,5-trimethylhexanoyl) peroxide				--	--	--	
	Isooctene	3.2	UN 1216	Flammable Liquid	II	1,2	1	
	Isopentane. *See* Pentanes							
	Isopentenes	3.1	UN 2371	Flammable Liquid	I	1,3	5	Keep cool
	Isophoronediamine	8	UN 2289	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Isophorone diisocyanate	6.1	UN 2290	Poison	II	1,2	1	Stow 'away from' living quarters
	Isoprene, inhibited	3.1	UN 1218	Flammable Liquid	I	1,3	5	Keep cool
	Isopropanol	3.2	UN 1219	Flammable Liquid	II	1,2	1	
	Isopropenyl acetate	3.2	UN 2403	Flammable Liquid	II	1,2	1	
	Isopropenylbenzene	3.3	UN 2303	Flammable Liquid	II	1,2	1,2	
	Isopropyl acetate	3.2	UN 1220	Flammable Liquid	II	1,2	1	
	Isopropyl acid phosphatic	8	UN 1793	Corrosive	III	1,2	1,2	Glass carboys in hampers prohibited under deck
	Isopropyl alcohol. *See* Isopropanol							
	Isopropylamine	3.1	UN 1221	Flammable Liquid	I	1,3	5	Keep cool
	Isopropylbenzene	3.3	UN 1918	Flammable Liquid	II	1,2	1,2	
	Isopropyl butyrate	3.3	UN 2405	Flammable Liquid	II	1,2	1,2	
	Isopropyl chloroacetate	3.3	UN 2947	Flammable Liquid	III	1,2	1,2	
	Isopropyl chloroformate	3.2	UN 2407	Flammable Liquid, Corrosive	II	1,2	1	
	Isopropyl-2-chloropropionate	3.3	UN 2934	Flammable Liquid	III	1,2	1,2	
	Isopropyl isobutyrate	3.2	UN 2406	Flammable Liquid	II	1,2	1	
	Isopropyl isocyanate	3.2	UN 2483	Flammable Liquid, Poison	I	1	5	Keep cool
	Isopropyl nitrate	3.2	UN 1222	Flammable Liquid	II	1,2	1	
	Isopropyl propionate	3.2	UN 2409	Flammable Liquid	II	1,2	1	
	Isosorbide dinitrate mixture *with not less than 60% lactose, mannose, starch, or calcium hydrogen phosphate*	4.1	UN 2907	Flammable Solid	II	1,2	5	
N	Jet perforating guns, charged, *oil well, without detonator*	1.1D	UN 0124	Explosive (1.1D)	--	--	--	
	Jute, dry. See Fibres, *vegetable, dry*							
	Kapok, dry. See Fibres, *vegetable, dry*							
	Kerosene	3.3	UN 1223	Flammable Liquid	II	1,2	1,2	
	Ketones, liquid, n.o.s.	3.1	UN 1224	Flammable Liquid	I/II	1,3	5	Keep cool
		3.2	UN 1224	Flammable Liquid	II	1,2	1	
		3.3	UN 1224	Flammable Liquid	II	1,2	1,2	
	Krypton, *compressed*	2.2	UN 1056	Nonflammable Gas	–	1,2	1,2	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Krypton, refrigerated liquid	2.2	UN 1970	Nonflammable Gas	--	1,2	1	
	Lacquer base. *See* Paints, *etc.*							
	Lacquer chips. *See* Nitrocellulose, *wetted with, by weight, more than 40% flammable liquids.*							
	Lacquers. *See* Paints, *etc.*							
	Lauroyl peroxide. *See* Dilauroyl 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	
N	Lead azide, *containing, by weight, at least 20% water or mixture of alcohol and water*	1.1A	UN 0129	Explosive (1.1A)	--	--	--	
	Lead compounds, soluble, n.o.s.	6.1	UN 2291	St. Andrews Cross	III	1,2	1,2	
	Lead cyanide	6.1	UN 1620	Poison	II	1,2	1,2	Stow 'away from' acids
	Lead dioxide	5.1	UN 1872	Oxidizer	III	1,2	1,2	Stow 'away from' foodstuffs
	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 styphnate, *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, *ethereal*	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 50% 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—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger 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* maneb preparation(s) *with not less than 60% maneb*	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 3.2 3.3	UN 1228 UN 1228 UN 1228	Flammable Liquid Flammable Liquid Flammable Liquid	II II II	1,3 1,2 1,2	5 1 1,2	Keep cool
	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	
	Mercurol. *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—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Metal alkyls, n.o.s.	4.2	UN 2003	Spontaneously Combustible	I	1	5	
	Metaldehyde	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 passenger 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 2294	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 indicating 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 diisocyanate							
Methyl ethyl ether. *See* Ethyl methyl ether							
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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Methyl fluoride	2.1	UN 2454	Flammable Gas	--	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							
	Methyl orthosilicate	3.2	UN 2606	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Methylpentadiene	3.1	UN 2461	Flammable Liquid	II	1,3	5	Keep cool
	Methylpentanes	3.1	UN 2462	Flammable Liquid	II	1,3	5	Keep cool
	2-Methylpentan-2-ol	3.3	UN 2560	Flammable Liquid	II	1,2	1,2	
	Methylphenyldichlorosilane	3.3	UN 2437	Flammable Liquid, Corrosive	II	1	1	
	1-Methylpiperidine	3.2	UN 2399	Flammable Liquid	II	1,2	1	
	Methyl propionate	3.2	UN 1248	Flammable Liquid	II	1,2	1	
	Methyl propyl ether	3.1	UN 2612	Flammable Liquid	II	1,3	5	Keep cool

	Methyl propyl ketone	3.2	UN 1249	Flammable Liquid	II	1,2	1	
	Methyl sulphide. *See* Dimethyl sulfide							
	Methyltetrahydrofuran	3.2	UN 2536	Flammable Liquid	II	1,2	1	
	Methyl trichloroacetate	6.1	UN 2533	St. Andrews Cross	III	1,2	1,2	
	Methyltrichlorosilane	3.2	UN 1250	Flammable Liquid, Corrosive	II	1,2	1	
	alpha-Methyl valeraldehyde	3.3	UN 2367	Flammable Liquid	III	1,2	1,2	
	Methyl vinyl ketone	3.2	UN 1251	Flammable Liquid	II	1,2	1	
N	Mines, *with bursting charge*	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 passenger 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 solution							
	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							
	Naphthalene, crude *or* refined	4.1	UN 1334	Flammable Solid	III	1,2	1,2	
	Naphtha, petroleum	3.2	UN 1255	Flammable Liquid	II	1,2	1	
	Naphtha, solvent	3.2	UN 1256	Flammable Liquid	II	1,2	1	
	Naphthylamine *(alpha)*	6.1	UN 2077	St. Andrews Cross	III	1,2	1,2	
	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	
	Napthalene, molten	4.1	UN 2304	Flammable Solid	III	1	1	
	Natural gases *with a high methane content. See* Methane *or* natural gases, *etc.*							

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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							
N	5-Nitrobenzotriazol	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 3.3	UN 2059 UN 2060	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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 3.3	(UN 2556) (UN 2556)	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
N	Nitrocellulose, wetted *with not less than 25% alcohol, by weight*	1.3C	UN 0342	Explosive (1.3C)	–	–	–	
	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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Nitrogen, *compressed*	2.2	UN 1066	Nonflammable Gas	–	1,2	1,2	
	Nitrogen dioxide, *liquefied*	2.3	UN 1067	Poison Gas, Oxidizer	–	1	5	Stow 'away from' foodstuffs, organic materials and living quarters
	Nitrogen, refrigerated liquid	2.2	UN 1977	Nonflammable Gas	–	1,3	1,3	
	Nitrogen tetroxide. *See* Nitrogen dioxide							
	Nitrogen trifluoride	2.3	UN 2451	Poison Gas	–	1	5	Stow 'away from' living quarters and organic materials
	Nitrogen trioxide	2.3	UN 2421	Poison Gas	–	1	5	Stow 'away from' living quarters and readily combustible substances
N	Nitroglycerine, desensitized, *with not less than 40% non-volatile water-insoluble phlegmatizer, by weight*	1.1D	UN 0143	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% nitroglycerin*	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	
	Nitrohydrochloric acid	8	UN 1798	Corrosive	I	1	5	Stow 'away from' fluorides
	Nitromethane	3.3	UN 1261	Flammable Liquid	II	1,2	1,2	
	Nitromuriatic acid. *See* Nitrohydrochloric acid							
	Nitronapthalene	4.1	UN 2538	Flammable Solid	III	1,2	1,2	
	Nitrophenols *(o-, m-, p-)*	6.1	UN 1663	St. Andrews Cross	III	1,2	1,2	
	Nitropropanes	3.3	UN 2608	Flammable Liquid	III	1,2	1,2	
	p-Nitrosodimethylaniline	4.2	UN 1369	Spontaneously Combustible	II	1,2	5	Stow 'away from' foodstuffs
N	Nitrostarch, *dry or containing, by weight, less than 20% water*	1.1D	UN 0146	Explosive (1.1D)	–	–	–	
	Nitrostarch, wetted *with, by weight, at least 20% water*	4.1	UN 1337	Flammable Solid	I	1	5	
	Nitrosyl chloride	2.3	UN 1069	Poison Gas, Corrosive	–	1	5	Stow 'away from' foodstuffs and living quarters
	Nitrosylsulphuric acid	8	UN 2308	Corrosive	II	1	5	Stow 'away from' organic materials
	Nitrotoluenes *(o-, m-, p-)*	6.1	UN 1664	Poison	II	1,2	1,2	
N	Nitro urea	1.1D	UN 0147	Explosive (1.1D)	–	–	–	
	Nitrous oxide, *compressed*	2.2	UN 1070	Nonflammable Gas, Oxidizer	–	1,2	1,2	

	Nitrous oxide, refrigerated liquid	2.2	UN 2201	Nonflammable Gas	–	1,2	1	
	Nitroxylenes *(o-, m-, p-)*	6.1	UN 1665	Poison	II	1,2	1,2	
	Nonane, *and its isomers*	3.3	UN 1920	Flammable Liquid	II	1,2	1,2	
	Nonyl trichlorosilane	8	UN 1799	Corrosive	II	1	1	Keep dry
	Octadecyl trichlorosilane	8	UN 1800	Corrosive	II	1	1	Keep dry
	Octadiene	3.2	UN 2309	Flammable Liquid	III	1,2	1	
	Octafluorobut-2-ene	2.2	UN 2422	Nonflammable Gas	–	1,2	1,2	
	Octafluorocyclobutane	2.2	UN 1976	Nonflammable Gas	–	1,2	1,2	
	Octafluoropropane	2.2	UN 2424	Nonflammable Gas	–	1,2	1,2	
	Octane *and its isomers*	3.2	UN 1262	Flammable Liquid	II	1,2	1	
	n-Octanoyl peroxide. *See* Di-n-octanoyl peroxide				–	–	–	
N	Octolite, *dry or wetted with less than 15% water, by weight*	1.1D	UN 0266	Explosive (1.1D)	–	–	–	
	Octyl trichlorosilane	8	UN 1801	Corrosive	II	1	1	Keep dry
	Oil gas	2.1	UN 1071	Flammable Gas, Poison Gas	–	1	5	Stow 'away from' living quarters
	Oleum. *See* Sulphuric acid, fuming							
	Organic peroxides, mixture (*this description must be supplemented with the name of the primary constituent of the mixture*)	5.2	UN 2756	Organic Peroxide	I/II	1	5	
	Organic peroxides, n.o.s., samples	5.2	UN 2255	Organic Peroxide	I/II	1	5	
	Organic peroxides, n.o.s., trial quantities	5.2	UN 2899	Organic Peroxide	–	1	5	
	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
		6.1	UN 2995	Poison, Flammable Liquid	II	1,2	1	Segregation same as for flammable liquids
		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	
		6.1	UN 2996	Poison	II	1,2	1	
		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	
		6.1	UN 2761	St. Andrews Cross	III	1,2	1,2	
	Organophosphorus pesticides, liquid, flammable, toxic, n.o.s., *flashpoint 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	
	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

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 overstow

	Paints, enamels, lacquers, stains, shellac *solutions*, varnish, polishes, fillers *liquid*, lacquer base *or* thinners	3.2 3.3	UN 1263 UN 1263	Flammable Liquid Flammable Liquid	II/III II/III	1,2 1,2	1 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 3.3	UN 1266 UN 1266	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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	
	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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
		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	
	Petroleum crude oil	3.1	UN 1267	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1267	Flammable Liquid	II	1,2	1	
		3.3	UN 1267	Flammable Liquid	II	1,2	1,2	
	Petroleum distillates, n.o.s.	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 ether. *See* Petroleum spirit							
	Petroleum gases, liquefied	2.1	UN 1075	Flammable Gas	–	1,2	1	
	Petroleum oil	3.1	UN 1270	Flammable Liquid	II	1,3	5	Keep cool
		3.2	UN 1270	Flammable Liquid	II	1,2	1	
		3.3	UN 1270	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							
	Phenacyl bromide	6.1	UN 2645	Poison	II	1,3	1	Keep cool. Stow 'away from' living quarters
	Phenetidines (*o-*, *p-*)	6.1	UN 2311	St. Andrews Cross	III	1,2	1,2	
	Phenol	6.1	UN 1671	Poison	II	1,2	1,2	
	Phenol, molten	6.1	UN 2312	Poison	II	1	1	
	Phenol solutions	6.1	UN 2821	Poison	II	1,2	1,2	Stow 'away from' living quarters
	Phenolsulphonic acid, *liquid*	8	UN 1803	Corrosive	II	1,2	1	Metal drums only under deck
	Phenoxy pesticides, solid, toxic, n.o.s.	6.1	UN 2765	Poison	I/II	1,2	1,2	
		6.1	UN 2765	St. Andrews Cross	III	1,2	1,2	

Phenoxy pesticides, liquid, flammable, toxic, n.o.s., *flashpoint less than 23 deg C*	3.2	UN 2766	Flammable Liquid and Poison or St. Andrews Cross (according to toxicity)	I/II	1,2	1	
Phenoxy pesticides, liquid, toxic, flammable, n.o.s., *flashpoint between 23 deg C and 61 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
Phenylacetyl chloride	8	UN 2577	Corrosive	II	1	1	Keep dry
Phenylcarbylamine chloride	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
Phenylenediamines *(o-, m-, p-)*	6.1	UN 1673	St. Andrews Cross	III	1,2	1,2	
Phenylhydrazine	6.1	UN 2572	Poison	II	1,2	1,2	Stow 'away from' living quarters
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
Phenyl mercaptan	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	
Phenylmercuric compounds, n.o.s.	6.1	UN 2026	Poison	I/II	1,2	1,2	
	6.1	UN 2026	St. Andrews Cross	III	1,2	1,2	
Phenylmercuric hydroxide	6.1	UN 1894	Poison	II	1,2	1,2	
Phenylmercuric nitrate	6.1	UN 1895	Poison	II	1,2	1,2	
Phenyl phosphorus dichloride	8	UN 2798	Corrosive	II	1,2	1	
Phenyl phosphorus thiodichloride	8	UN 2799	Corrosive	II	1,2	1	
Phenyl trichlorosilane	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	
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	II	1,2	1	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
		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-Phosphabicyononames	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 2576	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 passenger vessels
	Phosphorus trichloride	8	UN 1809	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger 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	
	Picolines	3.3	UN 2313	Flammable Liquid	II	1,2	1,2	
	Picric acid, wetted. *See* Trinitrophenol, wetted							
	Pinanyl hydroperoxide *technical pure*	5.2	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	III	1,2	1,2	
	Pine oil	3.3	UN 1272	Flammable Liquid	III	1,2	1,2	
	Piperazine	8	UN 2579	Corrosive	III	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
	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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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							
	Potassium arsenate	6.1	UN 1677	Poison	II	1,2	1,2	
	Potassium arsenite	6.1	UN 1678	Poison	II	1,2	1,2	
	Potassium bifluoride, *solid*	8	UN 1811	Corrosive, Poison	II	1,2	1,2	
	Potassium bifluoride, *solution*	8	UN 1811	Corrosive, Poison	II	1,2	1,2	
	Potassium borohydride	4.3	UN 1870	Dangerous When Wet	I	1,2	5	
	Potassium bromate	5.1	UN 1484	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	1,2	Stow 'separated from' ammonium compounds and 'away from' powdered metals
	Potassium chlorate, *aqueous solution*	5.1	UN 2427	Oxidizer	II	1,2	1	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	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							
	Potassium hydrogen sulphate	8	UN 2509	Corrosive	II	1,2	1,2	Stow 'away from' strong alkalis
	Potassium hydrosulphite	4.2	UN 1929	Spontaneously Combustible	II	1,2	5	Keep dry
	Potassium hydroxide, solid	8	UN 1813	Corrosive	II	1,2	1,2	Keep dry
	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	
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)	--	--	--	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
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' foodstuffs and all odor absorbing cargo
	Propanol	3.2	UN 1274	Flammable Liquid	II	1,2	1	
	Propionaldehyde	3.1 3.2	UN 1275 UN 1275	Flammable Liquid Flammable Liquid	II II	1,3 1,2	5 1	Keep cool
	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	3.3	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 3.3	UN 2258 UN 2258	Flammable Liquid, Corrosive Flammable Liquid, Corrosive	II II	1,2 1,2	1,2 1,2	
Propylene 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	3.3	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							
Pyrrolidine	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	--			
Reducing liquid. *See* Flammable liquid preparation, n.o.s.							
N Refrigerant gases, 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	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Refrigerating machines *containing non-flammable, non-toxic liquefied gases*	2.2	UN 2857	Nonflammable Gas	–	1,2	1,2	
	Release devices, explosive	1.4S	UN 0173	None. Package to be marked '1.4 S'	–	1,3	1,3	
	Removing liquid. *See* Flammable liquid preparations, n.o.s.							
	Resin solution *in flammable liquid*	3.2	UN 1866	Flammable Liquid	II	1,2	1	
		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 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	
	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*							
N	Rocket motors	1.1C	UN 0280	Explosive (1.1C)	–	–	–	
N	Rocket motors	1.2C	UN 0281	Explosive (1.2C)	–	–	–	
N	Rocket motors	1.3C	UN 0186	Explosive (1.3C)	–	–	–	
N	Rocket motors, *containing hypergolic liquids, with or without expelling charge*	1.2L	UN 0322	Explosive (1.2L)	–	–	–	
N	Rocket motors, *containing hypergolic liquids, with or without expelling charge*	1.3L	UN 0250	Explosive (1.3L)	–	–	–	
N	Rocket motors, liquid fueled	1.2J	UN 0395	Explosive (1.2J)	–	–	–	
N	Rocket motors, liquid fueled	1.3J	UN 0396	Explosive (1.3J)	–	–	–	
N	Rockets, line throwing	1.2G	UN 0238	Explosive (1.2G)	–	–	–	
N	Rockets, line throwing	1.3G	UN 0240	Explosive (1.3G)	–	–	–	
N	Rockets, liquid fueled, *with bursting charge*	1.1J	UN 0397	Explosive (1.1J)	–	–	–	
N	Rockets, liquid fueled, *with bursting charge*	1.2J	UN 0398	Explosive (1.2J)	–	–	–	
N	Rockets, *with bursting charge*	1.1E	UN 0181	Explosive (1.1E)	–	–	–	
N	Rockets, *with bursting charge*	1.2E	UN 0182	Explosive (1.2E)	–	–	–	

N	Rockets, *with bursting charge*	1.1F	UN 0180	Explosive (1.1F)	–	–	–	
N	Rockets, *with bursting charge*	1.2F	UN 0295	Explosive (1.2F)	–	–	–	
N	Rockets, *with inert head*	1.3C	UN 0183	Explosive (1.3C)	–	–	–	
	Rodenticides, n.o.s., *liquid*	6.1	UN 1681	Poison	I	1	1	
		6.1	UN 1681	Poison	II	1,2	1	
		6.1	UN 1681	St. Andrews Cross	III	1,2	1,2	
	Rodenticides, n.o.s., *solid*	6.1	UN 1681	Poison	I/II	1,2	1,2	
		6.1	UN 1681	St. Andrews Cross	III	1,2	1,2	
	Rosin 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							
	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	
N	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	
	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.*							
	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)	–	–	–	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
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 arsanilate	6.1	UN 2473	St. Andrews Cross	III	1,2	1,2	
	Sodium arsenate	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	
		6.1	UN 1686	St. Andrews Cross	III	1,2	1,2	

	Sodium arsenite, solid	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 5% 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	
	Sodium hydrogen sulphite, solution. *See* 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. *See* Sodium dithionite							
	Sodium hydroxide, solid	8	UN 1823	Corrosive	II	1,2	1,2	Keep dry

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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 3.3	UN 1289 UN 1289	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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. See* 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 0235	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. See* 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. See Acid mixtures, *spent*							
	Spirits of salts. *See* 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. *See* 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. *See* 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 chlorate	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		
		6.1	UN 1692	Poison	II	1,2		
		6.1	UN 1692	St. Andrews Cross	III	1,2		
							1	
							1,2	
	Strychnine *(and salts of), solid*	6.1	UN 1692	Poison	I/II	1,2	1,2	
		6.1	UN 1692	St. Andrews Cross	III	1,2	1,2	
	Styrene monomer, inhibited	3.3	UN 2055	Flammable Liquid	II	1,2	1,2	
N	Substances, explosive, n.o.s.	1.1L	UN 0357	Explosive (1.1L)	--	--	--	
N	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)	--	--	--	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	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* Disuccinic 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 6.1	UN 1693 UN 1693	Poison St. Andrews Cross	I/II III	1 1	5 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 6.1	UN 1704 UN 1704	Poison St. Andrews Cross	I/II III	1 1	5 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
Tetraethyl lead. *See* Motor fuel anti-knock mixtures							
Tetraethyl pyrophosphate and compressed gas, *mixture*	2.3	UN 1705	Poison Gas	–	1	5	Stow 'away from' living quarters
Tetraethyl silicate	3.3	UN 1292	Flammable Liquid	II	1,2	1,2	
Tetrafluoroethylene, inhibited	2.1	UN 1081	Nonflammable Gas	–	1,2	5	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Tetrafluorohydrazine	2.3	(UN 1955)	Poison Gas	--	1	5	Stow 'away from' living quarters and readily combustible substances, 'separated from' hydrogen
	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 2056	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		
		6.1	UN 1707	Poison	II	1,2		
		6.1	UN 1707	St. Andrews Cross	III	1,2	1	
							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-Thiapentanal	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 if 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
	Thiolactic 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 3.3	UN 1293 UN 1293	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 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 53 microns; or chemicaly 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 53 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
	2,4-Toluylenediamine	6.1	UN 1709	St. Andrews Cross	III	1,2	1,2	
N	Torpedoes, *with bursting charge*	1.1E	UN 0329	Explosive (1.1E)	--	--	--	

§ 172.102 Optional Hazardous Materials Table—Continued

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
N	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	