apparatus, or equipment, or type thereof, or any other arrangement: *Provided*, That he shall have been satisfied by suitable trials that the fitting, material, appliance, apparatus, or equipment, or type thereof, or the provision or arrangement is at least as effective as that specified in this subchapter.

(b) In any case where it is shown to the satisfaction of the Commandant that the use of any particular equipment, apparatus, or arrangement not specifically required by law is unreasonable or impracticable, the Commandant may permit the use of alternate equipment, apparatus, or arrangement to such an extent and upon such conditions as will insure, to his satisfaction, a degree of safety consistent with the minimum standards set forth in this subchapter.

[CGFR 65–50, 30 FR 16657, Dec. 30, 1965, as amended by USCG–2004–18884, 69 FR 58345, Sept. 30, 2004; USCG–2004–18884, 69 FR 68089, Nov. 23, 2004]

Subpart 30.25—Commodities Regulated

§ 30.25–1 Cargoes carried in vessels certificated under the rules of this subchapter.

(a) Table 30.25–1 lists flammable or combustible cargoes that, when transported in bulk, must be in vessels certificated under this subchapter D.

(b) A mixture or blend of two or more cargoes appearing in Table 30.25–1 may be transported under this subchapter D.

(c) A mixture or blend of one or more cargoes appearing in Table 30.25–1 and one or more cargoes appearing in Table 2, 46 CFR part 153, may be carried under this subchapter D if the mixture is flammable or combustible.

(d) Any mixture containing one or more cargoes categorized by the International Maritime Organization (IMO) and listed in Table 30.25–1 as a category X, Y, or Z noxious liquid substance (NLS) may be carried in bulk—

(1) Under this subchapter D if the vessel is not regulated under 46 CFR part 153;

(2) Under part 153 if the vessel is regulated under that part; or alternatively under 33 CFR part 151 if the cargo is listed in 33 CFR 151.49; or

(3) Under 33 CFR part 151 if the cargo is listed in 33 CFR 151.47.

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Acetochlor	**X**
Acetone	Z
Acetophenone	#
Acrylic acid/ethenesulphonic acid copolymer with phosphonate groups, sodium salt solution	Z
Acrylonitrile-Styrene copolymer dispersion in polyether polyol	Y
Alcohol (C6–C17) (secondary) poly(3–6) ethoxylates	Y
Alcohol (C6–C17) (secondary) poly(7–12) ethoxylates	Y
Alcohol (C9–C11) poly(2.5–9) ethoxylate	Y
Alcohol (C12–C15) poly(. . .) ethoxylates, see Alcohol (C12–C16) poly*(. . .)* ethoxylates.	
Alcohol (C12–C16) poly(1–6) ethoxylates	Y
Alcohol (C12–C16) poly(7–19) ethoxylates	Y
Alcohol (C12–C16) poly(20+) ethoxylates	Y
Alcohols (C13 +)	Y
Alcoholic beverages, n.o.s.	Z
Aliphatic oil	I
Alkanes (C6-C9)	X
Iso- and cyclo-alkanes (C10-C11)	Y
Iso- and cyclo-alkanes (C12 +)	Y
n-Alkanes (C10 +)	Y
Alkaryl polyethers (C9-C20)	Y
Alkenyl (C11+) amide	**X**
Alkenyl (C8+) amine, Alkenyl (C12+) acid ester mixture	#
Alkenyl (C16–C20) succinic anhydride	Z
Alkyl acrylate-Vinylpyridine copolymer in toluene	**Y**

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Alkylbenzene, Alkylindane, Alkylindene mixture (each C12–C17)	**Z**
Alkyl (C3–C4) benzenes	**Y**
Alkyl (C5–C8) benzenes	**X**
Alkyl (C9+) benzenes	Y
Alkyl (C11–C17) benzene sulfonic (alternately sulphonic) acid	**Y**
Alkylbenzene sulfonic (alternately sulphonic) acid (4% or less)	#
Alkyl dithiocarbamate (C19–C35)	**Y**
Alkyl dithiothiadiazole (C6-C24)	Y
Alkyl ester copolymer (C4-C20)	Y
Alkyl (C7–C11) phenol poly(4–12) ethoxylate	Y
Alkyl phenol sulfide (alternately *sulphide*) *(C8–C40), see* Alkyl (C8–C40) phenol sulfide (alternately sulphide).	
Alkyl (C8–C40) phenol sulfide (alternately sulphide)	Z
Alkyl (C8–C9) phenylamine in aromatic solvents	**Y**
Alkyl (C9–C15) phenyl propoxylate	Z
Alkyl (C8–C10) polyglucoside solution (65% or less)	**Y**
Alkyl (C12–C14) polyglucoside solution (55% or less)	**Y**
Alkyl (C8–C10)/(C12–C14):(40% or less/60% or more) polyglucoside solution (55% or less)	**Y**
Alkyl (C8–C10)/(C12–C14):(60% or more/40% or less) polyglucoside solution (55% or less)	**Y**
Alkyl (C8–C10)/(C12–C14):(50%/50%) polyglucoside solution (55% or less)	**Y**
Alkyl (C10–C20, saturated and unsaturated) phosphite	**Y**
n-Alkyl phthalates, see individual phthalates.	
Alkyl sulfonic (alternately sulphonic) acid ester of phenol	Y
Aluminum (alternately, Aluminium) hydroxide, sodium	**Y**
Aminoethyldiethanolamine/Aminoethylethanolamine solution	Z
2-Amino-2-methyl-1-propanol	**Z**
Amyl acetate (all isomers)	Y
Amyl alcohol (iso-, n-, sec-, primary, tert-)	Z
tert-Amyl ethyl ether	**Z**
tert-Amyl methyl ether	X
Amyl methyl ketone, see Methyl amyl ketone..	
Amylene, see Pentene (all isomers)..	
Animal acid oil	#
Animal and Fish acid oils and distillates, n.o.s.	#
Animal and Fish oils, n.o.s.	#
Animal oil	#
Aromatic oil	I
Aryl polyolefins (C11-C50)	Y
Asphalt	I
Asphalt blending stocks:	
Roofers flux	I
Straight run residue	I
Aviation alkylates (C8 paraffins and isoparaffins BPT 95 to 120 °C)	**X**
Barium long-chain (C11-C50) alkaryl sulfonate (alternately sulphonate)	**Y**
Barium long-chain alkyl (C8–C14) phenate sulfide (alternately sulphide)	#
Beechnut oil	#
Behenyl alcohol, see Alcohols (C13+)..	
Benzene tricarboxylic acid, trioctyl ester	Y
Benzyl acetate	**Y**
Benzyl alcohol	Y
Bis(2-ethylhexyl) terephthalate	**Y**
Brake fluid base mix: Poly(2-8)alkylene(C2-C3) glycols/Polyalkylene(C2-C10) glycols monoalkyl(C1-C4) ethers and their borate esters	Z
Butane	LFG
Butene, see Butylenes (all isomers)..	
Butene oligomer	X
2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture)	**Y**
Butyl acetate (all isomers)	Y
Butyl alcohol (iso-, n-, sec-, tert-), see Butyl alcohol (all isomers).	
Butyl alcohol (all isomers)	Z
Butylbenzene (all isomers), see Alkyl (C3–C4) benzenes..	
Butyl benzyl phthalate	X
Butyl butyrate (all isomers)	**Y**
Butylene	LFG
Butylene glycol	Z
1,3-Butylene glycol, see Butylene glycol..	
iso-Butyl formate, see Isobutyl formate..	
n-Butyl formate	#
Butyl heptyl ketone	#

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Butyl methyl ketone, see Methyl butyl ketone.	
n-Butyl propionate	Y
Butyl stearate	#
Butyl toluene	#
gamma-Butyrolactone	Y
Calcium alkyl (C9) phenol sulfide (alternately sulphide), polyolefin phosphorosulfide (alternately phosphorosulphide) mixture	#
Calcium alkyl salicylate, see Calcium long-chain alkyl salicylate (C13+)	
Calcium long-chain alkaryl sulfonate (alternately sulphonate) (C11–C50)	#
Calcium long-chain alkyl phenate (C8–C40), see Calcium long-chain alkyl (C5–C10) phenate *or* Calcium long-chain alkyl (C11–C40) phenate	
Calcium long-chain alkyl (C5–C10) phenate	Y
Calcium long-chain alkyl (C11–C40) phenate	Y
Calcium long-chain alkyl phenolic amine (C8–C40)	#
Calcium long-chain alkyl salicylate (C13+)	Y
Camelina oil	**Y**
Candelilla wax, see Waxes: Candelilla..	
Caprolactam solutions, see epsilon-Caprolactam (molten or aqueous solutions).	
epsilon-Caprolactam (molten or aqueous solutions)	**Z**
Carnauba wax, see Waxes: Carnauba..	
Cetyl alcohol (Hexadecanol), see Alcohols (C13+)..	
Cetyl/Stearyl alcohol, see Alcohols (C13+).	
Chlorinated paraffins (C10–C13)	**X**
1-(4-Chlorophenyl)-4,4-dimethyl-pentan-3-one	**Y**
Citric acid (70% or less)	**Z**
Clarified oil	I
Coal oil	#
Coconut oil fatty acid methyl ester	**Y**
Cod liver oil	#
Copper salt of long-chain (C17 +) alkanoic acid	Y
Corn acid oil	#
Cotton seed acid oil	#
Cottonseed, fatty acid, see Cottonseed oil, fatty acid..	
Cottonseed oil, fatty acid	#
Crude Isononylaldehyde	#
Crude Isopropanol	@Z
† Crude oil	I
Cumene, see Alkyl (C3–C4) benzenes.	
Cycloheptane	**X**
Cyclohexane	Y
Cyclohexanol	Y
Cyclohexyl acetate	**Y**
1,3-Cyclopentadiene dimer (molten)	Y
Cyclopentane	**Y**
Cyclopentene	**Y**
p-Cymene	Y
Dark mixed acid oil	#
Decahydronaphthalene	Y
iso-Decaldehyde, see Isodecaldehyde..	
n-Decaldehyde	#
Decane, see n-Alkanes (C10+).	
Decanoic acid	**X**
Decene	X
Decyl acetate	#
Decyl alcohol (all isomers)	Y
n-Decylbenzene, see Alkyl (C9+) benzenes..	
Detergent alkylate, see Alkyl (C9+) benzenes..	
Di+, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether acetate.	
Diacetone alcohol	Z
Dialkyl (C10–C14) benzenes, see Alkyl (C9+) benzenes..	
Dialkyl (C8–C9) diphenylamines	Z
Dialkyl (C7–C13) phthalates	X
Including:	
Diisodecyl phthalate.	
Diisononyl phthalate.	
Dinonyl phthalate.	
Ditridecyl phthalate.	
Diundecyl phthalate.	

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Dibutyl carbinol, see Nonyl alcohol (all isomers).	
Dibutyl hydrogen phosphonate	Y
2,6-Di-tert-butylphenol	**X**
Dibutyl phthalate	**X**
ortho-Dibutyl phthalate, see Dibutyl phthalate.	
Dibutyl terephthalate	**Y**
Dicyclopentadiene, see 1,3-Cyclopentadiene dimer (molten).	
Diesel oil	I
Diethylbenzene	Y
Diethylene glycol	Z
Diethylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.	
Diethylene glycol butyl ether acetate, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether acetate..	
Diethylene glycol diethyl ether	Z
Diethylene glycol ethyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Diethylene glycol ethyl ether acetate, see Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate.	
Diethylene glycol n-hexyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.	
Diethylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.	
Diethylene glycol methyl ether acetate, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether acetate.	
Diethylene glycol phenyl ether	#
Diethylene glycol phthalate	Y
Diethylene glycol propyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Di-(2-ethylhexyl)adipate	Y
Di-(2-ethylhexyl)phthalate, see Dioctyl phthalate.	
Diethyl phthalate	Y
Diglycidyl ether of bisphenol A	X
Diglycidyl ether of bisphenol F	**Y**
Diheptyl phthalate, see Dialkyl (C7–C13) phthalates.	
Di-n-hexyl adipate	**X**
Dihexyl phthalate	Y
Diisobutyl carbinol, see Nonyl alcohol (all isomers).	
Diisobutylene	Y
Diisobutyl ketone	Y
Diisobutyl phthalate	X
Diisodecyl phthalate, see Dialkyl(C7-C13) phthalates.	
Diisononyl adipate	Y
Diisononyl phthalate, see Dialkyl (C7–C13) phthalates..	
Diisooctyl phthalate	Y
Diisopropylbenzene (*all isomers*)	X
Diisopropylnaphthalene	Y
Dimethyl adipate	X
Dimethylbenzene, see Xylenes.	
Dimethyl glutarate	Y
Dimethyl octanoic acid	**Y**
Dimethyl phthalate	Y
Dimethylpolysiloxane	Y
2,2-Dimethylpropane-1,3-diol (molten or solution)	Z
Dimethyl succinate	Y
Dinonyl phthalate, see Dialkyl (C7–C13) phthalates..	
Dioctyl phthalate, see Dialkyl (C7–C13) phthalates..	
Dipentene	Y
Diphenyl	X
Diphenylamine (molten)	**Y**
Diphenylamines, alkylated	**Y**
Diphenyl/Diphenyl ether mixtures	X
Diphenyl ether	X
Diphenyl ether/Diphenyl phenyl ether mixture	X
Diphenylol propane-epichlorohydrin resins	**X**
Dipropylene glycol	Z
Dipropylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Dipropylene glycol dibenzoate	#
Dipropylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.	
Dithiocarbamate ester (C7–C35)	**X**
Distillates:	
Flashed feed stocks	I
Straight run	I
Diundecyl phthalate	Y
Dodecane (all isomers)	Y
Dodecanol (all isomers), see Dodecyl alcohol (all isomers)..	

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Dodecene (all isomers)	X
Dodecyl alcohol	Y
Dodecyl benzene, see Alkyl (C9+) benzenes..	
Dodecyl hydroxypropyl sulfide (alternately sulphide).	X
Dodecyl phenol	X
Dodecyl xylene	Y
Drilling brines (containing zinc salts) (if flammable or combustible)	**X**
Drilling brines, including: calcium bromide solution, calcium chloride solution and sodium chloride solution (if flammable or combustible)	**Z**
Drilling mud (low toxicity) (if flammable or combustible)	#
ETBE, see Ethyl tert-butyl ether..	
Ethane	LFG
Ethoxy triglycol (crude)	#
2-Ethoxyethyl acetate	Y
Ethoxylated alkyloxy alkyl amine, see Ethoxylated long-chain (C16+) alkyloxyalkylamine..	
Ethoxylated long-chain (C16+) alkyloxyalkylamine	Y
Ethyl acetate	Z
Ethyl acetoacetate	Z
Ethyl alcohol	Z
Ethyl amyl ketone	Y
Ethylbenzene	Y
Ethyl butanol	#
Ethyl tert-butyl ether	Y
Ethyl butyrate	Y
Ethyl cyclohexane	Y
S-Ethyl dipropylthiocarbamate	**Y**
Ethylene	LFG
Ethylene carbonate	Z
Ethylene glycol	Y
Ethylene glycol acetate	Y
Ethylene glycol butyl ether acetate	Y
Ethylene glycol diacetate	Y
Ethylene glycol dibutyl ether	#
Ethylene glycol ethyl ether acetate, see 2-Ethoxyethyl acetate.	
Ethylene glycol methyl butyl ether	#
Ethylene glycol methyl ether acetate	Y
Ethylene glycol phenyl ether	Z
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture	Z
Ethyl-3-ethoxypropionate	Y
2-Ethylhexaldehyde, see Octyl aldehydes.	
2-Ethylhexanoic acid	Y
Ethylhexoic acid, see 2-Ethylhexanoic acid.	
2-Ethylhexanol, see Octanol (all isomers).	
Ethyl hexyl phthalate	#
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol, (C8-C10) ester	Y
Ethyl propionate	Y
Ethyl toluene	Y
Fatty acid (saturated, C13 +)	Y
Fatty acids (C16+)	**Y**
Fatty acids, essentially linear (C6–C18) 2-ethylhexyl ester	**Y**
Fish acid oil	#
Formamide	Y
Furfuryl alcohol	Y
† Gas oil, cracked	I
Gas oil, high pour	I
Gas oil, low pour	I
Gas oil, low sulfur (alternately sulphur)	I
Gasoline blending stocks:	
Alkylates	I
† Reformates	I
Gasolines:	
† Automotive (*containing not more than 4.23 grams lead per gallon*)	I
† Aviation (*containing not more than 4.86 grams lead per gallon*)	I
Casinghead (*natural*)	I
Polymer	I
† Straight run	I
Gasoline (Natural gas condensate)	I
Glucitol/glycerol blend propoxylated (containing 10% or more amines)	**Z**

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Glycerine	Z
Glycerine (83%), Dioxanedimethanol (17%) mixture	#
Glycerol, see Glycerine.	
Glycerol ethoxylated	**OS**
Glycerol monooleate	Y
Glycerol polyalkoxylate	#
Glycerol, propoxylated and ethoxylated	**Z**
Glycerol/sucrose blend, propoxylated and ethoxylated	**Z**
Glyceryl triacetate	Z
Glycidyl ester of tridecyl acetic acid, see Glycidyl ester of C10 trialkylacetic acid.	
Glycidyl ester of versatic acid, see Glycidyl ester of C10 trialkylacetic acid.	
Glycidyl ester of C10 trialkylacetic acid	Y
Glycol diacetate, see Ethylene glycol diacetate.	
Glycol triacetate, see Glyceryl triacetate.	
Glyoxal solution (40% or less)	Y
Glyphosate solution (not containing surfactant)	Y
Grape seed oil	**Y**
Groundnut acid oil	#
Groundnut oil	Y
Hazelnut oil	#
Heartcut distillate	I
Heptadecane, see n-Alkanes (C10+)..	
Heptane (all isomers)	X
Heptanoic acid, see n-Heptanoic acid..	
***n*-Heptanoic acid**	**Z**
Heptanol (all isomers)	Y
Heptene (all isomers)	Y
Heptyl acetate	Y
Herbicide (C15H22NO2Cl), see N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methylchloroacetanilide.	
Hexadecanol (Cetyl alcohol), see Alcohols (C 13+)..	
1-Hexadecylnaphthalene/1,4-Bis(hexadecyl)naphthalene mixture	Y
Hexaethylene glycol, see Polyethylene glycol.	
Hexamethylene glycol	Z
Hexamethylenetetramine solutions	Z
Hexane (all isomers)	Y
1,6-Hexanediol, distillation overheads	**Y**
Hexanoic acid	Y
Hexanol	Y
Hexene (all isomers)	Y
Hexyl acetate	Y
Hexylene glycol	Z
Hydrogenated starch hydrolysate	**OS**
2-Hydroxy-4-(methylthio)butanoic acid	Z
Hydroxyl terminated polybutadiene, see Polybutadiene, hydroxyl terminated..	
Illipe oil	Y
Isoamyl alcohol	Z
Isobutyl alcohol	Z
Isobutyl formate	Z
Isobutyl methacrylate	Z
Isodecaldehyde	#
Isophorone	Y
Isopropyl acetate	Z
Isopropyl alcohol	Z
Isopropylbenzene, see Alkyl (C3–C4) benzenes..	
Isopropylcyclohexane	@Y
Jatropha oil	**Y**
Jet fuels:	
† JP-4	I
JP-5 (*kerosene, heavy*)	I
JP-8	I
Kerosene	I
Lactic acid	Z
Lanolin oil	#
Lard oil	#
Latex, ammonia (1% or less)-inhibited	Y
Latex: Carboxylated styrene-Butadiene copolymer; Styrene-Butadiene rubber	**Z**
Lauric acid	**X**
Lecithin	OS

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Linseed oil	Y
Long-chain alkaryl polyether (C11-C20)	Y
Long-chain alkaryl sulfonic (alternately sulphonic) acid (C16–C60)	Y
Long-chain alkylphenate/Phenol sulfide (alternately sulphide) mixture	Y
Lubricating oil	I
L-Lysine solution (60% or less)	**Z**
Magnesium long-chain alkaryl sulfonate (alternately sulphonate) (C11–C50)	Y
Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8–C20)	#
Magnesium long-chain alkyl salicylate (C11 +)	Y
Magnesium nonyl phenol sulfide (alternately *sulphide*), *see* Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8–C20)..	
Maleic anhydride/sodium allylsulphonate copolymer solution	**Z**
Mango kernel oil	**Y**
2-Mercaptobenzothiazol (*in liquid mixtures*)	#
Methane	LFG
3-Methoxy-1-butanol	Z
3-Methoxybutyl acetate	Y
1-Methoxy-2-propyl acetate	#
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methylchloroacetanilide	**X**
Methoxy triglycol, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Methyl acetate	Z
Methyl acetoacetate	Z
Methyl alcohol	Y
Methylamyl acetate	Y
Methylamyl alcohol	Z
Methyl amyl ketone	Z
Methyl butanol, see amyl alcohols..	
Methylbutenol	Y
Methyl tert-butyl ether	Z
Methyl butyl ketone	Y
Methylbutynol	**Z**
Methyl butyrate	Y
Methylcyclohexane	**Y**
Methylcyclopentadiene dimer	**Y**
Methyl 3-(3,5 di-tert-butyl-4-hydroxyphenyl)propionate crude melt	**[Y]**
Methyl ethyl ketone	Z
Methyl formate	**Z**
N-Methylglucamine solution (70% or less)	Z
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	**Z**
Methyl heptyl ketone	#
2-Methyl-2-hydroxy-3-butyne	**Z**
Methyl isobutyl carbinol, see Methyl amyl alcohol.	
Methyl isobutyl ketone	Z
3-Methyl-3-methoxybutanol	Z
3-Methyl-3-methoxybutyl acetate	#
Methyl naphthalene (molten)	**X**
Methyl pentene, see Hexene (all isomers).	
Methyl tert-pentyl ether, see tert-Amyl methyl ether.	
2-Methyl-1,3-propanediol	Z
Methyl propyl ketone	Z
2-Methylpyridine	**Z**
3-Methylpyridine	**Z**
4-Methylpyridine	**Z**
N-Methyl-2-pyrrolidone	Y
Methyl salicylate	**Y**
Metolachlor, see N-(2-Methoxy-1-methylethyl)-2-ethyl-6-methylchloroacetanilide.	
Mineral oil	I
Mineral seal oil	I
Mineral spirits	I
Mixed acid oil	#
Mixed general acid oil	#
Mixed hard acid oil	#
Mixed soft acid oil	#
Motor oil	I
MTBE, see Methyl tert-butyl ether.	
Myrcene	X
Naphtha:	
† Aromatic (*having less than 10% Benzene*)	I

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Heavy	I
Paraffinic	I
† Petroleum	I
† Solvent	I
Stoddard Solvent	I
† Varnish makers' and painters' (75%)	I
Naphthenic acid	#
Neatsfoot oil	#
Neodecanoic acid	**Y**
Nitrilotriacetic acid, trisodium salt solution	**Y**
Nitroethane	**Y**
Nitroethane (80%)/Nitropropane (20%)	**Y**
Nitroethane/1-Nitropropane (each 15% or more) mixture	**Y**
Nitropropane (60%)/Nitroethane (40%) mixture	Y
Nonane (all isomers)	X
Nonanoic acid (all isomers)	Y
Nonanoic/Tridecanoic acid mixture	#
Nonene (all isomers)	Y
Nonyl acetate	#
Nonyl alcohol (all isomers)	Y
Nonyl methacrylate monomer	Y
Nonylphenol	X
Nonylphenol poly(4 +)ethoxylate	Y
Nonyl phenol sulfide (alternately *sulphide*) *(90% or less), see* Alkyl (C8–C40) phenol sulfide (alternately sulphide)..	
Noxious liquid, F, (2) n.o.s. (''trade name'' contains ''principal components'') ST 1, Cat X	X
Noxious liquid, F, (4) n.o.s. (''trade name'' contains ''principal components'') ST 2, Cat X	X
Noxious liquid, F, (6) n.o.s. (''trade name'' contains ''principal components'') ST 2, Cat Y	Y
Noxious liquid, F, (8) n.o.s. (''trade name'' contains ''principal components'') ST 3, Cat Y	Y
Noxious liquid, F, (10) n.o.s. (''trade name'' contains ''principal components'') ST 3, Cat Z	Z
Noxious liquid, (11) n.o.s. (''trade name'' contains ''principal components'') Cat Z (if flammable or combustible)	Z
Non noxious liquid, (12) n.o.s. (''trade name'' contains ''principal components'') Cat OS (if flammable or combustible)	OS
Nutmeg butter oil	#
Octadecanol (Oleyl alcohol), see Alcohols (C13+)..	
Octadecene, see the olefin or alpha-olefin entries..	
Octadeceneamide solution	#
Octamethylcyclotetrasiloxane	**Y**
Octane (all isomers)	X
Octanoic acid (all isomers)	Y
Octanol (all isomers)	Y
Octene (all isomers)	Y
Octyl acetate, see n-Octyl acetate.	
n-Octyl acetate	**Y**
Octyl alcohol (iso-, n-), see Octanol (all isomers).	
Octyl aldehydes	Y
Octyl decyl adipate	Y
Octyl phthalate, see Dioctyl phthalate.	
Oil, fuel:	
No. 1 (*kerosene*)	I
No. 1-D	I
No. 2	I
No. 2-D	I
No. 4	I
No. 5	I
No. 6	I
Oiticica oil	#
alpha-Olefins (C6-C18) mixtures	X
alpha-Olefins (C13-C18) mixtures, see alpha-Olefins (C6-C18).	
Olefins (C13 + , all isomers)	Y
Olefin-Alkyl ester copolymer (molecular weight 2000 +)	Y
Olefin mixture (C7–C9) C8 rich, stabilized	**X**
Olefin mixtures (C5-C7)	Y
Olefin mixtures (C5-C15)	X
Oleic acid	Y
Oleyl alcohol (Octadecanol), see Alcohols (C13+)..	
Olive oil	Y
Orange juice (concentrated)	**OS**

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Palm kernel acid oil, methyl ester	#
Palm kernel fatty acid distillate	**Y**
Palm kernel olein	**Y**
Palm kernel stearin	**Y**
Palm mid-fraction	**Y**
Palm oil	Y
Palm oil fatty acid methyl ester	Y
Palm olein	**Y**
Palm stearin	**Y**
Paraffin wax, see Waxes: Paraffin..	
n-Paraffins (C10–C20), see n-Alkanes (C10+) all isomers..	
Paraldehyde-ammonia reaction product	**Y**
Peanut oil, see Groundnut oil..	
Peel oil (oranges and lemons)	#
Penetrating oil	I
Pentadecanol, see Alcohols (C13+)..	
1,3-Pentadiene	**Y**
1,3-Pentadiene (greater than 50%), cyclopentene and isomers, mixtures	**Y**
Pentaethylene glycol, see Polyethylene glycols.	
Pentane (all isomers)	Y
Pentanoic acid	Y
Pentene (all isomers)	Y
n-Pentyl propionate	Y
Perilla oil	#
Petrolatum	Y
1-Phenyl-1-xylyl ethane	Y
Phosphate esters, alkyl (C12-C14) amine	Y
Phosphosulfurized (alternately Phosphosulphurized) bicyclic terpene	#
Pilchard oil	#
Pinene, see the alpha- or beta- isomers..	
alpha-Pinene	X
beta-Pinene	X
Pine oil	X
Piperazine (70% or less)	**Y**
Polyalkyl (C18–C22) acrylate in xylene	**Y**
Polyalkylene glycols, polyalkylene glycol monoalkyl ethers mixtures	#
Polyalkylalkenaminesuccinimide, molybdenum oxysulfide (alternately oxysulphide)	**Y**
Polyalkylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether	Z
Including:	
Diethylene glycol butyl ether.	
Diethylene glycol ethyl ether.	
Diethylene glycol n-hexyl ether.	
Diethylene glycol methyl ether.	
Diethylene glycol n-propyl ether.	
Dipropylene glycol butyl ether.	
Dipropylene glycol methyl ether.	
Polypropylene glycol methyl ether.	
Triethylene glycol butyl ether.	
Triethylene glycol ethyl ether.	
Triethylene glycol methyl ether.	
Tripropylene glycol methyl ether.	
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	Y
Including:	
Diethylene glycol butyl ether acetate.	
Diethylene glycol ethyl ether acetate.	
Diethylene glycol methyl ether acetate.	
Polyalkylene oxide polyol	#
Polyalkyl (C10–C20) methacrylate	Y
Polyalkyl (C10–C18) methacrylate/Ethylene-propylene copolymer mixture	**Y**
Polybutadiene, hydroxyl terminated	#
Polybutene	Y
Polybutenyl succinimide	Y
Poly(2+)cyclic aromatics	**X**
Polydimethylsiloxane, see Dimethylpolysiloxane.	
Polyether (molecular weight 1350 +)	Y
Polyether polyols	#
Polyethylene glycol	Z

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Polyethylene glycol dimethyl ether	Z
Poly(ethylene glycol) methylbutenyl ether (molecular weight >1000)	**Z**
Polyethylene glycol monoalkyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Polyglycerine, sodium salt solution (containing less than 3% sodium hydroxide)	Z
Polyglycerol	#
Polyisobutenamine in aliphatic (C10–C14) solvent	**Y**
Polyisobutenyl anhydride adduct	Z
Poly(4+)isobutylene (molecular weight >224)	**X**
Polyisobutylene (molecular weight ≤224)	**Y**
Polymerized esters	#
Polyolefin (molecular weight 300+)	Y
Polyolefin amide alkeneamine (C17 +)	Y
Polyolefin amide alkeneamine (C28+), see Polyolefin amide alkeneamine (C17+)..	
Polyolefin amide alkeneamine borate (C28-C250)	Y
Polyolefin amide alkeneamine/Molybdenum oxysulfide (alternately oxysulphide) mixture	#
Polyolefin amide alkeneamine polyol	Y
Polyolefinamine (C28–C250)	**Y**
Polyolefinamine in alkyl (C2–C4) benzenes	**Y**
Polyolefinamine in aromatic solvent	**Y**
Polyolefin aminoester salts (molecular weight 2000+)	**Y**
Polyolefin anhydride	Y
Polyolefin ester (C28-C250)	Y
Polyolefin phenolic amine (C28-C250)	Y
Polyolefin phosphorosulfide (alternately phosphorosulphide), barium derivative (C28–C250)	Y
Poly(20)oxyethylene sorbitan monooleate	Y
Poly(5 +)propylene	Y
Polypropylene glycol	Z
Polypropylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.	
Polysiloxane	Y
Poppy oil	#
Poppy seed oil	#
Potassium oleate	Y
Potassium salt of polyolefin acid	#
Propane	LFG
2-Propene-1-aminium, N, N-dimethyl-N–2-propenyl-, chloride, homopolymer solution	**Y**
Propionaldehyde	**Y**
n-Propoxypropanol, see Propylene glycol monoalkyl ether.	
n-Propyl acetate	Y
n-Propyl alcohol	Y
iso-Propylbenzene, see Propylbenzene (all isomers).	
n-Propylbenzene, see Propylbenzene (all isomers).	
Propylbenzene (all isomers), *see* Alkyl(C3–C4) benzenes..	
iso-Propylbenzene, see Alkyl(C3–C4) benzenes..	
n-Propylbenzene, see Alkyl(C3–C4) benzenes..	
iso-Propylcyclohexane, see Isopropylcyclohexane..	
Propylene	LFG
Propylene-Butylene copolymer	#
Propylene carbonate	Z
Propylene dimer	#
Propylene glycol	Z
Propylene glycol n-butyl ether, see Propylene glycol monoalkyl ether.	
Propylene glycol ethyl ether, see Propylene glycol monoalkyl ether.	
Propylene glycol methyl ether, see Propylene glycol monoalkyl ether.	
Propylene glycol methyl ether acetate	Z
Propylene glycol monoalkyl ether	Z
Including:	
n-Propoxypropanol.	
Propylene glycol n-butyl ether.	
Propylene glycol ethyl ether.	
Propylene glycol methyl ether.	
Propylene glycol propyl ether.	
Propylene glycol phenyl ether	Z
Propylene glycol propyl ether, see Propylene glycol monoalkyl ether.	
Propylene polymer (*in liquid mixtures*)	#
Propylene tetramer	X
Propylene trimer	Y
Pseudocumene, see Trimethylbenzenes.	
Pseudocumene, see Trimethylbenzenes (all isomers)..	

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Raisin seed oil	#
Rapeseed oil	Y
Rapeseed oil fatty acid methyl esters	**Y**
Rape seed oil fatty acid methyl esters*	Y
Residual oil	I
Rice bran oil	Y
Road oil	I
Rosin, see Rosin oil..	
Rosin oil	Y
Rum, see Alcoholic beverages, n.o.s..	
Safflower acid oil	#
Safflower oil	Y
Salad oil	#
Seal oil	I
Sesame oil	#
Soapstock oil	#
Sodium acetate, Glycol, Water mixture (containing 1% or less, Sodium hydroxide) (if flammable or combustible)	#
Sodium benzoate	Z
Sodium bromide solution (less than 50%)	**Y**
Sodium carboxylate solution	**Y**
Sodium long-chain alkyl salicylate (C13 +)	#
Sodium methylate 21 to 30% in methanol	**Y**
Sodium thiocyanate solution (56% or less)	**Y**
Soya acid oil	#
Soyabean oil	Y
Soyabean oil (epoxidized)	#
Soyabean oil fatty acid methyl ester	**Y**
Spindle oil	I
Stearic acid, see Fatty acid (saturated, C13 +).	
Stearyl alcohol, see Alcohols (C13 +).	
Sulfohydrocarbon (alternately Sulphohydrocarbon) (C3–C88)	Y
Sulfohydrocarbon (alternately Sulphohydrocarbon), long-chain (C18+) alkylamine	#
Sulfolane (alternately Sulpholane)	Y
Sulfurized (alternately Sulphurized) fat (C14–C20)	Z
Sulfurized (alternately Sulphurized) polyolefinamide alkene(C28–C250) amine	Z
Sunflower oil, see Sunflower seed acid oil.	
Sunflower seed acid oil	#
Tall oil, crude	**Y**
Tall oil, distilled	**Y**
Tall oil, fatty acid	#
Tall oil pitch	**Y**
Tall oil soap, crude	**Y**
Tallow	Y
Tallow alcohol, see Alcohols (C13 +).	
Tallow alkyl nitrile	#
Tallow fatty acid	Y
TAME, see tert-Amyl methyl ether.	
Tetradecanol, see Alcohols (C13 +).	
Tetradecene, see alpha-Olefins (C6-C18) mixtures, Olefin mixtures (C5-C15), or Olefins (C13 + , all isomers).	
Tetradecylbenzene, see Alkyl (C9+) benzenes..	
Tetraethylene glycol	Z
Tetraethyl silicate monomer/oligomer (20% in ethanol)	**Z**
Tetrahydronaphthalene	Y
Tetramethylbenzene (all isomers)	**X**
Tetrapropylbenzene, see Alkyl(C9 +)benzenes.	
Toluene	Y
Transformer oil	I
Triarylphosphate, see Triisopropylated phenyl phosphates.	
Tributyl phosphate	Y
Tricresyl phosphate (less than 1% ortho isomer)	Y
Tridecane, see n-Alkanes (C10+) (all isomers)..	
Tridecanoic acid	Y
Tridecanol, see Alcohols (C13 +).	
Tridecene, see Olefins (C13 + , all isomers).	
Tridecyl acetate	Y
Tridecylbenzene, see Alkyl (C9+) benzenes..	
Triethylbenzene	X
Triethylene glycol	Z

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo name	IMO Annex II pollution category
Triethylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Triethylene glycol butyl ether mixture	#
Triethylene glycol di-(2-ethylbutyrate)	#
Triethylene glycol ether mixture	#
Triethylene glycol ethyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Triethylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Triethyl phosphate	Z
Triisooctyl trimellitate	#
Triisopropanolamine	Z
Triisopropylated phenyl phosphates	X
Trimethylamine solution (30% or less)	**Z**
Trimethylbenzene (all isomers)	X
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	Y
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate	**Y**
2,2,4-Trimethyl-3-pentanol-1-isobutyrate	#
1,3,5-Trioxane	**Y**
Tripropylene, see Propylene trimer.	
Tripropylene glycol	Z
Tripropylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether..	
Trixylenyl phosphate, see Trixylyl phosphate.	
Trixylyl phosphate	X
Tucum oil	#
Tung oil	Y
Turbine oil	I
Turpentine	X
† *Turpentine substitute, see* White spirit (low (15–20%) aromatic).	
Undecanoic acid	Y
1-Undecanol, see Undecyl alcohol.	
Undecene, see 1-Undecene.	
1-Undecene	X
1-Undecyl alcohol, see Undecyl alcohol.	
Undecyl alcohol	X
Undecylbenzene, see Alkyl (C9+) benzenes..	
Vegetable oils, n.o.s	#
Vegetable protein solution (hydrolyzed) (if flammable or combustible)	**OS**
Vinyltoluene	**Y**
Walnut oil	#
Waxes:.	
Candelilla	Y
Carnauba	Y
Paraffin	Y
† *White spirit, see* White spirit, low (15–20%) aromatic.	
† White spirit, low (15–20%) aromatic	Y
Wine, see Alcoholic beverages, n.o.s..	
Wood lignin with sodium acetate/oxalate	**Z**
Xylenes	Y
Xylenes/Ethylbenzene (10% or more) mixture	**Y**
Zinc alkaryl dithiophosphate (C7-C16)	Y
Zinc alkenyl carboxamide	Y
Zinc alkyl dithiophosphate (C3-C14)	Y

Notes:

"#" = The noxious liquid substance status is undetermined—see 46 CFR 153.900(c) for shipping on an oceangoing vessel.

"†" = Marine occupational safety and health regulations for benzene, 46 CFR part 197, subpart C, may apply to this cargo.

"[ ]" = Provisional categorization to which the United States is party.

"@" = The noxious liquid substance category has been assigned by the Coast Guard, in the absence of one assigned by the IMO. The category is based on a GESAMP Hazard Profile or, by analogy, to a closely related product having a noxious liquid substance assigned.

Bolded entries were added from the March 2012 Annex to the 2007 edition of the IBC Code (MEPC 63/23/Add.1), the December 2012 IMO Marine Environmental Protection Committee Circular (MEPC.2/Circ.18), or the December 2013 IMO Marine Environmental Protection Committee Circular (MEPC.2/Circ.19).

"Cat" = Pollution category.

"F" = Flammable (flash point less than or equal to 60 °C (140 °F).

"I" = An "oil" under MARPOL Annex I.

Italicized words are not part of the cargo name, but may be used in addition to the cargo name.

"LFG" = Liquid flammable gas.

"n.o.s." = Not otherwise specified.

"OS" = An "other substance" considered at present to pose no harm to marine resources, human health, amenities, or other legitimate uses of the sea when discharged into the sea from tank cleaning or deballasting operations.

"see" = A redirection to the preferred, alternative cargo name—for example, in "*Diethyl ether, see* Ethyl ether," the pollution category for "diethyl ether" will be found under the preferred, alternative cargo name "ethyl ether."

"ST" = Ship type, as defined in Chapter 2 of the 2016 International Bulk Chemical Code.
"X," "Y," and "Z" = Noxious liquid substance categories under MARPOL Annex II.

[78 FR 50152, Aug. 16, 2013, as amended by USCG–2013–0423, 85 FR 21663, Apr. 17, 2020; 86 FR 42738, Aug. 5, 2021]

§ 30.25–3 Benzene.

The provisions contained in 46 CFR part 197, subpart C, apply to liquid cargoes containing 0.5% or more benzene by volume.

[CGD 88–040, 56 FR 65006, Dec. 13, 1991]

Subpart 30.30—Interim Procedures for Evaluating Vessel Personnel Licensing and Certification Programs of Foreign Countries

SOURCE: CGD 79–081a, 45 FR 23427, Apr. 7, 1980, unless otherwise noted.

§ 30.30–1 Scope and purpose.

(a) This subpart contains procedures for evaluating vessel personnel licensing and certification programs of foreign countries. Evaluations are done for countries which license or certificate personnel serving on tank vessels that enter or operate in U.S. navigable waters and ports.

(b) The purpose of each evaluation is to determine whether a foreign licensing and certification program has standards that are comparable to or more stringent than U.S. standards.

(c) A determination that licensing and certification standards of a foreign country are not comparable to or more stringent than U.S. standards will subject tank vessels manned with officers licensed by that country to the prohibition in 46 U.S.C. 70021(a)(5) on operation with those officers in U.S. navigable waters and ports.

[CGD 79–081a, 45 FR 23427, Apr. 7, 1980, as amended by USCG–2020–0304, 85 FR 58282, Sept. 18, 2020]

§ 30.30–3 Evaluation materials.

The materials to be submitted for evaluation must include the English text of the following:

(a) All laws, decrees, orders, and regulations relating to manning, training, qualification, and watchkeeping of personnel on tank vessels engaged in foreign trade.

(b) A copy of each type of license and certificate issued by the country to tank vessel personnel.

§ 30.30–5 Submission of evaluation materials.

(a) The evaluation materials listed in § 30.30–3 should be sent to Commandant (CG–CVC), Attn: Office of Commercial Vessel Compliance, U.S. Coast Guard Stop 7501, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593–7501. The materials should include the name and address of the person to whom correspondence concerning the evaluation can be sent.

(b) Updated materials may be submitted at any time during the evaluation process.

[CGD 79–081a, 45 FR 23427, Apr. 7, 1980, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996; USCG–2009–0702, 74 FR 49226, Sept. 25, 2009; USCG–2013–0671, 78 FR 60146, Sept. 30, 2013]

§ 30.30–7 Availability of materials.

Evaluation materials submitted in accordance with this subpart will be available for inspection and copying at Coast Guard Headquarters. Contact Commandant (CG–CVC), Attn: Office of Commercial Vessel Compliance, U.S. Coast Guard Stop 7501, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593–7501; telephone 202–372–1251.

[USCG–2013–0671, 78 FR 60146, Sept. 30, 2013]

§ 30.30–9 Evaluation.

Materials submitted in accordance with this subpart will be evaluated by comparison to the regulations in parts 5, 10, and 13 of this chapter, and by comparison to the U.S. laws referenced in those regulations.

[CGD 79–081a, 45 FR 23427, Apr. 7, 1980, as amended by CGD 97–057, 62 FR 51043, Sept. 30, 1997]