DEPARTMENT OF TRANSPORTATION UNITED STATES COAST GUARD

U.S. COAST GUARD (G-MTH-3) WASHINGTON, D.C. 20593 PHONE: (202) 426-1577

NVIC 3-85 19 MAR 1985

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 3-85

Subj: Bulk Liquid Cargo Finding Aid

- 1. <u>PURPOSE.</u> This Circular provides a reference source for identifying which regulations apply to the marine transportation of bulk liquid cargoes evaluated to date. Other pertinent information about the cargoes is also included.
- 2. <u>DIRECTIVES AFFECTED.</u> Navigation and Vessel Inspection Circular (NVIC) 4-81, and CH-1 to NVIC 4-81 are canceled.
- 3. <u>SCOPE.</u> This Circular is to be used strictly as a finding aid, and should not be used in any way as regulatory authority.

4. DISCUSSION.

- a. Since the publication of CH-l to NVIC 4-81, well over 100 new products have been evaluated and classified by the U.S. Coast Guard. These classifications involved cargoes transported by tankbarge, tankship, or both. Many commodities have been assigned an International Maritime Organization (IMO) reference cargo when carried by foreign flag vessels in U.S. waters. In addition, the Tenth Set of Amendments to the IMO Chemical Code (which incorporates many new products) and the International Bulk Chemical Code have been published.
- b. The Finding Aid lists in tabular form commodity names and the applicable parts of the Code of Federal Regulations governing their movement in bulk. These chemical names are to be used on all documents identifying the shipping name of the cargo. Trade names are not to be used as the sole identifying names on these documents. If cargoes are being shipped or considered for bulk shipment but are not listed in this Circular, contact COMMANDANT (G-MTH-3). Also included as separate entries for each commodity are applicable international Codes, other U.S. regulations, and useful, but not regulatory, information. Past users of the Finding Aid will find this edition to have a revised column format. The index should be carefully checked while becoming familiar with this new format.
- 5. SOURCES. The sources of the regulations and information are:
 - a. U.S. Coast Guard:
 - (1) 33 CFR Part 126, Handling of Explosives or Other Dangerous Cargoes Within or Contiguous to Waterfront Facilities (Cargoes Of Particular Hazard (COPH)).

- (2) 33 CFR Part 161, Vessel Traffic Management (Certain Dangerous Cargoes (CDC)).
- (3) 46 CFR Parts 30-40, Subchapter D Tank Vessels (flammable and combustible cargoes).
- (4) 46 CFR Part 150, Subchapter 0 Compatibility of Cargoes and Operational Requirements for Bulk Liquid Hazardous Waste Cargoes (cargo compatibility groups).
- (5) 46 CFR Part 151, Subchapter 0 Unmanned Barges Carrying Certain Bulk Dangerous Cargoes.
- (6) 46 CFR Part 153, Subchapter 0 Safety Rules for Self-propelled Vessels Carrying Hazardous Liquids and, Appendix I List of Cargoes Not Regulated Under Part 151, Part 153 or Subchapter D.
- (7) 46 CFR Part 154, Subchapter 0 Safety Standards for Self-propelled Vessels Carrying Bulk Liquefied Gases.
- (8) 46 CFR Part 154a, Subchapter 0 Special Interim Regulations for Issuance of Letters of Compliance to Barges and Existing Liquefied Gas Vessels (Annex cargoes).
- (9) The Chemical Hazards Response Information System (CHRIS).
- b. U.S. Environmental Protection Agency: 40 CFR Part 302, Designation, Reportable Quantities, and Notification (EPA's pollution category).
- c. International Maritime Organization (IMO):
 - (1) Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO Chemical Code), Resolution A. 212 (VII) including the 10th Set of Amendments.
 - (2) International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Chemical Code), Resolution MSC. 4(48), 1983 Amendments to the International Convention for the Safety of Life at Sea, 1974 (SOLAS), Volume II.
 - (3) Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IMO Gas Code for new ships), Resolution A. 328 (Ix) including 4 sets of amendments.
 - (4) Code for Existing Ships Carrying Liquefied Gases in Bulk (IMO Gas Code for existing ships), including 4 sets of amendments.
 - (5) International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (International Gas Carrier Code), 1983 Amendments to

the International Convention for the Safety of Life at Sea, 1974 (SOLAS), Volume III.

- (6) International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL) - Annex II, Noxious Liquid Substances (IMO's pollution category), and the Proposed Amendment to Annex II.
- 6. <u>Comments Desired</u>. Comments, additional information, corrections or suggestions for improving this Finding Aid should be sent to COMMANDANT (G-MTH-3), U.S. Coast Guard, Washington, D.C. 20593.

CLYDII. LUSK, Jr.
Chief, Office of Merchant Marine Safety

End: (1) Bulk Liquid Cargo Finding Aid

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- C:e Baltimore (45); Alameda (40); Port Arthur, Honolulu, Puget Sound (35); Miami, Mobile, Long Beach (25); Norfolk, Jacksonville, Portland OR (20); Boston, Portland ME, Charleston, Anchorage (15); Cleveland (12); Cincinnati, Louisville, Memphis, Nashville, Paducah, Pittsburg, St. Louis, Savannah, San Juan, Tampa, Galveston, Buffalo, Chicago, Detroit, Duluth, Milwaukee, San Diego, Juneau, Valdez (10) Providence, Huntington, Wilmington, Corpus Christi, Toledo (5).
- C:m New Orleans (140); New York (70); Philadelphia (35); Houston (25); St. Ignace (5); Sturgeon Bay (4).
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BULK LIQUID CARGO FINDING AID

MARINE TECHNICAL and HAZARDOUS MATERIALS DIVISION U.S. COAST GUARD U.S. DEPARTMENT OF TRANSPORTATION

INDEX to the BULK LIQUID CARGO FINDING AID

Column		Commont	
			Column
(COPH)		Cargo Of Particular Hazard, 33 CFR 126.	S
Α.	46 CFR 150, Car (1) Unassigned assistance (2) Additional	46 CFR 150, Cargo Compatibility. (1) Unassigned in the Compatibility Guide. For assistance call G-MTH-3, 202/426-1577. (2) Additional stowage criteria and was a stowage criteria and was a stowage criteria.	NS New Ship code. B Both new ship and existing ship codes. J. IMO Pollution Category, Annex II, MARPOL 73/78.
	Appe	Appendix I - Exceptions to the Chart, 46 CFR 150.	A, B, C, & D Pollution categories. @ Indicates either;
œ.	46 CFR 3	CFR 30-40, Subchapter D (Table 30.25-1).	 a. Pollution category rating is highest rating of several isomers not listed
· ·	Flammabi and 46 (A, E	Flammability/Combustibility Grade, 46 CFR 30.10-15, and 46 CFR 30.10-22. A, B, & C Flammable liquid. D, & E Combustible liquid.	separately in this NVIC, or b. Pollution category rating is for a substance similar to a commodity listed in this NVIC.
	LFG LCG	Liquefied Flammable Gas. Liquefied Compressed Gas.	K. IMO Pollution Category, Annex II, MARPOL 73/78, proposed revision.
D.	46 CFR 151,	.51, Subchapter O, Table 151.05 (tankbarges).	A, B, C, & D Pollution categories. 3 Appendix III substances.
<u>ы</u>	46 CFR 1	46 CFR 153, Subchapter O.	@ See same in Column J above.
	ID#	Table I (tankships). "Unregulated", Appendix I. Certain Dangerous Cargoes (CDC), 33 CFR 161. Note: CDC also includes all commodities	 L. EPA Pollution Category, 40 CFR 302. X, A, B, C, & D Pollution categories. @ See same in Column J above.
		(cargoes) listed in Table I.	M. CHRIS Code (principle Code).
٠ ب	46 CFR 1	154, Subchapter O, Table 4 (gas ships).	See also Remarks column for related CHRIS Codes.
5	46 CFR 1 A B	46 CFR 154a, Subchapter O (Annex cargoes). A Annex A, Letter Of Compliance (LOC) required. B Annex B, Letter Of Compliance (LOC) not	Remarks. Related, and isomeric CHRIS Codes. Isomer Codes are listed generally in the order: iso-, n-, sec-, tert-;
	×	required. Not presently authorized for carriage in U.S. Waters in bulk.	<pre>meta-, ortho-, para-, Other pertinent information.</pre>
ж.	IMO Chem Y	IMO Chemical Code, and International Bulk Chemical Code Y Commodities (carones) to which the Codes	
	Z	apply, Chapter VI/17 (as appropriate). Commodities (cargoes) to which the Codes do not apply, Chapter VII/18 (as appropriate).	N No, not included/regulated by. P Proposed for inclusion.

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ALKYL(C9-C15) BENZENES ALKYL BENZENE SULFONIC ACID ALKYL BENZENE SULFONIC ACID (4% or less)	(2)	¥			H		PB PB	Z Y		ရပမ္မ	^ 0 0	ABS	ABS
ALKYLENEAMINE IMO Ref: Polyethylene polyamines												AAE	
ALKYL PHOSPHORUS ACID ESTER -ALKYL PHTHALATES	34	4 ≻	ы				PB						
ALKYL SUCCINAIE FURMALDEHIDE HIDROXI AMINO CONDENSAIE (If it does not exceed 3.2% of total volume) ALLYL ALCOHOL	1.5	¥	ပ	X	H		PB A	>-		8	_ 	B ALA	
ALLYL CHLORIDE (COPH)	1		В	7	H 5		∢ 5	>->		ပ	<u>я</u>	C ALC	
2-(2-AMINOETHOXY)ETHANOL AMINOETHYLETHANOLAMINE N-AMINOETHYLPIPERAZINE	× × ×		ы	¥	T I I		PA A			- -	А	AEK AEE AEP	
2-AMINO-2-METHYL-1-PROPANOL (90% or less) IMO Ref: Aminoethylethanolamine	œ		ы		ΡΙ		PA					APR	
AMMONIA, anhydrous	H) 6		TCG	Υ 0	*	Y	¥		æ		ر ن	B AMA	46 CFR 98
AMMONIUM HYDROXIDE (28% or less Ammoniu)				Α Ν	Н		¥	>-		щ	၁ဨ ၁	; AMH	
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AMMONIUM PHOSPHATE Solution AMMONIUM PHOSPHATE, UREA Solutions AMMONIUM POLYPHOSPHATE Solution	43			000		z a m		Q	•	7 T
AMMONIUM SULFATE Solution (20% or less) AMMONIUM SULFIDE Solution (45% or less)	43			n		P.B	ø	ΘD	4	AMS
IMO Ref: (mono) Ethylamine Solution (72% or less), w/ modifications. AMMONIUM THIOSULFATE Solution (60% or less)	5		¥	PI		PA PY PB			ASS	
(iso-, n-) AMYL ACETATE AMYL ACETATE, Commercial sec-AMYL ACETATE	34	>	Q			zzz m	U	င ရမ္မီ ဗ	AEC AAS	IAT/AML/AAS/AYA
iso-AMYL ALCOHOL n-AMYL ALCOHOL (sec-, tert-, & primary) AMYL ALCOHOL	20 20	*	Ω			zzz m	D D	D D D	IAA AAN	
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BARIUM CARBOXYLATE (in oil) BARIUM SULFONATE (in oil) BEHENYL ALCOHOL BENZENE	20 32	<u>ል</u> ል አ	ыыыо	Ϋ́		PB A	O	o o	BNZ	
BENZENE, HYDROCARBON Mixtures (10% Benzene or more)	32			Y	_	PA Y		@ C	BHB	
(containing Acet	0 (2)			Y PI		PA PA Y		ම රි ස	BHA	
<pre>BENZENE, TOLUENE, XYLENE (having 10% Benzene or more) IMO Ref: Benzene, Hydrocarbon mix., cont. Benzene</pre>	32		B/C	¥		¥			BTX	
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	Commodity	BENZYL ALCOHOL BENZYL CHLORIDE (stabilized)	BICYCLIC TERPENEL POLYAMINE AMIDE SALT BUTADIENE (inhibited) BUTADIENE, BUTENE Mixtures (cont. Acetylenes)	BUTANES	BUTANE, PROPANE Mixtures BUTENE BUTEL ACETATE (180- n-) RITYL ACRYLATE (inhibited)	BUTYL ALCOHOL (all isomers) BUTYLAMINE (all isomers)	BUTYL BENZYL PHTHALATE BUTYLENE 1,3-BUTYLENE GLYCOL	BUTYLENE OXIDE TMO Ref: Propylene oxide, w/ modifications.	BUTYLENE POLYGLÝCOL n-BUTYL ETHER	BUTYL FORMATE iso-BUTYL FORMATE		BUTYL METHACRYLATE, DECYL METHACRYLATE, CETYL EICOSYL METHACRYLATE Mixture (inhibited)	BUTYL METHYL KETONE BUTYL STEARATE	BUTYL TOLUENE (1so-, n-, & crude) BUTYRALDEHYDE	BUTYRIC ACID IMO Ref: Propionic acid, w/ modifications.	gamma-BUTYROLACTONE	C-5 Mixture (15% or more Isoprene) (inhibited) IMO Ref: Isoprene	CALCIUM ALKYLPĤENATE CALCIUM ALKYL SALICYLATE	CALCIUM AMINO NONYL PHENOLATE	CALCIUM CARBOXYLATE CALCIUM CHLORIDE SOLUTIONS CALCIUM NAPHTHENATE, MINERAL OIL Mixture		Compatibility D.

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CYCLOHEXANONE, CYCLOHEXANOL Mixture IMO Ref: Cyclohexanone CYCLOHEXYLAMINE CYCLOPENTADIENE POLYMERS	18 (2) 7 30	Y	А	н	PA PB	>	Q	ပ	CYX	
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(iso-, n-) DECALDEHYDE DECANE DECENE	19 31 30	** ** >* >*			PB B		ົດ	ရှိုင္	DCC	IDA/ DAL
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DEXTROSE SOLUTION DIACETONE ALCOHOL	20	Υ			В	z	Ω	Q	DAA	
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DIBASIC ESTERS Mixtures DIBUTYLAMINE	34 7	- >		н	A K	Y		၁	DBA	
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Commodity	ortho-DIBUTYL PHTHALATE DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE See ETHYLENE DICHLORIDE 36 1,2-DICHLOROETHANE	2,2'-DICHLOROETHYL ETHER 2,2'-DICHLOROISOPROPYL ETHER 316 DICHLOROMETHANE 2,4-DICHLOROPHENOL 1,1-, 1,2-, or 1,3-DICHLOROPROPANE 36	1,2-DICHLOROPROPANE 1,3-DICHLOROPROPANE DICHLOROPROPANE, DICHLOROPROPENE Mixtures 1,3-DICHLOROPROPENE 2,2-DICHLOROPROPIONIC ACID	-DICHLOROPHENOXYACETIC	21 N	GLYCOL MONOBUTYL ETHER ACE GLYCOL MONOBUTYL ETHER ACE GLYCOL MONOBUTYL ETHER	DIETHYLENE GLYCOL MONOETHYL ETHER ACEIAIE DIETHYLENE GLYCOL MONOMETHYL ETHER DIETHYLENE GLYCOL MONOPHENYL ETHER ACETATE DIETHYLENE GLYCOL MONOPHENYL ETHER 7	See ETHYL ETHER	See also DIOCTYL PHTHALATE	Commodity A. Compatibility D. Tank barge F. B. Subchapter D E. I=Tankship G. C. Flam./Combust. U="Unreg." H.

	Remarks											DMC/DMG/DMY	, c						Remarks	EPA Pollution CHRIS Code
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BULK LIQUID CARGO FINDING	Commodity	DIHEPTYL PHTHALATE DI-n-HEXYL ADIPATE	DIHEXYL PHTHALATE DIISOBUTYLAMINE DIISOBUTYL CARBINOL	DIISOBUTYLENE		DIISODECYL PHTHALATE DIISONONYL ADIPATE	DIISONONYL PHTHALATE	DIISOOCTYL PHTHALATE DIISOPROPANOLAMINE	DIISOPROPYLAMINE DIISOPROPYL BENZENE	DIISOPROPYL NAPHTHALENE	DIMETHYL ACETAMIDE IMO Ref: Benzene, w/ modifications. DIMETHYL ADIPATE	(ngoo)	DIMETHYLAMINE DIMETHYLAMINE (40% or less) DIMETHYLAMINE Solution, 45% or less DIMETHYLAMINE Solution, greater than 45%, less than 55% DIMETHYLAMINE Solution, greater than 55%, less than 65%	DIMETHLYAMINE SALT of 2,4-DICHLOROPHENOXYACETIC ACID Solution (cont. 1% or less Dimethylamine) IMO Ref: 1,1,2-Trichloroethane, w/ modifications.	2-((2-(DIMETHYLAMINO)EIHIL)-MEIHILAMINO)EIHANOLAMINE IMO Ref: Di-n-propylamine, w/ modifications.	DIMETHYL AMMONIUM-2,4-DICHLOROPHENOXYACETATE Solution (70% or less) IMO Ref: Methylene chloride DIMETHYL BENZENE DIMETHYLCYCLICSILOXANE HYDROLYZATE (70% or less)	N,N-DIMETHYLCYCLOHEXYLAMINE DIMETHYLETHANOLAMINE	Dimethyl formal See METHYL FORMAL DIMETHYLFORMAMIDE DIMETHYL FURAN	Commodity	A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C. Flam./Combust. U="Unreg."

EPA Pollution CHRIS Code

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Gas ship Annex's IMO Chem. Code R

F. G. F.

. Б

Compatibility Subchapter D Flam./Combust.

CB.

AID	B C D E F G H I J K L M Remarks	P PB DPI P E PA PY DPI P E PB N DMO Y E PB DTL P E PB DMP	Y PB PB PN D Y E PB PN D	Y E P B N 3 D DOP C Y I A Y C D X DOX Y B N C DPN Y B DIL	Y E PB N B DPE Y E P I A Y B DPE P E PB Y B DPM C Y PI PA Y C D	Y E B N 3 DPG P E PB N D Y PB N DFF Y PB DSR	Y PB D DUP Y PB D DP Y PB N B DDN LAL Y D PB PN C DOD DDC for 1-	Y E B N C C DDB I PA Y DOS PI PA Y DDM Y PB N A DOL	Y LFG # Y A Y B C C EPC Y PB Y LFG # Y A B ETH E Y I A Y D D MEA	B C D E F G H I J K L M Remarks
BULK LIQUID CARGO F	Commodity	DIMETHYL GLUTARATE DIMETHYL HYDROGEN PHOSPHITE 2,2-DIMETHYLOCTANOIC ACID DIMETHYL PHTHALATE DIMETHYL POLYSILOXANE 34	2,2-DIMETHYLPROPANE-1,3-DIOL DIMETHYL SUCCINATE DINITRILES (crude) DINONYL PHTHALATE DI-(OCTYLPHENYL)AMINE	DIOCTYL PHTHALATE See also DI (2-ETHYLHEXYL)PHTHALATE 34 DIOLEFIN STREAM (containing 20% Benzene) (inhib.) 1,4-DIOXANE DIPENTENE 30 DIPHENYL	DIPHENYL, DIPHENYL OXIDE Mixtures DIPHENYL ETHER DIPHENYLMETHANE DIISOCYANATE DIPHENYL OXIDE, DIPHENYL PHENYL ETHER Mixture 7	DIPROPYLENE GLYCOL DIPROPYLENE GLYCOL DIBENZOATE DIPROPYLENE GLYCOL MONOMETHYL ETHER DISTILLATES, FLASHED FEED STOCKS DISTILLATES, STRAIGHT RUN 33	DIUNDECYL PHTHALATE DODECANE DODECANOL See also PROPYLENE TETRAMER 30 DODECYLAMINE, TETRADECYLAMINE Mixture IMO Ref: Dimethylethanolamine	DODECYLBENZENE See also DETERGENT ALKYLATE 32 DODECYL DIPHENYL OXIDE DISULFONATE Solution 43 DODECYL METHACRYLATE (inhibited) 14 DODECYL, PENTADECYL METHACRYLATE Mixture (inhibited) 14 DODECYL, PHENOL 21	EPICHLOROHYDRIN EPOXYLATED LINEAR ALCOHOLS, C11-C15 EPOXY RESIN ETHANE ETHANE ETHANOLAMINE (mono-) 8	Commodity

AID	
FINDING	
CARGO	
LIQUID	
BULK	

Commodity	A	В	U	ы В	r. G	н	7	L	Remarks
	ı								
ETHYLENE OXIDE (GOPH) ETHYLENE OXIDE (30% or less), PROPYLENE OXIDE Mixture IMO Ref: Propylene oxide, w/ modifications (Gas Code)	0 (1) 16	>	- < □	# I	Y A P PA	NS PY B		X EOX EPM	
ETHYLENE, PROPYLENE COPOLYMER (in liquid mixtures) ETHYLENE, VINYL ACETATE COPOLYMER EMÜLSION (in water)	43	> 4	푀	PU	д Ж		3		
ETHYLENE, VINYL ACETATE POLYMER (in aromatic naphtha)		۵.	Q		PB v				
ETHYL ETHER See DIETHYL ETHER (COPH) FILLY ETHER See 31s, OCTY, ALDEHYDE	41 19	>	a ∢	Ι	A A		D @3	B EET	
ID See also 2-ET	\ \	· >-			PB	z	Q		
2-ETHYLHEXANOL See also OCTYL ALCOHOL	20	>>	ш		D 23		၁	EHX	
See also ATE (inhibited)	14 7		ы	Y I	PA A	7 X	D D	EAI EHM	
ETHYL HEXYL PHTHALATE		X			PB				
ETHYL HEXYL TALLATE ETHYLIDENE NORBORNENE (inhibited)	34 30 (2)	¥	ЭО	Y PI	B PA	¥	æ		
ETHYL METHACRYLATE (inhibited) 2-FTHYL AFTHYL -2-MFTHOXYETHYL)ANILINE	14				PA	¥	Ω	CETM	
Z-Ennic of the control of the contro	6				PA			EEM	
ETHYL PROPIONATE 2-FTHY1-3-PROPYI ACROLFIN	34 19	۵,	ŒΙ	I X	¥		B	EPR	
ETHYL TOLUENE	32	> >	_		P.B	PN	æ	ETE	
FERRIC CHLORIDE Solutions	3		1	*	<u> </u>		9	@C FCS	FCL:
FORMALDEHYDE, METHANOL Mixtures									
	19 (2)			ΡΙ	PA			MTM	
FORMALDEHIDE SOLUTIONS (37-30%) IMO Ref: Formaldehyde Sol. 45% FORMALDEHYDE Solutions, 45% or less	19	Н	D/E	Ϋ́Ι	∢	>-	၁ ၁ ၁	@C FMS	FMS
.DE ACID	10 4	>	ᄄ	Ϋ́	PB A	z×	3 D D	FAM D FMA	-
Fuming sulfuric acid FURFURAL FURFURYL ALCOHOL	19 20	>	ыы	Y	Α	××	ပ	D FFA FAL	
GAS OIL, cracked GASOLINE BLENDING STOCK, ALKYLATES GASOLINE BLENDING STOCK, REFORMATES	33 33 33	***			P.B. P.B. B.B. B.B. B.B. B.B. B.B. B.B.			GOC GAK GRF	DM (5
Commodity	A		U	D	F.	H	-	M L	Remarks
A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C. Flam./Combust. U="Unreg."	e G I	Gas shi Annex's IMO Che	Gas ship Annex's IMO Chem.	Code	н. К.	IMO Ga IMO Po IMO Po	Gas Code Pollution Pollution	n A.	EPA Pollution CHRIS Code

BULK LI	BULK LIQUID CARGO FINDING	INDING AID	OI.			
	Ą	B C D	F	피	I J K L	M Renarks
GASOLINES: AROMATIC AUTOMOTIVE (cont. not over 4.23 grams lead per gal.) AVIATION (cont. not over 4.86 grams lead per gal.) CASINGHEAD (natural) POLYMER		O KKKKK	۵.	рв В Рв		GAR GAT GAV GCS GPL GSR
STRAIGHT RUN GLUCOSE Solution GLUTARALDEHYDE Solution (50% or less) GLYCERINE GLYCERINE See also GLYCERINE GLYCERINE GLYCERINE GLYCERINE	19 20 34	N >> >	U P PI	PB Y B N B B N	3 3 93	GTA GCR GCR
GLYCIDYL ESTER Of TERTIARY CARBOXYLIC ACID GLYCIDYL ESTER Of VERSATIC ACID GLYCOL DIACETATE See also ETHYLENE GLYCOL DIACETATE GLYCOL, RESINS, and SOLVENTS Mixture	34 34 33	国		PB PB PB		;
GLYCOL IKIACEIAIE GLYOXAL Solutions (40% or less)	19			PB PB		SOS
GREASE HEAVY AROMATICS HEPTADECANE UEDTANE	31	C D		PB B	•	HPT
n-HEPTANOIC ACID HEPTANOL 1-HEPTENE HERBICIDE (C15-H22-NO2-C1)	20 33 33 33	****		PB PB N PB N	a 0 0	HTN HTE
1		¥	Ħ	P.B.		
HEXAETHYLENE GLYCOL HEXAMETHYLENEDIAMINE ADIPATE HEXAMETHYLENEDIAMINE SOLUTION HEXAMETHYLENE GLYCOL HEXAMETHYLENE TETRAMINE	, ,	>- E3 €	Y PI) 0 0	_
HEXAMETHYLENIMINE HEXANE HEXANOL HEXANOL	31 20 30 8	Y B/C			M C D C C C C C C C C C C C C C C C C C	HXA IHA/HXA HXN HXE
HEXYL ACETATE See also MEIHIL AMIL ACETATE	200	ж ы			N 3	HXG
	,	×	I X	PB A	X D D	D HCL HCS
HYDROCHLORIC ACID, Spent (15% or less)		B	D	<u>6</u>	H J K	L M Remarks
Commodity A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C. Flam./Combust. U="Unreg."	irge F. ship G.	Gas ship Annex's IMO Chem.	Code	1. 7. X	IMO Gas Code IMO Pollution IMO Pollution	L. EPA Pollution M. CHRIS Code

LIQUID CARGO FINDING AID	A B C D E F G H I J K L M Remarks	1 X @B C B HFA 1 Y PA HFS 1 LFG X HXX X HDC X HFX	0 (1)	18 Y E B N D D IPH E I PA Y D IPI I PA Y I PD 30 30 A Y I A Y B D C PB IPR		33 Y B JPT 33 Y B JPT 33 Y B JPF 33 Y B	43 Y D B KRS 18 P E PU PB 5 Y D B A KRS 7 Y D B B A D D LTA	Y PB 3 43 Y PB 9D LLS 43 U PB eD LLS 31 LFG LFG LPG 31 LFG LPG LPG	0 (2)	11	A B C D E F G H I J K L M Remarks	ge F. Gas ship I. IMO Gas Code L. EPA Pollution ip G. Annex's J. IMO Pollution M. CHRIS Code
BULK L	Commodity	HYDROFLUORIC ACID HYDROFLUOROSILICIC ACID (25% or less) HYDROGEN HYDROGEN CHLORIDE HYDROGEN FLUORIDE	HYDROGEN PEROXIDE Solutions (over 8%, but not over 60%) HYDROGEN PEROXIDE Solutions (over 60%, but not over 70%) 2-HYDROXYETHYL ACRYLATE (inhibited) INDUSTRIAL WASTE (contaninig Dimethyldisulfide, Methyl mercaptan, and Methomyl)	ISOPHORONE DIAMINE ISOPHORONE DIAMINE ISOPHORONE DIISOCYANATE ISOPRENE (inhibited)	iso- LOOK UNDER PARENT COMPOUND	JET FUELS: JP-1 (Kerosene) JP-3 JP-4 JP-5 (Kerosene, heavy)	KAOLIN CLAY SLURRY KEROSENE See also JET FUEL, JP-1 or OIL, FUEL NO. 1 KETONE RESIDUE (mixed ketones) KRAFT BLACK LIQUOR (Caustic soda, 1% or less) LACTIC ACID	LARD LATEX, LIQUID SYNTHETIC LICONIN LIQUOR (Calcium lignosulfonate solution) LIQUEFIED NATURAL GAS LIQUEFIED PETROLEUM GAS	MAGNESIUM ALKYL SALICYLATE (in oil) MAGNESIUM CHLORIDE SOLUTION MAGNESIUM HYDROXIDE, WATER SUSPENSIONS MAGNESIUM NONYL PHENOL SULFIDE MAGNESIUM SULFONATE	MALEIC ANHYDRIDE MALEIC ANHYDRIDE COPOLYMER MAPP Gas See METHYL ACETYLENE, PROPADIENE MIX. 2-MERCAPTOBENZOTHIAZOLE (in liquid mixtures)	Commodity	A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship

BULK LIQUID	CARGO	B C	1 1		ы	E.	=	н	ר	×	긔	 _	Remarks	l
Commodity			,		-	Δd			C	Ω	W	MSO		
(inhibited)	18 4 5		э н	Д	I I I	PA PA	7. Y)	n D m	A A	MAD		
YLONITRILE See FORMALDEHYDE in METHANOL Solutions rm Cae ING (COPH)	31	Ϊ.	LFG		#	Ϋ́		æ			Σ	MTH		
RIGLYCOL	40	>- >-	ыc			PB B	z		Q	3 D	ΣΣ	MTG		
METHYL ACETATE METHYL ACETOACETATE METHYL ACETYLENE, PROPADIENE Mixture METHYL ACETYLENE, PROPADIENE Mixture	330 14 14	· }	LFG	7 7	# I	PB Y PA A	A A K	М	ပ	ပ	ΣŽ	MAP		
METHYL ACRYLATE (inhibited)	20	¥	ပ	1			B			3	O a	MAL		
OL (anhydrous) Solutions (42% or lo ACETATE	7 7 34 20	× ×	Ω	م م. م	PI	PA B PB	N N N		Q	ပပပ		MSZ MAC MAA		
See also	18	≯		>	*	>-	89 e	NS		ပ	ΣΣ U	MAK MTB		
See also AMYL	36 41 (2) 19	* *	ပ	4	=	്.പ് പ _്	N N			Ω	2.	MBE		
METHYL BUTYRATE	34 36	<u>م</u>	LFG	X	*	¥	⋖	æ			×	MBU		
See 1,1,1-TRICHLORO ADIENYL MANGANESE TRICARBONYL See DICHLOROM	3		ഥ				×	> -	В	@D	້ວ	MCT		
4,4'-METHYLENEDIANILINE (43% or less), POLYMETHYLENE POLYPHENYLAMINE, o-DICHLOROBENZENE Mixture IMO Ref: Chlorohydrins, crude w/ modifications.	56	;	म्ब र		PI		PA PA	> 2			Д	MDB MEN MEK		
2-METHYL-6-EINTL ANILING METHYL ETHYL KETONE	18	×	ا ر	>	۰		> د	: >	ď	<u></u>		MEP		
2-METHYL-5-ETHYL PYRIDINE METHYL FORMAL (Dimethyl formal)	9 41 34	7	ы «	×	ĭ		A A	. .	1			MEM		
METHYL FORMATE METHYL HEPTYL KETONE METHYL - LEYNDOYY-3-RITYNE	18 20	7			ΡΙ		PB PA	×				MHB		
Z-METHYL ISOBUTYL CARBINOL See also METHYLAMYL ALCOHOL METHYL ISOBUTYL KETONE	20 18	* *	QUU	>	-			z×	_	םםם	0 D D D D	MIK MMM		
METHIL METHACKTATE (inhibited) 3-METHYL 3-METHOXY BUTANOL 3-METHYL-3-METHOXY BUTYL ACETATE	14 32	X	>	•			PB F PB F PB	N N N N		4	∢	MNA		
METHYL NAPHTHALENE	,	<u>~</u>	C	h	H	124	ပြ	F	<u> </u>		Z L	Σ	Remarks	1 1
0.0	ip G.	Gas		۵		H7:	HH:	IMO G	as 011	Gas Code Pollution	a C C	'nΣ	EPA Pollution CHRIS Code	_
		IWO	Chem.		Code		⊣		170	nr T	=			

AID	
FINDING	
CARGO	
LIQUID	
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COMBODITY	A	2	اد		되	= 의	_	ے ح	7	Σ	Remarks
METHYLOLUREAS (20% free Formaldehyde) IMO Ref: Formaldehyde Sol. 45% METHYL PENTENE	19	¥		PI	ш	PA PB N	-	О Д	v	MUS	
2-METHYLPYRIDINE 3-METHYI PYRIDINE	6		Q	Y PI	u	PA Y	٨.	н	ВЪ	MPR	MPE/MPF
IMO Ref: 2-Methylpyridine 4-METHYLPYRIDINE	0 0			P.I. P.I		PA PY PA PY		-	æ	MPE MPF	MPR/MPF MPE/MPR
N-METHYL PYRROLIDONE alpha-METHYL STYRENE (inhibited) MINERAL SPIRITS MOLASSES	9 33 20 20	* *	Ω Ω	× .	ı O	PB Y B B B B B B B B B B B B B B B B B B	. .	Ω Ω	3 A B	MPY MSR MNS	
mono- LOOK UNDER PARENT COMPOUND											
MONOCHLORODIFLUOROMETHANE see REFRIGERANT GASES MORPHOLINE MOTOR FUEL ANTIKNOCK COMPOUNDS CONTAINING	36		DOL	~ ≻- ≻-	u	4 A	ν.	C	Ω	MCF MPL	
LEAD ALKYLS (COPH)	0 (1)		D/E			Α	١.	@A @A	A PA	MFA	
NAPHTHA: AROMATIC (10% or less Benzene) COAL TAR CRACKING FRACTION HEAVY	33 33 (2)	* **	Q 8	_	н	B PB Y PB	N .			NCT	
PARAFFINIC PETROLEUM SOLVENT STODDARD SOLVENT VARNISH MAKERS' and PAINTERS' (75%)	3333 3333 3333 3333 3333	****	QO			2 Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	zz			PTN NSV NSS NVM	
NAPHTHALENE (molten) NAPHTHENIC ACID NITRIC ACID (70% or less) NITRIC ACID (greater than 70%) NITROBENZENE (mono-)	32 4 3 0 (1) 42	>	ᄓ			AXA Y	N. N.N.N.	A A A C C C C C C C C C C C C C C C C C	##000 0000	NTM NTI NCD NTB	NAC
ortho-NITROCHLOROBENZENE See also 2-CHLORONITROBENZENE NITROGEN (11quid) Nitrogen dioxide See NITROGEN TETROXIDE NITROGEN TETROXIDE ortho-NITROPHENOL (molten)	42 0 (2)	۵,		PI I	,	44 ×4	B K K	@ 80 81	в ® В ® В	CNO NXX NOX NTP	CNP NIP/NPH
Commodity	A	В	ပ	6	EI E-	투 얼		F	ť	Σ	Remarks
A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C. Flam./Combust. U="Unreg."	e o E	Gas shij Annex's IMO Che	Gas ship Annex's IMO Chem.	Code	H.Y.X	IMO IMO IMO	Gas Poll	Gas Code Pollution Pollution	1 5 5	Är.	EPA Pollution CHRIS Code

	Remarks							EVO		Remarks	EPA Pollution CHRIS Code
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	J	Q	D D	QQ		QQ	999	QQ		\succeq	Gas Code Pollution Pollution
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CARG											F O H
LIQUID CARGO FINDING AID	V	34 34	34 34	34 34 34	34	34 34 34	34 34 34	34 34 34 34	34	A	
LIQ	, 		V/V/					6.46.6	60		rge hip 8.
BULK				E OIL D OIL	T OIL	T OIL	D 01L				Tank barge I=Tankship U="Unreg."
·				also MAIZE AISIN SEED	also PEANUT e also CORN	also GROUNDNUT	GRAPESEED				Tan I=T U="
				also M	so P also	GROU	GRAP				Б.
				<u>~</u>	al se	lso '	also (t. 54
				a1	See S	See	e 8				illiter I
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											Compatibility Subchapter D Flam./Combust
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	Commodity	: gu	YL ESTER esterified ATTY ACID	SEED SEED FATTY ACID ED				(Commodity	
	COM	including: R	L ES ster FTY	rty				lize		Com	
			ETHY L, e L FA') FA	g	ren Ser	0	ooxio			
		EDIBLE OILS, i BABASSU BEECHNUT CASTOR COCOA BUTTER	COCONUT COCONUT, METHYL ESTER COCONUT OIL, esterifie COCONUT OIL FATTY ACID COD LIVER		GROUNDNUT HAZELNUT LARD MAIZE MUSTARD SEED	NUTMEG BUTTER OLIVE PALM PEANUT	RAISIN SEED RAPESEED RICE BRAN SAFFLOWER SALAD	SESAME SOYA BEAN SOYBEAN (epoxidized) SUNFLOWER SEED TUCUM	LE		
		IBLE OIL BABASSU BEECHNUT CASTOR COCOA BU	COCONUT, COCONUT, COCONUT OCCOONUT OCCO	N N S	GROUNDNUT HAZELNUT LARD MAIZE MUSTARD S	NUTMEG OL IVE PALM PEANUT	RAISIN SER RAPESEED RICE BRAN SAFFLOWER SALAD	SESAME SOYA BEAN SOYBEAN (SUNFLOWER	VEGETABLE WALNUT		
		BAI BAI BEE CAS COC	888888	CORN COTTC COTTC FISH GRAPE	GROUN HAZELI LARD MAIZE MUSTAI	NUTME OLIVE PALM PEANU'	RAISII RAPESI RICE I SAFFLC SALAD	SESAME SOYA E SOYBEA SUNFLC	VEG		
	'	ഥ니								1 1	

Commodity A B C D E F G H I J K L M kemarks

BULK LI	BULK LIQUID CARGO FINDING AID	O FIND	ING A								
Commodity	A	m	O	DE	<u> </u>	ပ	H	7	K	Σ	Remarks
MISCELLANEOUS OILS, including (cont): TANNER'S TUNG TURBINE	33 34 33	***	-			PB 8			Q	OTN	
WHALE WHITE (mineral) WOOD	33	***				PB PB PB					
Oleamide alpha-OLEFINS (C6-C18) OLEIC ACID OLEUM OLEVM OLEY OLEVM	30 4 0 (1,2)	> >	ഥ	Ι ×		PB P PB P PB P	PN Y	ပ	ပ္စ္ထပ္က	OLA	
ORGANIC AMINE 70 (mixture of high molecular weight alcohol amines) OXYALKYLATED ALKYL PHENOL FORMALDEHYDE OXYGEN n-PARAFFINS (C-10 to C-20)	33	≯ ₫	Q			PB PB P	N		D	ОХУ	
PARALDEHYDE PENTACHLOROETHANE PENTADECANOL 1,3-PENTADIENE (inhibited) 1,4-PENTADIENE IMO Ref: Isoprene	36 30	>		н н		PA PB PA	** *	æ	OM O	C PDH X PCE PDC B PDI PDN	PDN
PENTAETHYLENE GLYCOL PENTAETHYLENE HEXAMINE IMO Ref: Triethylenetetramine PENTAETHYLENEHEXAMINE, TETRAETHYLENEPENTAMINE Mixture (1so-, n-) PENTANE	, 7 31	* *	¥			PB PA PB	z	စ္ခ	စ္	PEH	IPT/PTA
PENTASODIUM SALT of DIETHYLENETRIAMINE PENTAACETIC ACID Solution 1-PENTENE PENTENE, MISCELLANEOUS HYDROCARBON Mixture 3-PENTENEITRILE	43 30 30 (2) 37	≯ ₽	ပရ	۵.	b	РВ Р РВ	N N		ρO	PTE	
PENTYL ALDEHYDE PERCHLOROETHYLENE See 1,1,2,2-TETRACHLOROETHYLENE PETROLATUM PHENOL PHENOL PHENOLATED OILS IMO Ref: Coal tar naphtha	19 36 21	>-	ОЯ	1		PA B A	z×	E E	@B @X B C	X PER PTL C PHN PHO	
Commodity	A	M	U	Ω	ᄺ	ပြ	H	\vdash		Z L	Remarks
A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C. Flam./Combust. U="Unreg."	n G. ₽.G.±	Gas ship Annex's IMO Chem	Gas ship Annex's IMO Chem.	Code	X	IMO IMO IMO	0 Gas 0 Poll 0 Poll	Gas Code Pollution Pollution	de Lon Lon	Ä.	EPA Pollution CHRIS Code

BULK L	BULK LIQUID CARGO	O FIN	FINDING	AID								
Commodity	A	m	S	D	íz,	미	H	\neg	\times	니	- - -	Remarks
1-PHENYL-1-XYLYL ETHANE PHOSPHORIC ACID PHOSPHORUS (elemental) PHOSPHORUS TRICHLORIDE PHOSPHORUS (yellow, or white)	32 1 0 (1)	Δ.	丘	# X X		PB PN A Y X	Z	D A B	O & O A	D PAC X C PPT X PPW		PPW/PPR/PPB PPR/PPB
PHOSPHOSULFURIZED BICYCLIC TERPENE PHTHALATE PLASTICIZERS PHTHALIC ANHYDRIDE (molten) Picoline PINENE	11 30	* * *	缸	I X		B A B	> z	O	ე ∢	D PAN PIN	3 3	
POLYALKENYL SUCCINIC ANHYDRIDE AMINE POLYAMINE, AMIDE Mixture POLYBUTADIENE, HYDROXYL TERMINATED POLYBUTENE POLYDIMETHYLSILOXANE	33 20 34 34	K 10 K K	ដោយ			PB BB P	Z Z		n	PI	PLB	
POLYETHYLENE GLYCOLS POLYETHYLENE GLYCOL MONOALKYL ETHER POLYETHYLENE POLYAMINES POLYISOBUTYLENE POLYISOBUTYLENE POLYMERIZED ESTERS	40	* **		ı ×		PB PA PB PB	N Y		© ©	A.	PEB	
POLYMETHYLENE POLYPHENYL ISOCYANATE POLYMETHYLSILOXANE POLYPROPYLENE POLYPROPYLENE GLYCOLS POLYPROPYLENE GLYCOLS	12 34 30 40 40	***	ഥ ഥ	∀		A PB PB B	> z		о о		PPI PLP PGC PGC	
POLYSTYRENE DIALKYL MALEATE PROPANE 1so-PROPANOLAMINE (mono-) n-PROPANOLAMINE beta-PROPIOLACTONE	31 8	**	គម្ ភូមិ ភូមិ	>	* 11	X A A A X	B ≻≻≻	၁ ရ	ပပ႖		PRP MPA P PLA P	PLA/PRM PRM
PROPIONALDEHYDE PROPIONIC ACID PROPIONIC ANHYDRIDE PROPIONITRILE (1so-, n-) PROPYL ACETATE	19 4 11 37 34	>	ODM O	Y H I I		BAAAB	Z X X X X	ooo S	ရေပပ	00	PAD PNA PCN I	IAC/PAT
(1so-, n-) PROPYL ALCOHOL 1so-PROPYLAMINE n-PROPYLAMINE PROPYL BENZENE 1so-Propyl benzene	20 7 7	* *	∪∢m	>-	нн	P A A B	e Z X X	Θ Ο	ရ ီပပပ	11 Q	I IPP I PRA I	IPA/PAL IPO/PRA IPO/IPP
Commodity	A	m	o	P	H	ဗ			$ \cdot $		Σ	Remarks
A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship G. Flam./Combust. U="Unreg."	Ege TP G.		Gas ship Annex's IMO Chem.	. Code	e HJR	. IMO IMO IMO			Code .ution	'nέ		EPA Pollution CHRIS Code

BULK LIG	BULK LIQUID CARGO FINDING	FINDIN	3 AID						
Commodity	A	B C	DE	F G	H	ᅱ	K	Σ	Remarks
PROPYLENE PROPYLENE BUTYLENE POLYMER PROPYLENE GLYCOL PROPYLENE GLYCOL PROPYLENE GLYCOL MONOETHYL ETHER PROPYLENE GLYCOL MONOMETHYL ETHER	30 20 20	Y E Y Y E Y	#	Y PB BB	ZZZ	æ	ღმმ	PPL PBP PPG PME	
PROPYLENE OXIDE PROPYLENE POLYMER (in liquid mixtures) PROPYLENE TETRAMER PROPYLENE TETRAMER PROPYLENE TRIMER iso-PROPYL ETHER (inhibited)	16 30 41	ч ж	и Х	PB B B PA	* ZZ>	æ	д гг Э	POX PTT IPE	
iso-Propyl toluene See also 1,2,4-TRIMETHYLBENZENE PYRIDINE PYRIDINE PYRIDINE BASES IMO Ref: 4-Methylpyridine, w/ modification	32 9 9	γ S	7	B ∢	*	Ø	ж ж	PRD	TME
PYROLYSIS GASOLINE (containing more than 5% Benzene) IMO Ref: Benzene, Hydrocarbon mix., cont. Benzene PYROLYSIS RESIDUAL FUELS	33 33		P PI	PA PA				GPY PRF	
REFRIGERANT GASES: DICHLORODIFLUOROMETHANE (See also) DICHLOROMONOFLUOROMETHANE DICHLOROTETRAFLUOROMETHANE		>		*		æ	Q	RFG DCF DFM DTE	
<pre>(mono)CHLORODIFLUOROMETHANE (See also) (mono)CHLOROTETRAFLUOROETHANE (mono)CHLOROTRIFLUOROMETHANE</pre>		¥						MCF MTE MCM	
RUM SALICYLALDEHYDE SEWAGE SLUDGE SILICON TETRACHLORIDE IMO Ref: Chlorosulfonic acid, w/ modifications.	20 19 43	> -	19 9 U 19	B PA		Ω	Q	SAL	
SLUDGE (Stable, non-corrosive, non-toxic, and non-flammable.) SODIUM ACETATE, GLYCOL Solutions SODIUM BOROHYDRIDE (15% or less), SODIUM HYDROXIDE Solution SODIUM BROMATE Solution	s	Y El	U PI	J PA	>		v	SBX	SBH/SBI
SODIUM CARBONATE Solutions SODIUM CHLORATE Solution (50% or less) SODIUM CYANIDE Solution (30% or less)	5 0 (2) 5		U Y PI	J PB	>-		3 @A @A	SDD SCS	SDC
Commodity	A	В	Q	E F G	F		¥	Σ	Remarks
A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C. Flam./Combust. U="Unreg."	о От. F. O. T.	Gas ship Annex's IMO Chem	ship x's Chem. Code	 X	IMO G IMO P IMO P	Gas Code Pollution Pollution	Code ution ution	JÆ.	EPA Pollution CHRIS Code

BULK LI	BULK LIQUID CARGO FINDING	FINDING	AID				
Commodity	¥	ВС	DE	F G H	I J K	L M Remarks	
SODIUM DICHROMATE Solution (70% or less) SODIUM DIMETHYL NAPHTHALENE SULFONATE Solution SODIUM HYDROSULFIDE, AMMONIUM SULFIDE Solution	0 (2) 34 (2)	_	P PI	PA Y PB	@C B	SDL SCR	
IMO Ref: (mono) Ethylamine solution (72% or Less) w/ modifications.		4	PI	PA PY		SSA	
	5	ပ	н	PA Y	9 C	OD SHR	
SODIUM HYPOCHLORITE Solution (15% or less)	5		I	PA Y	ပ	SHP	
SODIUM LIGNO SULFONATES, SUDIUM HYDROXIDE (not exceeding 1% by weight) Solution			n	PB			
	5		PI	PA Y		SMB	
Solution (33% or lications.	7		Ē	PA		SMD	
SODIUM NAPHTHENAIE SOLUCIONS (Iree alkali, 3% of less) SODIUM POLYACRYLATE Solution	43 (2)		0 5				
SODIUM SALT of FERRIC HYDROXYETHYLETHYLENEDIAMINE TRIACETIC ACID Solution	43		P PI			STA	
SODIUM SILICATE Solution SODIUM SULFIDE Solutions	43 (2)		U d		O 88	SSC SDS	
SODIUM SULFIDE, HYDROSULFIDE Solution (H2S orester than 200 ppm)	0 (1)		>			SSJ SSH/SSI/SSJ	
SULFIDE, HYDROSULFIDE So greater than 15 ppm, les			Y			SSI	
SODIUM SULFIDE, HYDROSULFIDE Solution (H2S, 15 ppm or less)			¥			SSH	
SODIUM SULFONATE		¥		PB			
SUBLUM THIOUTANAIE SOLUTION INO Ref: Cresols, w/ modifications.	0 0	G	P PI	PA B	93	STS SCY	
SORBLIUL SOLUTIONS STEARIC ACID	7	۲ ۲	0	PB	ָ ט	SRA	
STEARYL ALCOHOL STODDARD SOLVENT	33	γ γ γ	-	PB PB	(e) 3	NSS STY	
SITKENE (monomer) (intidiced) SUBSTITUTED PHENOL (in oil) SULFOLANE	36	A Y		_			
SULFUR (molten)	0 (1)	ы	X X	A Y Y PA	3 NS	SXX SFD	
Spent	2 (2) 2		Ι Χ	A Y Y	ပ	C SFA SAC	
Commodity	A	B	D	F G	I J K	L M Remarks	
A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C. Flam./Combust. U="Unreg."	то е Н.	Gas ship Annex's IMO Chem.	opoo.	I. IMO J. IMO K. IMO	Gas Code Pollution Pollution	L. EPA Pollution M. CHRIS Code	uo

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LIQUID	
BULK	

A B C D E F G H I J K L M Remarks	P E . P P E . P D P E .	34 Y D B D D TLO 34 (1) P E PB 20 Y PB TFA 1,3-DICHLOROPROPENE	Second Control	CK COMPOUNDS 7 E Y I A Y D TTP CK COMPOUNDS 41 C P I PA Y D D C THF 32 Y E B N C C THN	OCK COMPOUNDS Y PB 43 U PB PN proposed. 2 PA D D TIT	32 Y C B N C C TOL 9 PI PA Y C X TDA (COPH) 12 E Y I A Y B C B TDI TDD	9 E PI PA Y C TLI 34 Y E PB 34 P E PB N TBP 36 E PI PA Y B B TCB 36 U PB N @C B C TCE	36 I PA Y @C B X TCM 36 Y I PA Y B B C TCL 36 Y PI PA Y B TCN 36 U PB TCN	A B C D E F G H I J K L M Remarks	n Tank haroo F. Gas shin I. IMO Gas Gode I. EPA Pollution
Commodity	SULFURIZED ALIPHATIC ALCOHOL SULFURIZED ALKYL PHENOL (in oil) SULFURIZED C4-C8 OLEFIN (in oil) (30% or less) SULFURIZED C4-C8 OLEFIN (in oil) (31% or more) SULFURIZED C6-C10 OLEFIN (in oil)	TALLOW TALLOW FATTY ACID TALLOW FATTY ALCOHOL TALLOW NITRILE Telone	1,1,2,2-TETRACHLOROETHANE 1,1,2,2-TETRACHLOROETHYLENE TETRADECANOL TETRADECENE TETRADECENE TETRADECENE	TETRAETHYLENE GLYCOL TETRAETHYLENEPENTAMINE Tetraethyl lead See MOTOR FUEL ANTIKNOCK COMPOUNDS TETRAHYDROFURAN (stabilized)	Tetramethyl lead See MOTOR FUEL ANTIKNOCK COMPOUNDS TETRAPROPYL BENZENE TETRASODIUM SALT of EDTA Solution TITANIUM TETRACHLORIDE IMO Ref: Unassigned. Min. carriage req. proposed.	TOLUENE TOLUENEDIAMINE TOLUENE DIISOCYANATE TOLUENE DIISOCYANATE, DIPHENYLMETHANE DIISOCYANATE Mixtures IMO Ref: Toluene diisocyanate	o-TOLUIDINE TRIARYLPHOSPHATE TRIBUTYL PHOSPHATE 1,2,4-TRICHLOROBENZENE 1,1,1-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE TRICHLOROETHYLENE 1,2,3-TRICHLOROPROPANE 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	Commodity	A. Compatibility I

BULK LIQUID		CARGO FINDING AID	3 AID							
Commodity	A	ВС		ഥ	비비	I I	K	Σ	Remarks	
RICRESYL (TRITOLYL) PHOSPHATE (containing		>			PB N	(9B	¥	TCP		
less than it, or the orthory representations TRICRESYL (TRICOLYL) PHOSPHATE (containing if, or more of the orthorisomer)				н	PA Y	9 8	∢	TCO		
	34						ć	N. C.		
	20 30 32				8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	z	າ ຕ	10C		
TKIDECILBENZENE	∞	EJ ·	> :	н,	∢.	> :		TEA		
	32 32	×× ∨¤≖	>-	-	4 8 8 4 2 2		o ∀ €			
OL OL BUTYL ETHER Mixture	40 40					· 7-	6			
DIETHYL BUTYRATE FTHER Mixture	70	≻ d ;			P.B.					
IER	7	E E	¥	1		¥	၁ဝ	TET		
	_			PI		PY		TPI		
TRIETHYL PHOSPHITE TRIISOOCIYL TRIMELLITATE	34 (2) 8	Y	¥		PB PB	z	Q	TIP		
SALT of 2,4-DICHLOD Solution	'		Δ.	PI	PA P	PY		TSA		
IMO Ref: Aminoethylethanolamine, w/ modifications.	?	٠			č	>	c	ТАА		
TRIMETHYLACETIC ACID TRIMETHYL BENZENE See also PSEUDOCUMENE	32	л Х		1	PB	. z	ပ ရောရာ	TME	TMD/TME/TMB	
ENZENE See XYLENE, para-ETHYL T TO IMPTIVITENT		P D		PI	PA	; > -	Q	THA		
2,2,4- and 2,4,4-initialiiiziiiziiiziiiziiiziiiziiiziiiziiizi		;		Ιd	PA	¥	æ	THI		
2,2,4-TRIMETHYL PENTANEDIOL-1,3-DIISOBUTYRATE 2,2,4-TRIMETHYL 1 3-PENTANEDIOL-1-ISOBUTYLATE	34		-1 (PN	@C	TMP		
2,2,4-TRIMETHYL-3-PENTANOL-1-ISOBUTYRATE TRIMETHYL PHOSPHITE	34	- ≻	ш	PI	P P A	¥		TPP		
TRIPROPYLENE See also PROPYLENE TRIMER	30 40	- 	ы		PB PB	Z:	m (TGC		
TRIPROPYLENE GLYCOL TRIPROPYLENE GLYCOL MONOMETHYL ETHER TRISODIUM NITRILOTRIACETATE Solution	40 34	×	ш,	P PI	PB	z	a			
Command tv	A	В	D D	D E	F	H	J	W T	Remarks	
	e F.	Gas ship Annex's			1. I	IMO Gas	Gas Code Pollution	'nΣ	EPA Pollution CHRIS Code	
Flam./Combust.		IMO C		Code		MO POL	lution			

AID
FINDING
CARGO
LIQUID
BULK

Commodity	A	m	ပ	D E	ſΞŧ	E H	П	J	1	Σ	Remarks
TRISODIUM SALT OF N-HYDROXYETHYLETHYLENEDIAMINE TRIACETIC ACID Solution Tritclyl phosphate TRIXYLONYLPHOSPHATE TURPENTINE	43	7. 7.	, Q	n		PB PN PB N		B B	4	TRP TPT	
TURPENTINE SUBSTITUTE (White spirit) UNDECANOL UNDECENE UNDECENE UNDECYL ALCOHOL UNDECYLL ALCOHOL UNDECYLLENE	20 30 32	***				PB PB PN PB PN PB		8 8	~ ~	UND UDC UDB	
UREA, AMMONIUM NITRATE Solution (more than 2% Ammonia) UREA, AMMONIUM NITRATE Solution (2% or less Ammonia) UREA, AMMONIUM PHOSPHATE Solutions UREA, AMMONIUM Solution, containing aqua Ammonia	6 43			PHOD		PB PA PB N		QQO	0.00	UAS	URE UAS
(iso-, n-) VALERALDEHYDE VANILLIN BLACK LIQUOR VINYL ACETATE (inhibited) VINYL ACETATE, FUMARATE COPOLYMER VINYL ACETATE, (inhibited)	19 5 13 34 35	*	C F D/E LFG	I # X X	*	PA Y PB Y	m	၁ ၁	D ×	VAK VBL VAM VCM	IVA/VAL 46 CFR 40
VINYL ETHYL ETHER (inhibited) VINYLIDENE CHLORIDE (inhibited) VINYL NEODECANATE (inhibited) VINYL TOLUENE (inhibited) WATER	13 35 13 13		Aad	X H		PA Y Y Y Y Y	m m	м	D B C	VEE VCI VND VNT	
WAXES: CANDELILLA CARNAUBA PARAFFIN PETROLEUM	34 31	***	म म			PB BB N	_	(,,	e	WCA	
WHITE SPIRIT See also TURPENTINE SUBSTITUTE WHITE SPIRIT, low aromatic WINE WOOL GREASE (m-, o-, p-) XYLENE See also DIMETHYL BENZENE	32	****	Q			N 889 N 889 N 889 N 8		(BB) 33 (BC) C	ပ အမှားရာ		WSP XLX XLM/XLO/XLP
XYLENE, ETHYL BENZENE Mixtures XYLENOLS ZINC BROMIDE, CALCIUM BROMIDE Solution ZINC DIALKYLDITHIOPHOSPHATE	43	д >	D/E		I D	PA Y B	χ.		ပ အ	XYL	
Commodity	A	m	U		E.	비		5		Σ	Remarks
A. Compatibility D. Tank barge B. Subchapter D E. I=Tankship C Flam / Combust II="Illargo."	E O E	Gas Anne TMO	Gas ship Annex's TMO Chem	o de	i i X	IMO		Gas Code Pollution	e c	L M.	EPA Pollution CHRIS Code