

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

46 CFR Parts 30, 150, and 153

[Docket No. USCG–2013–0423]

RIN 1625–AB94

2013 Liquid Chemical Categorization Updates

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: The Coast Guard is finalizing its 2013 proposal to update the Liquid Chemical Categorization tables, aligning them with the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk and the International Maritime Organization's Marine Environment Protection Committee circulars from December 2012 and 2013. This final rule corrects errors in our interim rule of August 16, 2013, and follows our supplemental notice of proposed rulemaking of October 22, 2015. The updated tables provide a list of liquid hazardous materials and liquefied and compressed gases approved for international and domestic maritime transportation, and indicate how each substance is categorized by its pollution potential, safe carriage requirements, chemical flammability, combustibility, and compatibility with other substances. This rule imposes no cost to chemical shippers and vessel owners.

DATES: This final rule is effective May 18, 2020.

ADDRESSES: You may view comments identified by docket number USCG–2013–0423 using the Federal eRulemaking Portal at <https://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: For information about this document call or email LT Jake Lobb, Coast Guard; telephone (202) 372–1428, email Jake.R.Lobb2@uscg.mil, or Dr. Raghunath Halder, Coast Guard; telephone (202) 372–1422, email Raghunath.Halder@uscg.mil.

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I. Abbreviations

CFR Code of Federal Regulations
 DHS Department of Homeland Security
 FR Federal Register
 IBC Code International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
 IMO International Maritime Organization
 LCC Liquid Chemical Categorization
 MARPOL International Convention for the Prevention of Pollution From Ships
 MEPC Marine Environment Protection Committee
 OMB Office of Management and Budget
 SNPRM Supplemental Notice of Proposed Rulemaking
 SOLAS International Convention for the Safety of Life at Sea
 § Section
 U.S.C. United States Code

II. Basis and Purpose

The legal basis for this final rule is Title 46 of the United States Code (U.S.C.) Section (§) 3703, which requires the Secretary of the Department of Homeland Security (DHS) to prescribe regulations relating to the operation of vessels that carry oil or hazardous material in bulk as cargo or cargo residue, and to the types and grades of cargo those vessels carry. Additional regulatory authority is provided by 33 U.S.C. 1903 (regulations to implement the International Convention for the Prevention of Pollution from Ships, 1973, or “MARPOL”), 46 U.S.C. 2103 (general merchant marine regulatory authority), and 46 U.S.C. 3306 (regulations for the safety of individuals and property on inspected vessels). The Secretary delegated the authority to carry out the provisions of this section to the Coast Guard, in accordance with DHS Delegation No. 0170.1(II)(77) and (92).

The purpose of this final rule is to revise and update the Liquid Chemical Categorization (LCC) tables that list the liquid hazardous materials and liquefied and compressed gases that have been approved for international and domestic maritime transportation in bulk. The tables also indicate how each substance is categorized by its pollution potential, safe carriage requirements, chemical flammability, combustibility, and chemical compatibility with other substances.

This final rule applies to the carriage of cargos from vessel populations described in 46 CFR 30.01–5, 150.110

(with exceptions described in 46 U.S.C. 3702), 153.1, and 154.5. All U.S. and foreign-flagged tank vessels are included, unless exempted by 46 CFR 30.01–5. Also included are self-propelled bulk cargo carrying oceangoing/non-oceangoing U.S.-flag and oceangoing foreign-flag vessels when in U.S. waters. Foreign tank vessels are exempt from this regulation when on innocent passage through U.S. waters.

III. Regulatory History

The Coast Guard published an interim rule on this topic in 2013.¹ Acknowledging public comments that brought to light certain errors in the interim rule, we delayed the interim rule's effective date of September 16, 2013 three times.² We proposed corrections to these errors in a supplemental notice of proposed rulemaking (SNPRM) published on October 22, 2015.³ Because of the amount of time that had passed since the interim rule was published, in addition to correcting errors in the tables, the SNPRM also proposed to align the interim rule's LCC tables with the International Maritime Organization's (IMO) Marine Environment Protection Committee (MEPC) December 2013 Circular. We published the SNPRM, rather than proceeding directly from the 2013 interim rule to this final rule, to allow the public to review the additional entries and, if necessary, suggest corrections.

IV. Discussion of the Rule

Coast Guard regulations in title 46 Code of Federal Regulations (CFR), chapter I, subchapter D (Tank Vessels, parts 30 through 39) and subchapter O (Certain Bulk Dangerous Cargoes, parts 150 through 155) contain requirements for ensuring safe international and domestic maritime carriage of certain bulk liquid cargoes. The tables in subchapters D and O (collectively referred to as “LCC tables”) list the cargoes for maritime carriage that have

¹ 2012 *Liquid Chemical Categorization Updates*; Interim Rule, Volume 78 of the **Federal Register** (FR) 50147 (August 16, 2013). Because the interim rule contained information updated only through December 2012, it was titled “2012 Liquid Chemical Categorization Updates.” On October 22, 2015, we published an SNPRM titled “2013 Liquid Chemical Categorization Updates,” because it had been updated as of the IMO's MEPC December 2013 Circular. The interim rule, the SNPRM, and this final rule share the same docket number.

² See 78 FR 56837 (September 16, 2013); delayed until January 16, 2014); 79 FR 2106 (January 13, 2014); delayed until January 16, 2015); 79 FR 68131 (November 14, 2014); delayed until January 16, 2017).

³ 80 FR 64191 (October 22, 2015).

been approved by the Coast Guard. The LCC tables also categorize the pollution-hazard risk for each cargo. The Coast Guard may approve carriage of unlisted cargoes, or carriage under conditions other than those listed in the tables, through individual letters of approval.⁴

As we described in detail in our interim rule and the SNPRM, the LCC tables contain categorization information based on assessments by the Coast Guard and IMO, and on international tripartite agreements that categorize the pollution-hazard risk, flammability, and combustibility of each cargo in accordance with the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code).⁵ IMO conducts its own multi-year review and assessment of the information contained in the tripartite agreements, and, following its review, either validates or modifies them. These LCC tables reflect modifications resulting from the IMO's 2013 review, as described below.

Each December, the IMO's MEPC releases an annual circular that lists cargoes for which it has completed a multi-year review. A cargo is listed in the circular if a tripartite agreement approves it for international bulk maritime transportation and the MEPC validates the approval. The IBC Code is periodically revised by state parties to the Code to include the cargoes listed in the MEPC annual circulars as of the last edition of the Code. The IBC Code was last comprehensively revised in 2007. In that revision, the pollution categories used to indicate a cargo's relative pollution-hazard risk—A, B, C, and D—were replaced by categories X, Y, Z, and OS (for “other substance,” considered to pose no risk).⁶ The LCC tables in this

final rule reflect the 2007 revisions to the IBC Code.

In March 2012, the IMO published an annex to the 2007 IBC Code, which listed additional cargoes and their pollution categorizations. This additional information is also reflected in the LCC tables in this final rule.

Until we published the 2013 interim rule, the LCC tables in subchapter D and subchapter O had gone unamended for several years and contained pre-2007 IBC Code provisions. They also did not reflect carriage allowed by individual approvals. The interim rule updated the following tables:

- Table 30.25–1 in subchapter D;
- Table I to part 150 in subchapter O;
- Table II to part 150 in subchapter O;
- Appendix I to part 150; and
- Table 2 to part 153 in subchapter O.

The 2015 SNPRM proposed updating these tables to be current with the December 2013 MEPC circular. This final rule adopts the interim rule with the changes proposed in the SNPRM, including corrections to the tables published in the interim rule. Minor modifications were also made in response to comments received on the SNPRM, as discussed below, and to harmonize chemical names and categories within the tables. We also reinstated chemicals that had been listed in previous editions of the CFR but were inadvertently omitted from the tables in the SNPRM. Vessels continue to carry these substances in the manner described in this rule, and reinstating these substances creates no change to current practice. The tables in their entirety are available in the docket where indicated under the **ADDRESSES** portion of this preamble.

V. Discussion of Comments and Changes

Our 2013 interim rule prompted comments from two individuals and four industry representatives, one of whom made multiple submissions. Those comments were fully discussed in the 2015 SNPRM.⁷

The SNPRM prompted comments from the American Chemistry Council (a trade group) and two chemical companies. One of the companies asked us to add a substance to the tables, Alkanes (C10–C26), linear and branched (flash point ≤60 °C), and we have added this substance to our tables. This company also corrected our “group” assignments for 11 substances and corrected two misspellings, and we have accepted those corrections. In addition, that company pointed to the need to spell out an abbreviation used in one of

the LCC tables and asked us to delete five trade names for substances, which we have done. The other company asked us to accept variant spellings for the same substance, (for example “aluminium” for “aluminum”) and to correct the spelling of one of the substances. We have done so in this final rule.

Both companies asked us to list substances that had been approved by the IMO after 2013. We did not list these substances in this final rule because the scope of the rule is limited to IMO actions through its 2013 MEPC annual circular. For the same reason, we cannot act on the American Chemistry Council's request to list 1-dodecene as a unique substance. These substances will be considered for inclusion in a future update to the LCC tables.

In addition to the comments discussed above, the Coast Guard received one late comment from an individual expressing general support for the rule.

VI. Regulatory Analyses

We developed this rule after considering numerous statutes and Executive orders related to rulemaking. Below we summarize our analyses based on these statutes or Executive orders.

A. Regulatory Planning and Review

Executive Orders 12866 (Regulatory Planning and Review) and 13563 (Improving Regulation and Regulatory Review) direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. Executive Order 13771 (Reducing Regulation and Controlling Regulatory Costs) directs agencies to reduce regulation and control regulatory costs and provides that “for every one new regulation issued, at least two prior regulations be identified for elimination, and that the cost of planned regulations be prudently managed and controlled through a budgeting process.”

The Office of Management and Budget (OMB) has not designated this rule a significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, OMB has not reviewed it. Because this rule is not a significant regulatory action, this rule is exempt

⁴ See, for example, 46 CFR 150.160 and 151.01–15.

⁵ The IBC Code contains international standards for the safe maritime bulk transportation of dangerous and noxious liquid chemicals in accordance with the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL) and the International Convention for the Safety of Life at Sea (SOLAS). For a discussion of tripartite agreements, see page 50149 of the interim rule (78 FR 50147, 50149).

⁶ See MARPOL, Annex II, Chapter 2, Regulation 6. With respect to the discharge of a cargo into the sea from tank cleaning or deballasting operations and the resulting hazard to marine resources or human health, the new categories indicate:

- X = Major hazard justifying prohibition of the discharge;
- Y = Hazard justifying a limitation on the quality and quantity of the discharge;
- Z = Minor hazard justifying less stringent restrictions on the quality and quantity of the discharge; and
- OS = No harm that justifies special discharge requirements.

⁷ 80 FR 64192 at 64193 (col. 3) and 64194.

from the requirements of Executive Order 13771. See the OMB Memorandum titled “Guidance Implementing Executive Order 13771, titled ‘Reducing Regulation and Controlling Regulatory Costs’” (April 5, 2017). A regulatory analysis follows.

Affected Population

This final rule updates and revises the LCC tables that list the name, pollution potential, safe carriage requirements, chemical flammability, combustibility, and compatibility with other substances of each liquid chemical cargo that has been categorized and approved for maritime transportation in bulk by IMO and the Coast Guard. This final rule provides updated information about cargoes that are currently approved for maritime transportation in bulk, the cargo’s pollution categorization, and minimum transportation safety requirements. This rule applies to the carriage of the subject cargoes from vessel populations described in 46 CFR 30.01–5, 150.110 (with exceptions described in 46 U.S.C 3702), 153.1, and 154.5. All U.S. and foreign flagged tank vessels are included, unless exempted by 46 CFR 30.01–5. Also included are self-propelled bulk cargo carrying oceangoing/non-oceangoing U.S.-flag and oceangoing foreign-flag vessels when in U.S. waters. Foreign tank vessels are exempt from this regulation when on innocent passage through U.S. waters.

Costs

This final rule updates the LCC tables that list the name, pollution potential, safe carriage requirements, chemical flammability, combustibility, and compatibility with other substances of each liquid chemical cargo that has already been categorized and approved by the Coast Guard and the IMO for maritime transportation in bulk, either permanently, or on a provisional basis. This final rule updates and revises the LCC tables to reflect existing international agreements regarding liquid chemical cargoes approved for bulk maritime transportation and their categorizations. As such, the rule does not change the established shipping requirements, and imposes no private-sector costs to chemical shippers and vessel owners. No additional labor nor equipment will be required because of this rule. No commenter challenged the “no cost to industry” assessment by the Coast Guard in the SNPRM’s regulatory analysis.

There is no cost to Coast Guard, as the updates are included in this rulemaking.

This final rule also corrects errors and omissions in the tables that were

included in the interim rule, and updates the LCC tables to be current through the IMO MEPC Circular of December 2013. The rule incorporates the Coast Guard’s compatibility categorizations, as well as chemical cargoes and categorizations listed in the 2013 MEPC circular.

Benefits

The primary benefit of this final rule is that it conforms regulatory language to practices currently allowed by the Coast Guard, either through individual letters of approval or the IBC Code. We expect the rule to result in improved service to the public through improved clarity and transparency. Public comments reflect that this rulemaking will provide benefits for the public and private sector by bringing more clarity and transparency to the maritime transportation of hazardous materials. Thus, this final rule is codifying existing practices which will decrease confusion as to what are the regulatory requirements in the LCC tables.

B. Small Entities

Under the Regulatory Flexibility Act, 5 U.S.C. 601–612, we have considered whether this rule will have a significant economic impact on a substantial number of small entities. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. There are no small shippers engaged in the transport of the LCC chemicals. Further, there are no private industry costs incurred. Consequently, the rule is estimated to have no incremental impact on the regulated public.

The Coast Guard certified in the SNPRM under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, Public Law 104–121, we offer to assist small entities in understanding this rule so that they can better evaluate its effects on them and participate in the rulemaking. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture

Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency’s responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247).

D. Collection of Information

This rule calls for no new or modified collection of information under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501–3520. It simply updates and revises the LCC tables that list cargoes that have been approved and categorized for bulk maritime transportation, and does not collect any information from the public.

E. Federalism

A rule has implications for federalism under Executive Order 13132 (Federalism) if it has a substantial direct effect on States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under Executive Order 13132 and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Our analysis follows.

It is well settled that States may not regulate in categories reserved for regulation by the Coast Guard. It is also well settled that all of the categories covered in 46 U.S.C. 3306, 3703, 7101, and 8101 (design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning of vessels), as well as the reporting of casualties and any other category in which Congress intended the Coast Guard to be the sole source of a vessel’s obligations, are within the field foreclosed from regulation by the States. See the Supreme Court’s decision in *United States v. Locke* and *Intertanko v. Locke*, 529 U.S. 89, 120 S.Ct. 1135 (2000). This final rule amends existing regulations for inspected tank vessels carrying certain bulk dangerous cargoes, which fall within the categories enumerated in 46 U.S.C. 3703, which themselves are within fields in which the States are foreclosed from regulating. Therefore, because the States may not regulate within these categories, this rule is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

F. Unfunded Mandates

The Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531–1538, requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Although this rule will not result in such expenditure, we do discuss the effects of this rule elsewhere in this preamble.

G. Taking of Private Property

This rule will not cause a taking of private property or otherwise have taking implications under Executive Order 12630 (Governmental Actions and Interference with Constitutionally Protected Property Rights).

H. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988 (Civil Justice Reform) to minimize litigation, eliminate ambiguity, and reduce burden.

I. Protection of Children

We have analyzed this rule under Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks). This rule is not an economically significant rule and will not create an environmental risk to health or risk to safety that might disproportionately affect children.

J. Indian Tribal Governments

This final rule does not have tribal implications under Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

K. Energy Effects

We have analyzed this rule under Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use). We have determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

L. Technical Standards

The National Technology Transfer and Advancement Act, codified as a note to 15 U.S.C. 272, directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards will be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This rule does not use technical standards. It is based on international standards that were developed using consensus standards development processes.

M. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023–01, Rev. I, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have made a determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. A final Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the **ADDRESSES** section of this preamble. This rule involves administrative updates of existing chemical transport regulations and updates relating to the chemical properties of liquid chemical cargoes approved for maritime transportation in bulk. The updates incorporate changes to how approved cargoes are categorized by their chemical properties. This rule is categorically excluded under paragraphs L52, L54, and L57 under Appendix A, Table 1 of DHS Instruction Manual 023–01–001–01, Rev. 01. Paragraph L52 relates to “regulations concerning vessel operation safety standards . . . equipment approval, and/or equipment carriage requirements . . . and visual distress signals.” Paragraph L54 pertains to “regulations which are editorial or procedural, such as those updating addresses or establishing application procedures.” Paragraph L57 involves “regulations concerning manning,

documentation, admeasurement, inspection, and equipping of vessels.”

List of Subjects

46 CFR Part 30

Cargo vessels, Foreign relations, Hazardous materials transportation, Penalties, Reporting and recordkeeping requirements, Seamen.

46 CFR Part 150

Hazardous materials transportation, Marine safety, Occupational safety and health, Reporting and recordkeeping requirements.

46 CFR Part 153

Administrative practice and procedure, Cargo vessels, Hazardous materials transportation, Marine safety, Reporting and recordkeeping requirements, Water pollution control.

For the reasons discussed in the preamble, the Coast Guard adopts the interim rule published at 78 FR 50152 on August 16, 2013, amending 46 CFR parts 30, 150, and 153, as final with the following changes:

PART 30—GENERAL PROVISIONS

- 1. The authority citation for part 30 continues to read as follows:

Authority: 46 U.S.C. 2103, 3306, 3703, Department of Homeland Security Delegation No. 0170.1 (II)(92)(a), (92)(b).

- 2. In § 30.25–1:
 - a. Revise paragraphs (d) introductory text and (d)(2) and (3); and
 - b. Amend Table 30.25–1 by:
 - i. Revising the bracketed NOTES paragraph following the table heading;
 - ii. Removing the entries for “Alkyl(C8–C9) phenylamine in aromatic solvents”, “Diethylene glycol ethyle ether acetate, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether acetate”, and “Oil, edible: Poppy seed”;
 - iii. Adding in alphabetical order the entries marked “[ADD]” and revising the entries marked “[REVISE]”; and
 - iv. Revising the the notes at the end of the table.

The revisions and additions read as follows:

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

* * * * *

(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—

* * * * *

(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
[REVISE]	
Acetochlor	X
* * * * *	*
[ADD]	
Acrylic acid/ethenesulphonic acid copolymer with phosphonate groups, sodium salt solution	Z
* * * * *	*
[REVISE]	
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
<i>Alcohol (C12-C15) poly(. . .) ethoxylates, see Alcohol (C12-C16) poly(. . .) ethoxylates.</i>	
Alcohol (C12-C16) poly(1-6) ethoxylates	Y
Alcohol (C12-C16) poly(7-19) ethoxylates	Y
Alcohol (C12-C16) poly(20+) ethoxylates	Y
* * * * *	*
Alkenyl (C11+) amide	X
Alkenyl (C8+) amine, Alkenyl (C12+) acid ester mixture	#
[ADD]	
Alkenyl (C16-C20) succinic anhydride	Z
[REVISE]	
Alkyl acrylate-Vinylpyridine copolymer in toluene	Y
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 (C7-C11) phenol poly(4-12) ethoxylate	Y
<i>Alkyl phenol sulfide (alternately sulphide) (C8-C40), see Alkyl (C8-C40) phenol sulfide (alternately sulphide).</i>	
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
<i>n-Alkyl phthalates, see individual phthalates.</i>	
Alkyl sulfonic (alternately sulphonic) acid ester of phenol	Y
[ADD]	
Aluminum (alternately, Aluminium) hydroxide, sodium	Y
* * * * *	*
[REVISE]	
2-Amino-2-methyl-1-propanol	Z
* * * * *	*
tert-Amyl ethyl ether	Z
* * * * *	*
<i>Amyl methyl ketone, see Methyl amyl ketone.</i>	
<i>Amylene, see Pentene (all isomers).</i>	
* * * * *	*
Aviation alkylates (C8 paraffins and isoparaffins BPT 95 to 120 °C)	X
[ADD]	
Barium long-chain (C11-C50) alkaryl sulfonate	Y
[REVISE]	
Barium long-chain alkyl (C8-C14) phenate sulfide (alternately sulphide)	#

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
<i>Behenyl alcohol, see Alcohols (C13+).</i>	*
Benzyl acetate	Y
[ADD] Bis(2-ethylhexyl) terephthalate	Y
Butane	LFG
[REVISE] <i>Butene, see Butylenes (all isomers).</i>	*
[ADD] 2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture)	Y
[REVISE] <i>Butylbenzene (all isomers), see Alkyl (C3–C4) benzenes.</i>	*
Butyl butyrate (all isomers)	Y
[ADD] Butylene	LFG
[REVISE] <i>1,3-Butylene glycol, see Butylene glycol.</i> <i>iso-Butyl formate, see Isobutyl formate.</i> n-Butyl formate	#
Calcium alkyl (C9) phenol sulfide (alternately sulphide), polyolefin phosphorosulfide (alternately phosphorosulphide) mixture <i>Calcium alkyl salicylate, see Calcium long-chain alkyl salicylate (C13+)</i>	#
Calcium long-chain alkyl sulfonate (alternately sulphonate) (C11–C50)	#
<i>Calcium long-chain alkyl phenate (C8–C40), see Calcium long-chain alkyl (C5–C10) phenate or Calcium long-chain alkyl (C11–C40) phenate</i>	Y
Calcium long-chain alkyl (C5–C10) phenate	Y
Calcium long-chain alkyl (C11–C40) phenate	#
Calcium long-chain alkyl phenolic amine (C8–C40)	Y
Calcium long-chain alkyl salicylate (C13+)	Y
[ADD] Camelina oil	Y
[REVISE] <i>Candelilla wax, see Waxes: Candelilla.</i>	*
epsilon-Caprolactam (molten or aqueous solutions)	Z
<i>Carnauba wax, see Waxes: Carnauba.</i> <i>Cetyl alcohol (Hexadecanol), see Alcohols (C13+).</i> <i>Cetyl/Stearyl alcohol, see Alcohols (C13+).</i>	*
Chlorinated paraffins (C10–C13)	X
1-(4-Chlorophenyl)-4,4-dimethyl-pentan-3-one	Y
Citric acid (70% or less)	Z
Coconut oil fatty acid methyl ester	Y
<i>Cottonseed, fatty acid, see Cottonseed oil, fatty acid.</i> Cottonseed oil, fatty acid	#
<i>Cumene, see Alkyl (C3–C4) benzenes.</i> Cycloheptane	X

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
* * * * *	*
Cyclohexyl acetate	Y
1,3-Cyclopentadiene dimer (molten)	Y
Cyclopentane	Y
Cyclopentene	Y
* * * * *	*
Decahydronaphthalene	Y
<i>iso-Decaldehyde, see Isodecaldehyde.</i>	
n-Decaldehyde	#
<i>Decane, see n-Alkanes (C10+).</i>	
Decanoic acid	X
* * * * *	*
<i>n-Decylbenzene, see Alkyl (C9+) benzenes.</i>	
<i>Detergent alkylate, see Alkyl (C9+) benzenes.</i>	
* * * * *	*
<i>Dialkyl (C10–C14) benzenes, see Alkyl (C9+) benzenes.</i>	
Dialkyl (C8–C9) diphenylamines	Z
Dialkyl (C7–C13) phthalates	X
<i>Including:</i>	
<i>Diisodecyl phthalate.</i>	
<i>Diisononyl phthalate.</i>	
<i>Dinonyl phthalate.</i>	
<i>Ditridecyl phthalate.</i>	
<i>Diundecyl phthalate.</i>	
* * * * *	*
Dibutyl hydrogen phosphonate	Y
2,6-Di-tert-butylphenol	X
Dibutyl phthalate	X
* * * * *	*
Dibutyl terephthalate	Y
* * * * *	*
<i>Diethylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	
<i>Diethylene glycol butyl ether acetate, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether acetate.</i>	
* * * * *	*
<i>Diethylene glycol ethyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	
[ADD]	
<i>Di+, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether acetate.</i>	
[REVISE]	
<i>Diethylene glycol n-hexyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	
<i>Diethylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	
<i>Diethylene glycol methyl ether acetate, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether acetate.</i>	
* * * * *	*
<i>Diethylene glycol propyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	
* * * * *	*
Diglycidyl ether of bisphenol F	Y
<i>Diheptyl phthalate, see Dialkyl (C7–C13) phthalates.</i>	
Di-n-hexyl adipate	X
* * * * *	*
<i>Diisononyl phthalate, see Dialkyl (C7–C13) phthalates.</i>	
* * * * *	*
Dimethyl octanoic acid	Y
* * * * *	*
<i>Dinonyl phthalate, see Dialkyl (C7–C13) phthalates.</i>	
<i>Dioctyl phthalate, see Dialkyl (C7–C13) phthalates.</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
* * * * *	*
Diphenylamine (molten)	Y
Diphenylamines, alkylated	Y
* * * * *	*
Diphenylol propane-epichlorohydrin resins	X
* * * * *	*
<i>Dipropylene glycol butyl ether, see Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether.</i>	
* * * * *	*
<i>Dipropylene glycol methyl ether, see Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether.</i>	
Dithiocarbamate ester (C7-C35)	X
* * * * *	*
<i>Dodecanol (all isomers), see Dodecyl alcohol (all isomers).</i>	
* * * * *	*
<i>Dodecyl benzene, see Alkyl (C9+) benzenes.</i>	
Dodecyl hydroxypropyl sulfide (alternately sulphide)	X
* * * * *	*
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
* * * * *	*
<i>ETBE, see Ethyl tert-butyl ether.</i>	
[ADD]	
Ethane	LFG
[REVISE]	
* * * * *	*
<i>Ethoxylated alkyloxy alkyl amine, see Ethoxylated long-chain (C16+) alkyloxyalkylamine.</i>	
[ADD]	
Ethoxylated long-chain (C16+) alkyloxyalkylamine	Y
* * * * *	*
[REVISE]	
S-Ethyl dipropylthiocarbamate	Y
[ADD]	
Ethylene	LFG
* * * * *	*
[REVISE]	
Fatty acids (C16+)	Y
Fatty acids, essentially linear (C6-C18) 2-ethylhexyl ester	Y
* * * * *	*
Gas oil, low sulfur (alternately sulphur)	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
* * * * *	*
[ADD]	
Glucitol/glycerol blend propoxylated (containing 10% or more amines)	Z
* * * * *	*
[REVISE]	
Glycerol ethoxylated	OS
* * * * *	*
Glycerol, propoxylated and ethoxylated	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
Glycerol/sucrose blend, propoxylated and ethoxylated	Z
* * * * *	*
[ADD]	
Grape seed oil	Y
[REVISE]	
* * * * *	*
Groundnut oil	Y
* * * * *	*
<i>Heptadecane, see n-Alkanes (C10+).</i>	
* * * * *	*
<i>Heptanoic acid, see n-Heptanoic acid.</i>	
n-Heptanoic acid	Z
* * * * *	*
<i>Hexadecanol (Cetyl alcohol), see Alcohols (C 13+).</i>	
* * * * *	*
1,6-Hexanediol, distillation overheads	Y
* * * * *	*
Hydrogenated starch hydrolysate	OS
* * * * *	*
<i>Hydroxyl terminated polybutadiene, see Polybutadiene, hydroxyl terminated.</i>	
Illipe oil	Y
Isoamyl alcohol	Z
Isobutyl alcohol	Z
Isobutyl formate	Z
Isobutyl methacrylate	Z
[ADD]	
Isodecaldehyde	#
Isophorone	Y
[REVISE]	
Isopropyl acetate	Z
Isopropyl alcohol	Z
[ADD]	
<i>Isopropylbenzene, see Alkyl (C3-C4) benzenes.</i>	
[REVISE]	
Isopropylcyclohexane	@Y
Jatropha oil	Y
* * * * *	*
Lard oil	#
[ADD]	
Latex (ammonia (1% or less) inhibited)	Y
[REVISE]	
Latex: Carboxylated styrene-Butadiene copolymer; Styrene-Butadiene rubber	Z
Lauric acid	X
* * * * *	*
[ADD]	
Linseed oil	Y
* * * * *	*
[REVISE]	
Long-chain alkaryl sulfonic (alternately sulphonic) acid (C16-C60)	Y
Long-chain alkylphenate/Phenol sulfide (alternately sulphide) mixture	Y
* * * * *	*
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)	#

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
<i>Magnesium nonyl phenol sulfide</i> (alternately <i>sulphide</i>), see Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8–C20).	*
[ADD] Maleic anhydride/sodium allylsulphonate copolymer solution	Z
[REVISE] Mango kernel oil	Y
[ADD] Methane	LFG
[REVISE] N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methylchloroacetanilide	X
<i>Methoxy triglycol</i> , see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.	
<i>Methyl butanol</i> , see amyl alcohols.	
Methylbutynol	Z
Methylcyclohexane	Y
Methylcyclopentadiene dimer	Y
Methyl 3-(3,5 di-tert-butyl-4-hydroxyphenyl)propionate crude melt	[Y]
[ADD] Methyl formate	Z
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	Z
2-Methyl-2-hydroxy-3-butyne	Z
Methyl naphthalene (molten)	X
2-Methylpyridine	Z
3-Methylpyridine	Z
4-Methylpyridine	Z
[REVISE] Methyl salicylate	Y
Neodecanoic acid	Y
Nitrilotriacetic acid, trisodium salt solution	Y
[ADD] Nitroethane	Y
Nitroethane (80%)/Nitropropane (20%)	Y
Nitroethane/1-Nitropropane (each 15% or more) mixture	Y
Nitropropane (60%)/Nitroethane (40%) mixture	Y
[REVISE] <i>Nonyl phenol sulfide</i> (alternately <i>sulphide</i>) (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

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
<i>Octadecanol (Oleyl alcohol), see Alcohols (C13+).</i> <i>Octadecene, see the olefin or alpha-olefin entries.</i>	*
Octamethylcyclotetrasiloxane	Y
n-Octyl acetate	Y
<i>Octyl phthalate, see Dioctyl phthalate.</i>	*
[ADD] Olefin mixture (C7–C9) C8 rich, stabilized	X
[REVISE] <i>Oleyl alcohol (Octadecanol), see Alcohols (C13+).</i>	*
[ADD] Olive oil	Y
[REVISE] Orange juice (concentrated)	OS
Palm kernel olein	Y
Palm kernel stearin	Y
Palm mid-fraction	Y
[ADD] Palm kernel fatty acid distillate	Y
Palm oil	Y
[REVISE] Palm oil fatty acid methyl ester	Y
Palm olein	Y
Palm stearin	Y
<i>Paraffin wax, see Waxes: Paraffin.</i> <i>n-Paraffins (C10–C20), see n-Alkanes (C10+) all isomers.</i>	*
[ADD] Paraldehyde-ammonia reaction product	Y
[REVISE] <i>Peanut oil, see Groundnut oil.</i>	*
<i>Pentadecanol, see Alcohols (C13+).</i>	*
[ADD] 1,3-Pentadiene	Y
1,3-Pentadiene (greater than 50%), cyclopentene and isomers, mixtures	Y
[REVISE] Phosphosulfurized (alternately Phosphosulphurized) bicyclic terpene	#
<i>Pinene, see the alpha- or beta- isomers.</i>	*
Pine oil	X
[ADD] Piperazine (70% or less)	Y
[REVISE] Polyalkyl (C18–C22) acrylate in xylene	Y
Polyalkylalkenaminesuccinimide, molybdenum oxysulfide (alternately oxysulphide)	Y
<i>Polyalkylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</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
Polyalkyl (C10–C20) methacrylate	Y
Polyalkyl (C10–C18) methacrylate/Ethylene-propylene copolymer mixture	Y
Polybutadiene, hydroxyl terminated	#
Poly(2+)cyclic aromatics	X
Poly(ethylene glycol) methylbutenyl ether (molecular weight >1000)	Z
<i>Polyethylene glycol monoalkyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	
Polyisobutenamine in aliphatic (C10–C14) solvent	Y
Poly(4+)isobutylene (molecular weight >224)	X
[ADD] Polyisobutylene (molecular weight ≤224)	Y
Polyolefin (molecular weight 300+)	Y
[REVISE] <i>Polyolefin amide alkeneamine (C28+), see Polyolefin amide alkeneamine (C17+).</i>	
Polyolefin amide alkeneamine/Molybdenum oxysulfide (alternately oxysulphide) mixture	#
Polyolefinamine (C28–C250)	Y
Polyolefinamine in alkyl (C2–C4) benzenes	Y
Polyolefinamine in aromatic solvent	Y
Polyolefin aminoester salts (molecular weight 2000+)	Y
Polyolefin phosphorosulfide (alternately phosphorosulphide), barium derivative (C28–C250)	Y
[ADD] Polypropylene glycol	Z
[REVISE] <i>Polypropylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether</i>	
[ADD] Poppy seed oil	#
Propane	LFG
2-Propene-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, homopolymer solution	Y
Propionaldehyde	Y
[REVISE] Propylbenzene (all isomers), <i>see Alkyl(C3–C4) benzenes.</i>	
[ADD] <i>iso-Propylbenzene, see Alkyl(C3–C4) benzenes.</i>	
<i>n-Propylbenzene, see Alkyl(C3–C4) benzenes.</i>	
<i>iso-Propylcyclohexane, see Isopropylcyclohexane.</i>	
Propylene	LFG
<i>Pseudocumene, see Trimethylbenzenes (all isomers).</i>	
Rapeseed oil	Y
Rapeseed oil fatty acid methyl esters	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
[ADD] Rice bran oil	Y
[REVISE] <i>Rosin, see Rosin oil.</i> Rosin oil	Y
<i>Rum, see Alcoholic beverages, n.o.s.</i> [ADD] Safflower oil	Y
Sodium bromide solution (less than 50%)	Y
Sodium carboxylate solution	Y
Sodium methylate 21 to 30% in methanol	Y
[REVISE] Sodium thiocyanate solution (56% or less)	Y
[ADD] Soyabean oil	Y
[REVISE] Soyabean oil (epoxidized)	#
Soyabean oil fatty acid methyl ester	Y
Spindle oil	I
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
[ADD] Tall oil, crude	Y
[REVISE] Tall oil, distilled	Y
[ADD] Tall oil pitch	Y
Tall oil soap, crude	Y
[REVISE] <i>Tetradecylbenzene, see Alkyl (C9+) benzenes.</i>	
Tetraethyl silicate monomer/oligomer (20% in ethanol)	Z
Tetramethylbenzene (all isomers)	X
[ADD] Tricresyl phosphate (less than 1% ortho isomer)	Y
[REVISE] <i>Tridecane, see n-Alkanes (C10+) (all isomers).</i>	
<i>Tridecylbenzene, see Alkyl (C9+) benzenes.</i>	
<i>Triethylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</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
<i>Triethylene glycol ethyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i> <i>Triethylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	*
[ADD] Trimethylamine solution (30% or less)	Z
[REVISE] 2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate	Y
<i>Tripropylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i> [ADD] 1,3,5-Trioxane	Y
Tung oil	Y
[REVISE] <i>Undecylbenzene, see Alkyl (C9+) benzenes.</i>	*
Vegetable protein solution (hydrolyzed) (if flammable or combustible)	OS
[ADD] Vinyltoluene	Y
[REVISE] Waxes: Candelilla	Y
Carnauba	Y
Paraffin	Y
† <i>White spirit, see White spirit, low (15–20%) aromatic.</i>	*
<i>Wine, see Alcoholic beverages, n.o.s.</i> [ADD] Wood lignin with sodium acetate/oxalate	Z
[REVISE] Xylenes/Ethylbenzene (10% or more) mixture	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.

PART 150—COMPATIBILITY OF CARGOES

■ 3. The authority citation for part 150 continues to read as follows:

Authority: 46 U.S.C. 3306, 3703; Department of Homeland Security Delegation No. 0170.1. Section 150.105 issued under 44 U.S.C. 3507; Department of Homeland Security Delegation No. 0170.1.

§ 150.120 [Amended]

■ 4. In § 150.120, remove the text “Table I” and add, in its place, the text “Table 1”.

§ 150.130 [Amended]

■ 5. In § 150.130, in paragraph (a) introductory text, remove the text “table

I” and add, in its place, the text “Table 1”.

■ 6. In § 150.140, revise the section heading to read as follows:

§ 150.140 Cargoes not listed in Table 1 or 2.

* * * * *

■ 7. Amend Table I to Part 150 by:

- a. Revising the table heading;
- b. Removing the entries for:
 - i. “Alkanes (C10–C26), linear and branched (flash point >60 °C)* ”;
 - ii. “Ammonium nitrate/Urea solution (containing less than 2% free Ammonia)”;
 - iii. “Ethylene glycol iso-propyl ether”;
 - iv. Benzene sulfonyl chloride;

- v. “Glycidyl ester of tridecyl acetic acid, see Glycidyl ester of C10 triakyl acetic acid”;
 - vi. “Noxious Liquid Substance, n.o.s. (NLS)”;
 - vii. “ROUNDUP”;
 - viii. “Ucarsol CR Solvent 302 SG”;
- and
- ix. “Urea/Ammonium nitrate solution*”.
- c. Adding in alphabetical order the entries marked “[ADD]” and revising the entries marked “[REVISE]”; and
- d. Revising the notes at the end of the table.
- The revisions and additions read as follows:

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
[REVISE] Acetonitrile (low purity grade)	37	3	AIL.	
Acid oil mixture from soyabean, corn (maize) and sunflower oil refining, see Oil, misc.: Acid mixture from soyabean, corn (maize), and sunflower oil refining.		3		AOM
Acrylamide solution (50% or less)	10	3	AAM	AAO
Acrylic acid/ethenesulfonic (alternately ethenesulphonic) acid copolymer with phosphonate groups, sodium salt solution.	30	3	APG.	
Alachlor technical (90% or more)	33	3	ALH	ALI
Alcohol (C12–C13, branched and linear) poly(4–8) propoxy sulfates (alternately sulphates, sodium salt 25–30% solution).	41	3	ABL.	
Alcohol (C9–C11) poly(2.5–9) ethoxylates	20	3	AET	ALY/APV/APW
Alcohol (C6–C17) (secondary) poly(3–6) ethoxylates	20	3	AEA	AEB
Alcohol (C6–C17) (secondary) poly(7–12) ethoxylates	20	3	AEB	AEA
Alcohol (C12–C16) poly(1–6) ethoxylates	20	3	AED	AET/ALY/APW
Alcohol (C12–C16) poly(7–19) ethoxylates	20	3	APV	AET/ALY/APV
Alcohol (C12–C16) poly(20+) ethoxylates	20	3	APW	AET/ALY
Alcohol (C12–C15) poly (. . .) ethoxylate, see Alcohol (C12–C16) poly (. . .) ethoxylate.				
Alcohol polyethoxylates	20			AEA/AEB/AED/AET/APV/APW AEA/AEB
Alcohol polyethoxylates, secondary	20			
Alcoholic beverages, n.o.s.	20	3	ABV.	
Alcohols (C12+), primary, linear	20	3	ASY	ALR/AYK/AYL
Alcohols (C8–C11), primary, linear, and essentially linear	20		ALR	AYK/AYL
Alcohols (C12–C13), primary, linear, and essentially linear	20	3	AYK	ALR/ASY/AYL
Alcohols (C14–C18), primary, linear, and essentially linear	20	3	AYL	ALR/ASY/AYK
Alcohols (C13+)	20		ALY	ASY/AYK
Including:				
Cetyl alcohol (Hexadecanol)	20			
Oleyl alcohol (Octadecanol)	20			
Pentadecanol	20			
Tallow alcohol	20			
Tetradecanol	20			
Tridecanol	20			
Alkanes (C10–C26), linear and branched (flash point >60 °C)	31	3	ABD.	
Alkanes (C10–C26), linear and branched (flash point ≤ 60 °C)	31	3	ABE.	
Alkanes (C6–C9)	31		ALK.	
Including:				
Heptanes	31			

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Alkyl (C8–C10) polyglucoside solution (65% or less)	43	3	AGL	AGD/AGM/AGN/AGO/AGP
Alkyl (C8–C10)/(C12–C14):(40% or less/60% or more) polyglucoside solution (55% or less).	43	3	AGN	AGD/AGL AGM/AGO/AGP
Alkyl (C8–C10)/(C12–C14):(50%/50%) polyglucoside solution (55% or less)	43	3	AGO	AGD/AGL/AGN/AGP
Alkyl (C8–C10)/(C12–C14):(60% or more/40% or less) polyglucoside solution (55% or less).	43	3	AGP	AGD/AGL/AGM/AGN/AGO
Alkyl (C12–C14) polyglucoside solution (55% or less)	43	3	AGM	AGD/AGL/AGN/AGO/AGP
Alkyl (C12–C16) propoxyamine ethoxylates	8	3	AXE	LPE
Alkyl (C10–C20), saturated and unsaturated phosphite	34		AKL	
* * * *				
Alkyl sulfonic (alternately sulphonic) acid ester of phenol	34		AKH.	
Alkyl toluene	32		AYL	AUS
Alkyl (C18+) toluenes	32	3	AUS	AYL
Alkyl (C18–C28) toluenesulfonic (alternately toluenesulphonic) acid	0	1, 3	AUU.	
Alkyl (C18–C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, borated.	34	3	AUB.	
Alkyl (C18–C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, high overbase.	33	3	AUC.	
Alkyl (C18–C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, low overbase.	33	3	AUL.	
* * * *				
Aluminum (alternately, Aluminium) chloride/Hydrochloric acid solution, see "Aluminum (alternately, Aluminium (chloride/Hydrogen chloride solution)".		1	AHS	AHG
Aluminum (alternately Aluminium) chloride/Hydrogen chloride solution	0	1, 3	AHG	AHS
Aluminum (alternately Aluminium) hydroxide/sodium hydroxide/sodium carbonate solution (40% or less).	5	3	AHN.	
Aluminum sulfate (alternately Aluminium sulphate) solution	43	2	ASX	ALM
Amine C–6, morpholine process residue	9		AOI.	
Aminoethylmethanolamine/Aminoethylethanolamine solution	8		ADY.	
2-(2-Aminoethoxy) ethanol	8		AEX.	
Aminoethylethanolamine	8		AEE.	
* * * *				
Ammonia, aqueous (28% or less Ammonia), see Ammonium hydroxide				AMH
Ammonium bisulfite (alternately bisulphite) solution (70% or less)	43	2	ABX	ASU
Ammonium chloride solution (less than 25%)	43	3	AIS	AMC
* * * *				
Ammonium lignosulfonate (alternately lignosulphonate) solution, see also Lignin liquor.			ALG	LNL
Ammonium nitrate solution (45% or less)	0	1	AND	AMN/ANR/ANW
Ammonium nitrate solution (93% or less)	0	1	ANW	AMN/AND/ANR
Ammonium nitrate/Urea solution (containing Ammonia), see Urea/Ammonium nitrate solution (containing 1% or more Ammonia).				UAS (ANU/UAT/UAV)
Ammonium nitrate/Urea solution (not containing Ammonia), see Urea/Ammonium nitrate solution (containing less than 1% Ammonia).				UAV (ANU/UAS/UAT)
Ammonium phosphate/Urea solution, see Urea/Ammonium phosphate solution.				UAP (APP/URE)
* * * *				
Ammonium sulfate (alternately sulphate) solution	43		ASW	AME/AMS
Ammonium sulfate (alternately sulphate) solution (20% or less)	43		AME	AMS/ASW
Ammonium sulfide (alternately sulphide) solution (45% or less)	5	3	ASS	ASF
Ammonium thiocyanate/Ammonium thiosulfate (alternately thiosulphate) solution.	0	1	ACV	ACS
Ammonium thiosulfate (alternately thiosulphate) solution (60% or less)	43	3	ATV	ATF
Amyl acetate (all isomers)	34	3	AEC	IAT/AML/AAS/AYA
* * * *				
Amyl alcohol, primary	20	3	APM	AAI/AAL/AAN/APM/IAA
n-Amyl alcohol	20	3	AAN	AAI/AAL/APM/ASE/IAA
sec-Amyl alcohol	20	3	ASE	AAI/AAL/AAN/APM/IAA
tert-Amyl alcohol	20	3	AAL	AAI/APM/ASE/IAA
tert-Amyl methyl ether	41		AYE.	
Amyl methyl ketone, see Methyl amyl ketone			AMJ	MAK (AMK)
Amylene, see Pentene (all isomers)			AMW	PTX (AMX/AMZ/PTE)
tert-Amylenes, see Pentene (all isomers)			AMZ	PTX (AMW)
Aniline	9		ANL.	

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Animal and Fish oils, n.o.s.	34	.....	AFN.	
<i>Including:</i>				
<i>Cod liver oil</i>	34			
<i>Lanolin</i>	34			
<i>Neatsfoot oil</i>	34			
<i>Pilchard oil</i>	34			
<i>Sperm oil</i>	34			
Animal and Fish acid oils and distillates, n.o.s.	34	.....	AFA.	
<i>Including:</i>				
<i>Animal acid oil</i>	34			
<i>Fish acid oil</i>	34			
<i>Lard acid oil</i>	34			
<i>Mixed acid oil</i>	34			
<i>Mixed general acid oil</i>	34			
<i>Mixed hard acid oil</i>	34			
<i>Mixed soft acid oil</i>	34			
<i>Anthracene oil (Coal tar fraction), see Coal tar</i> .....		.....	AHO	COR
* * * * *				
Argon, liquefied	0	1	ARG.	
Aryl polyolefin (C11–C50)	30	.....	AYF.	
* * * * *				
Aviation alkylates (C8 paraffins and isoparaffins BPT 95–120 °C)	33	3	AVA	GAK/GAV
Barium long-chain (C11–C50) alkaryl sulfonate (alternately sulphonate)	34	.....	BCA.	
Barium long-chain alkyl (C8–C14) phenate sulfide (alternately sulphide)	34	.....	BCH.	
* * * * *				
Benzene hydrocarbon mixtures (containing Acetylenes) (having 10% Benzene or more).	32	.....	BHA	BHB/BNZ/PYG
Benzene/Toluene/Xylene mixtures (having 10% Benzene or more)	32	.....	BTX	BHB/BNZ/PYG/TOL/XLX/XLM/XLO/XLP
[ADD]				
Benzenesulfonyl (alternately Benzenesulphonyl) chloride	0	1, 2	BSC.	
* * * * *				
[REVISE]				
Bio-fuel blends of Diesel/gas oil and Alkanes (C10–C26), linear and branched with a flash point >60 °C (>25% but <99% by volume).	33	3	BIF	BIG/BIH/BII/BIJ/BIK
Bio-fuel blends of Diesel/gas oil and Alkanes (C10–C26), linear and branched with a flash point ≤ 60 °C (>25% but <99% by volume).	33	3	BIG	BIF/BIH/BII/BIJ/BIK
Bio-fuel blends of Diesel/gas oil and FAME (>25% but <99% by volume)	34	3	BIH	BIF/BIG/BII/BIJ/BIK
Bio-fuel blends of Diesel/gas oil and vegetable oil (>25% but <99% by volume).	34	3	BII	BIF/BIG/BIH/BIJ/BIK
Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume)	20	2, 3	BIJ	BIF/BIG/BIH/BII/BIK
[ADD]				
Bis (2-ethylhexyl) terephthalate	34	.....	DHH.	
[REVISE]				
Boronated Calcium sulfonate (alternately sulphonate)	34	.....	BCU.	
Brake fluid base mix: Poly(2–8)alkylene (C2–C3) glycols/Polyalkylene (C2–C10) glycols monoalkyl (C1–C4) ethers and their borate esters.	20	3	BFY.	
Brominated Epoxy Resin in Acetone	16	.....	BER.	
* * * * *				
<i>1,4-Butanediol, see Butylene glycol</i> .....		.....	BDO	BUG MEK
<i>2-Butanone, see Methyl ethyl ketone</i>		2		
Butene oligomer	30	.....	BOL.	
<i>Butene, see Butylenes (all isomers)</i> .....		.....		BUT/IBL
[ADD]				
2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture)	20			
[REVISE]				
Butyl acetate (all isomers)	34	3	BAX	BCN/BTA/BYA/IBA
Butyl acrylate (all isomers)	14	3	BAR	BAI/BTC
Butyl alcohol (all isomers)	20	2	BAY	BAN/BAS/BAT/IAL
<i>Butyl alcohol (iso-, n-, sec-, tert-), see Butyl alcohol (all isomers)</i>		2		BAN/BAS/BAT/BAY/IAL
Butylamine (all isomers)	7	3	BTY	BAM/BTL/BUA/IAM
<i>Butylbenzene (all isomers), see Alkyl (C3–C4) benzenes</i>		3	BBE	AKC
Butyl benzyl phthalate	34	.....	BPH.	
Butyl butyrate (all isomers)	34	3	BBA	BIB/BUB
Butylene glycol	20	2	BUG	BDO
1,2-Butylene oxide	16	.....	BTO.	

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Butylenes (all isomers)	30	.....	BTN	IBL
n-Butyl ether	41	3	BTE.	
[ADD] <i>iso-Butyl formate, see Isobutyl formate</i>		3	BFI	BFN/BFO
* * * *				
[REVISE] <i>Butyl methacrylate, Decyl methacrylate, Cetyl-Eicosyl methacrylate mixture, see Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture.</i>		3	.....	DER (BMH/BMI/BMN/CEM)
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	14	3	DER	BMH/BMI/BMN/CEM
<i>Butyl methyl ketone, see Methyl butyl ketone</i>		2	.....	MBJ (MBK/MIK)
[ADD] Butyl phenol, Formaldehyde resin in Xylene	32			
* * * *				
[REVISE] Butyraldehyde (all isomers)	19	3	BAE	BAD/BTR
* * * *				
[ADD] C9 Resinfeed (DSM)	32	2	CNR.	
[REVISE] <i>Calcium alkaryl sulfonate (alternately sulphonate) (C11–C50), see Calcium long-chain alkaryl sulfonate (alternately sulphonate) (C11–C50).</i>		3	CAE	CAY
Calcium alkyl (C9) phenol sulfide (alternately sulphide), polyolefin phosphorosulfide (alternately phosphorosulphide) mixture	34	.....	CPX.	
Calcium alkyl (C10–C28) salicylate	34	3	CAJ.	
<i>Calcium bromide solution, see Drilling brines</i>			CBI	DRB
<i>Calcium bromide/Zinc bromide solution, see Drilling brine (containing Zinc salts).</i> .....			.....	DZB
* * * *				
<i>Calcium chloride solution, see Drilling brines</i>			CCS	CLC
* * * *				
Calcium hypochlorite solution (15% or less)	5	3	CHU	CHY/CHZ
Calcium hypochlorite solution (more than 15%)	5	3	CHZ	CHU/CHY
<i>Calcium lignosulfonate (alternately lignosulphonate) solution, see also Lignin liquor.</i>			CLL	LNL
Calcium long-chain alkaryl sulfonate (alternately sulphonate) (C11–C50)	34	.....	CAY.	
<i>Calcium long-chain alkyl (C8–C40) phenate, see Calcium long-chain alkyl (C5–C10) phenate or Calcium long-chain alkyl (C11–C40) phenate.</i>			CAQ	CAU/CAV (CAN/CAW)
Calcium long-chain alkyl (C5–C10) phenate	34	3	CAU	CAN/CAQ/CAV/CAW
Calcium long-chain alkyl (C5–C20) phenate	34	.....	CAV	CAN/CAQ/CAU/CAW
Calcium long-chain alkyl (C11–C40) phenate	34	3	CAW ...	CAN/CAQ/CAU/CAV
Calcium long-chain alkyl phenate sulfide (alternately sulphide) (C8–C40)	34	.....	CPI.	
Calcium long-chain alkyl phenolic amine (C8–C40)	9	.....	CPQ.	
Calcium long-chain alkyl (C18–C28) salicylate	34	3	CAJ.	
Calcium long-chain alkyl salicylate (C13+)	34	.....	CAK	CAJ/CAZ
Calcium nitrate solutions (50% or less)	34	3	CNU	CNT
* * * *				
Calcium sulfonate (alternately sulphonate)/Calcium carbonate/Hydrocarbon solvent mixture	33	.....	CSH.	
<i>Camelina oil, see Oil, misc.: Camelina</i>		3	CEL.	
* * * *				
<i>Canola oil, see Oil, edible: Rapeseed (low erucic acid containing less than 4% free fatty acids).</i> .....			.....	ORO (ORP)
[ADD] <i>Caprolactam solution, see epsilon-Caprolactam (molten or aqueous solutions).</i>			CLS.	
[REVISE] epsilon-Caprolactam (molten or aqueous solutions)	22	3	CLU	CLS
Caramel solutions	43	.....	CML.	
Carbolic oil	21	.....	CBO.	
Carbon dioxide (high purity)	0	1	CDH	CDO/CDQ
Carbon dioxide (reclaimed quality)	0	1	CDQ	CDH/CDO
Carbon dioxide, liquefied	0	1	CDO	CDH/CDQ
Carbon disulfide (alternately disulphide)	38	.....	CBB.	
Carbon tetrachloride	36	2	CBT	CBU

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Cashew nut shell oil (untreated), see Oil, misc.: Cashew nut shell (untreated).</i>				OCN
* * * *				
Cesium formate solution	43	3	CSM	ALY (ASY/AYL)
<i>Cetyl alcohol (Hexadecanol), see Alcohols (C13+)</i>				ALY (ASY/AYL)
* * * *				
<i>Cetyl/Stearyl alcohol, see Alcohols (C13+)</i>				ALY (ASY/AYL)
* * * *				
Chlorinated paraffins (C14–C17) (with 50% Chlorine or more, and less than 1% C13 or shorter chains).	36	3	CLJ	CLG/CLH/CLQ
* * * *				
Chlorinated paraffins (C18+) with any level of chlorine	36		CLG	CLH/CLJ
* * * *				
Chloroacetic acid (80% or less)	4	3	CHM	CHL/MCA
Chlorobenzene	36	2	CRB.	
<i>Chlorodifluoromethane, see Monochlorodifluoromethane</i>			MCF.	
2-Chloro-4-ethylamino-6-isopropylamino-5-triazine solution	0	1	CET.	
1-(4-Chlorophenyl)-4,4-dimethyl pentan-3-one	18	2	CDP.	
2- or 3-Chloropropionic acid	4		CPM	CLA/CLP
Chloroform	36		CRF.	
Chlorohydrins (crude)	17	3	CHD.	
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	9		CDM.	
o-Chloronitrobenzene	42		CNO	CNP
Chlorosulfonic (alternately Chlorosulphonic) acid	0	1	CSA.	
m-Chlorotoluene	36	3	CTM	CHI/CRN/CTO
o-Chlorotoluene	36	3	CTO	CHI/CRN/CTM
p-Chlorotoluene	36	3	CRN	CHI/CTM/CTO
Chlorotoluenes (mixed isomers)	36	3	CHI	CRN/CTM/CTO
Choline chloride solutions	20		CCO.	
Citric acid (70% or less)	4	3	CIS	CIT
* * * *				
<i>Coal tar distillate, see Naphtha: Coal tar solvent</i>			CDL	NCT (CTU)
<i>Coal tar naphtha solvent, see Naphtha: Coal tar solvent</i>				NCT (CDL/CTU)
* * * *				
Coal tar pitch (molten)	33	3	CTP.	
[ADD]				
Coal tar, high temperature	33		CHH.	
Cobalt naphthenate in solvent naphtha	34		CNS.	
[REVISE]				
<i>Cocoa butter, see Oil, edible: Cocoa butter</i>				OCB (VEO)
<i>Coconut oil, see Oil, edible: Coconut</i>				OCC (VEO)
<i>Coconut oil, fatty acid, see Oil, misc.: Coconut fatty acid</i>		2		CFA
<i>Coconut oil, fatty acid methyl ester, see Oil, misc.: Coconut fatty acid methyl ester.</i>		3		OCM
* * * *				
<i>Corn oil, see Oil, edible: Corn</i>				OCO (VEO)
[ADD]				
Corn syrup	43		CSY.	
[REVISE]				
<i>Cottonseed oil, see Oil, edible: Cottonseed</i>				OCS (VEO)
<i>Cottonseed oil, fatty acid, see Oil, misc.: Cottonseed oil, fatty acid</i>			CFY.	
Creosote	21	2	CCW ...	CCT/CWD
Creosote (coal tar)	21	2, 3	CCT ...	CCW
Creosote (wood tar)	21	2, 3	CWD ...	CCT/CCW
Cresols (all isomers)	21	3	CRS	CFO/CFP/CRL/CRO/CSO/CSO
<i>Cresols with 5% or more Phenol, see Phenol</i>			CFP	PHN (CFO/CRL/CRO/CRS/CSO)
<i>Cresols with less than 5% Phenol, see Cresols (all isomers)</i>			CFO	CRS (CFP/CRL/CRO/CSO)
<i>Cresylate spent caustic, see Cresylic acid, sodium salt solution</i>		2	CSC	CYD
[ADD]				
Cresylic acid	21		CRY.	

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
[REVISE]				
Cresylic acid, dephenolized	21		CAD	CRY/CYN
Cresylic acid tar	21		CRX.	
Cresylic acid with 5% or more phenol	21		CYN	CAD/CRY
Cresylic acid, sodium salt solution	5	2	CYD	CSC
Crotonaldehyde	19	2	CTA.	
Crude Isononylaldehyde, see Isononyldehyde (crude)				INC
Crude Isopropanol	20			IPB (IPA/PAL)
Crude Piperazine, see Piperazine (crude)				PZC (PPZ/PIZ)
Cumene, see Alkyl(C3–C4) benzenes			CUM	AKD (PBY/PBZ)
* * * * *				
Cyclohexanone/Cyclohexanol mixtures	18	2	CYX.	
* * * * *				
Cyclopentadiene/Styrene/Benzene mixture	30		CSB.	
1,3-Cyclopentadiene dimer (molten)	30	3	CPD	DPT/DPV
Cyclopentane	31		CYP.	
Cyclopentene	30		CPE.	
p-Cymene	32		CMP.	
* * * * *				
[ADD]				
<i>iso-Decaldehyde</i> , see Isodecaldehyde.				
n-Decaldehyde	19			
[REVISE]				
Decane (all isomers), see n-Alkanes (C10+) (all isomers)			DCC	ALV (ALJ)
* * * * *				
Decyl alcohol (all isomers)	20	2, 3	DAX	ISA/DAN
Decyl/Dodecyl/Tetradecyl alcohol mixture	20	3	DYO	DAN/DAX/DDN/ISA
Decylbenzene, see Alkyl (C9+) benzenes			DBZ	AKB
* * * * *				
Dextrose solution, see Glucose solution			DTS	GLU
* * * * *				
Dialkyl (C10–C14) benzenes, see Alkyl (C9+) benzenes			DAB	AKB
* * * * *				
Dialkyl (C7–C13) phthalates	34		DAH.	
Including:				
Di-(2-ethylhexyl) phthalate	34			
Diheptyl phthalate	34			
Dihexyl phthalate	34			
Diisooctyl phthalate	34			
Diisodecyl phthalate	34			
Diisononyl phthalate	34			
Dinonyl phthalate	34			
Diocetyl phthalate	34			
Ditridecyl phthalate	34			
Diundecyl phthalate	34			
Dialkyl (C9–C10) phthalates, see Dialkyl (C7–C13) phthalates			DLK	DLH (DAP/DHL/DHP/DID/ DIE/DIF/DIN/DIO/DIT/ DOP/DPA/DTP/DUP)
Dialkyl thiophosphates sodium salts solution	34	3	DYH.	
Dibromomethane	36		DBH.	
Dibutyl carbinol, see Nonyl alcohol (all isomers)				NNS (DBC/NNI/NNN)
Dibutyl hydrogen phosphonate	34		DHD.	
Dibutyl phthalate	34		DPA	DIT
Dibutyl terephthalate	34	3	DYE.	
Dibutylamine	7		DBA.	
Dibutylphenols	21		DBT.	
Di-tert-butylphenol	21		DBF	DBT/DBV/DBW
2,4-Di-tert-butylphenol	21		DBV	DBF/DBT/DBW
2,6-Di-tert-butylphenol	21	3	DBW ...	DBF/DBT/DBV
Dichlorobenzene (all isomers)	36	3	DBX	DBM/DBO/DBP
* * * * *				
1,1-Dichloroethane	36		DCH.	
Dichloroethyl ether	41	3	DYR	DEE

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
* * * *				
2,4-Dichlorophenoxyacetic acid/Diethanolamine salt solution	43		DDE.	
2,4-Dichlorophenoxyacetic acid/Dimethylamine salt solution (70% or less) ...	0	1, 2, 3	DDA	DAD/DSX
2,4-Dichlorophenoxyacetic acid/Triisopropanolamine salt solution	43	2	DTI.	
[ADD]				
Dichloropropane	36		DPX.	
[REVISE]				
1,1-Dichloropropane	36		DPB	DPC/DPL/DPP/DPX
1,2-Dichloropropane	36	2, 3	DPP	DPB/DPC/DPL/DPX
1,3-Dichloropropane	36		DPC	DPB/DPL/DPP/DPX
* * * *				
2,2-Dichloropropionic acid	4		DCN.	
Dicyclopentadiene, Resin Grade, 81–89%	30	3	DPV	CPD/DPT
<i>Dicyclopentadiene, see 1,3-Cyclopentadiene dimer (molten)</i>			DPT	CPD (DPV)
Diethanolamine	8	2	DEA.	
<i>Diethanolamine salt of 2,4-Dichlorophenoxyacetic acid solution, see 2,4-Dichlorophenoxyacetic acid, Diethanolamine salt solution.</i>			DZZ	DDE
* * * *				
<i>Diethylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>			DME	PAG
<i>Diethylene glycol butyl ether acetate, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether acetate.</i>			DEM	PAF
[ADD]				
Diethylene glycol dibenzoate	34		DGZ.	
* * * *				
[REVISE]				
<i>Diethylene glycol ethyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>			DGE	PAG
<i>Diethylene glycol ethyl ether acetate, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether acetate.</i>			DGA	PAF
<i>Diethylene glycol n-hexyl ether, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether.</i>			DHE	PAG
<i>Diethylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether.</i>			DGM ...	PAG
<i>Diethylene glycol methyl ether acetate, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether acetate.</i>			DGR	PAF
* * * *				
<i>Diethylene glycol propyl ether, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether.</i>			DGO	PAG
* * * *				
<i>Diethylethanolamine, see Diethylaminoethanol</i>				DAE
* * * *				
<i>Diethyl hexanol, see Decyl alcohol (all isomers)</i>				DAX
* * * *				
<i>Di-(2-ethylhexyl) phthalate, see Dialkyl (C7–C13) phthalate</i>				DAH
* * * *				
Diethyl sulfate (alternately sulphate)	34		DSU.	
Diglycidyl ether of Bisphenol A	16		BDE.	
Diglycidyl ether of Bisphenol F	16		DGF.	
<i>Diheptyl phthalate, see Dialkyl (C7–C13) phthalate</i>			DHP	DAH
* * * *				
<i>Dihexyl phthalate, see Dialkyl (C7–C13) phthalate</i>			DHL.	
<i>Diisobutyl carbinol, see Nonyl alcohol (all isomers)</i>			DBC	NNS
Diisobutyl ketone	18		DIK.	
Diisobutyl phthalate	34		DIT	DPA
Diisobutylamine	7		DBU.	
Diisobutylene	30		DBL.	
<i>Diisodecyl phthalate, see Dialkyl (C7–C13) phthalates</i>			DID	DAH
* * * *				
<i>Diisononyl phthalate, see Dialkyl (C7–C13) phthalates</i>		2	DIN	DAH

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Diisooctyl phthalate, see</i> Dialkyl (C7–C13) phthalate			DIO	DAH/(DIE/DOP)
* * * *			*	*
1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution	5		DDH.	
N,N-Dimethylacetamide	10		DAC	DLS
N,N-Dimethylacetamide solution (40% or less)	10	3	DLS	DAL
* * * *			*	*
<i>Dimethylamine salt of 4-Chloro-2-methylphenoxyacetic acid solution, see</i> 4-Chloro-2-methylphenoxyacetic acid, Dimethylamine salt solution.				CDM
<i>Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid solution, see</i> 2,4-Dichlorophenoxyacetic acid, Dimethylamine salt solution (70% or less).			DAD	DDA (DSX)
Dimethylamine solution (45% or less)	7	3	DMG	DMA/DMC/DMY
Dimethylamine solution (greater than 45% but not greater than 55%)	7	3	DMY	DMA/DMC/DMG
Dimethylamine solution (greater than 55% but not greater than 65%)	7	3	DMC	DMA/DMG/DMY
2,6-Dimethylaniline	9		DMM	DDL
<i>Dimethylbenzene, see</i> Xylenes		2		XLX/XLM/XLO/XLP
[ADD] Dimethylcyclicsiloxane hydrolyzate	34		DXZ.	
[REVISE] N,N-Dimethylcyclohexylamine	7		DXN.	
Dimethyl disulfide (alternately disulphide)	0	1, 2, 3	DSK.	
* * * *			*	*
Dimethylformamide	10	2	DMF.	
[ADD] Dimethyl furan	41		DFU.	
* * * *			*	*
Dimethyl naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution.	34	2	DNS.	
* * * *			*	*
[REVISE] <i>Dimethylpolysiloxane, see</i> Polydimethylsiloxane				DMP.
2,2-Dimethylpropane-1,3-diol (molten or solution)	20	3	DDI.	
Dimethyl succinate	34		DSE.	
Dinitrotoluene (molten)	42	3	DNM	DNL/DNU/DTT
<i>Dinonyl phthalate, see</i> Dialkyl (C7–C13) phthalates			DIF	DAH
<i>Diocetyl phthalate, see</i> Dialkyl (C7–C13) phthalates			DOP	DAH (DIE/DIO)
* * * *			*	*
<i>Diphenyl ether/Biphenyl ether mixture, see</i> Diphenyl/Diphenyl ether mixture				DDO
* * * *			*	*
Diphenylmethane diisocyanate	12	2	DPM.	
<i>Diphenyl oxide, see</i> Diphenyl ether				DPE
Diphenylol propane-Epichlorohydrin resins	0	1	DPR.	
Di-n-propylamine	7		DNA	DIA
* * * *			*	*
<i>Dipropylene glycol butyl ether, see</i> Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether.			DBG	PAG
* * * *			*	*
<i>Dipropylene glycol methyl ether, see</i> Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether.			DPY	PAG
* * * *			*	*
Distillates, straight run	33		DSR.	
Dithiocarbamate ester (C7–C35)	34		DHO.	
* * * *			*	*
<i>Ditridecyl phthalate, see</i> Dialkyl (C7–C13) phthalate			DTP	DAH
<i>Diundecyl phthalate, see</i> Dialkyl (C7–C13) phthalates			DUP	DAH
<i>Dodecane (all isomers), see</i> n-Alkanes (C10+) (all isomers)			DOF	ALV (ALJ/DOC)
tert-Dodecanethiol	20	2	DDL	LRM
Dodecene (all isomers)	30	3	DOZ	DDC/DOD
<i>Dodecanol (all isomers), see</i> Dodecyl alcohol (all isomers)		2	DDN	LAL
* * * *			*	*
Dodecyl alcohol (all isomers)	20	2	DDN	ASK/ASY/LAL

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Dodecylamine/Tetradecylamine mixture	7	2	DTA.	
Dodecylbenzene, <i>see</i> Alkyl (C9+) benzenes			DDB	AKB
[ADD]				
Dodecylbenzenesulfonic (alternately Dedecylbenzenesulphonic) acid	0	1, 2	DSA.	
* * * *				
[REVISE]				
Dodecyltrimethylamine/Tetradecyltrimethylamine mixture	7		DOT.	
Dodecyl diphenyl ether disulfonate (alternately disulphonate) solution	43		DTA.	
Dodecyl hydroxypropyl sulfide (alternately sulphide)	0	1	DOH.	
* * * *				
Drilling brines, including: Calcium bromide solution, Calcium chloride solution and Sodium chloride solution.	43	3		DRS/DRL
* * * *				
Epoxy resin	16		EPN.	
ETBE, <i>see</i> Ethyl tert-butyl ether				EBE
* * * *				
2-Ethoxyethanol, <i>see</i> Ethylene glycol monoalkyl ethers			EEO	EGC (EGE)
* * * *				
Ethoxylated alcohols, C11–C15, <i>see</i> alcohol polyethoxylates				AEA/AEB/AED/AET/APV/ APW/APX
Ethoxylated long-chain (C16+) alkyloxyalkylamine	8		ELA.	
Ethoxylated tallow alkyl amine	7		TAY	TAG/TAR
Ethoxylated tallow alkyl amine, glycol mixture	7		TAG	TAR/TAY
Ethoxylated tallow amine (> 95%)	7	3	TAR	TAG/TAY
Ethoxy triglycol, <i>see</i> Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether			ETG	PAG (ETR/TGE)
* * * *				
Ethylamine solution (72% or less)	7	3	EAN	EAM/EAO
* * * *				
N-Ethylbutylamine	7		EBA.	
* * * *				
S-Ethyl dipropylthiocarbamate	34	3	ECB.	
Ethylene	30		ETL.	
[ADD]				
Ethyleneamine EA 1302	7	2	EMX.	
* * * *				
[REVISE]				
Ethylene glycol butyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EGM	EGC
Ethylene glycol tert-butyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EGG	EGC
* * * *				
Ethylene glycol ethyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EGE	EGC/EEO
Ethylene glycol ethyl ether acetate, <i>see</i> 2-Ethoxyethyl acetate			EGA	EEA
Ethylene glycol hexyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EGH	EGC
Ethylene glycol isobutyl ether, <i>see</i> Ethylene glycol monoalkyl ethers				EGC (EGG/EGM)
Ethylene glycol isopropyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EGI	EGC
Ethylene glycol methyl butyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EMB	EGC
Ethylene glycol methyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EME	EGC
* * * *				
Ethylene glycol monoalkyl ethers	40	2	EGC.	
<i>Including:</i>				
Ethylene glycol butyl ether	40			
Ethylene glycol tert-butyl ether	40			
Ethylene glycol ethyl ether	40			
Ethylene glycol hexyl ether	40			
Ethylene glycol isobutyl ether	40			
Ethylene glycol isopropyl ether	40			
Ethylene glycol methyl ether	40			
Ethylene glycol methyl butyl ether	40			
Ethylene glycol propyl ether	40			
* * * *				
Ethylene glycol propyl ether, <i>see</i> Ethylene glycol monoalkyl ethers			EGP	EGC/EGI/EGN

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Ethylene glycol n-propyl ether, see</i> Ethylene glycol monoalkyl ethers			EGN	EGC (EGI/EGP)
* * * *			*	*
Ethylene oxide/Propylene oxide mixture with an Ethylene oxide content not more than 30% by mass.	16	3	EPM	EPF
* * * *			*	*
<i>Ethyl ether, see</i> Diethyl ether				EET
* * * *			*	*
<i>2-Ethylhexaldehyde, see</i> Octyl aldehydes			EHA	OAL (OLX)
<i>2-Ethylhexanoic acid, see</i> Octanoic acid (all isomers)			EHO	OAY (OAA)
<i>2-Ethylhexanol, see</i> Octanol			EHX	OCA (OTA)
* * * *			*	*
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8–C10) ester	34		EHD.	
* * * *			*	*
N-Ethylmethylallylamine	7		EML.	
[ADD]				
2-Ethyl-6-methyl-N-(1'-methyl-2-methoxyethyl)aniline	9		EEM.	
o-Ethyl phenol	21		EPL.	
* * * *			*	*
[REVISE]				
Ethyl toluene	32		ETE.	
Fatty acid methyl esters	34	3	FME.	
Fatty acids (C8–C10)	34	3	FDS.	
Fatty acids (C12+)	34	3	FDT	FAB/FAD/FAI/FDI
Fatty acids (saturated, C13+)	334		FAB	FAD
<i>Fatty acids (saturated, C14+), see</i> Fatty acids (saturated, C13+)			FAD	FAB
Fatty acids (C16+)	34	3	FDI.	
Fatty acids, essentially linear (C6–C18) 2-ethylhexyl ester	34	2, 3	FAE.	
* * * *			*	*
<i>Fish oil, see</i> Oil, edible: Fish		2		OFS (AFN)
* * * *			*	*
Fluorosilicic acid (20–30%) in water solution	1	3	FSK	FSJ/FSL/HFS
* * * *			*	*
Formaldehyde solutions (45% or less)	19	2, 3	FMR	FMG/FMS
* * * *			*	*
Formic acid (85% or less)	4	2	FMB	FMA
Formic acid (over 85%)	4	2, 3	FMD.	
Formic acid mixture (containing up to 18% Propionic acid and up to 25% Sodium formate).	4	2, 3	FMC	FMA/FMB
* * * *			*	*
[ADD]				
<i>Fuming sulfuric (alternately sulphuric) acid, see</i> Oleum		2		
* * * *			*	*
[REVISE]				
<i>Gas oil, cracked, see</i> Oil, misc.: Gas, cracked				GOC
* * * *			*	*
Gasolines:				
Automotive (containing not more than 4.23 grams lead per gal.)	33		GAT.	
Aviation (containing not more than 4.86 grams lead per gal.)	33		GAV	AVA
Casinghead (<i>natural</i>)	33		GCS.	
Polymer	33		GPL.	
Straight run	33		GSR.	
<i>Gasolines: Pyrolysis (containing Benzene), see</i> Pyrolysis gasoline (containing Benzene).			GPY	PYG
Glucitol/Glycerol blend propoxylated (containing less than 10% amines)	40	3	GGA.	
* * * *			*	*
<i>Glycerol, see</i> Glycerine		2		GCR

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Glycerol propoxylated	40	3	GXP.	
Glycerol, propoxylated and ethoxylated	40	3	GXE.	
Glycerol/Sucrose blend propoxylated and ethoxylated	40	3	GSB.	
Glycidyl ester of C10 trialkyl acetic acid	34		GLU	GLT
<i>Glycidyl ester of tertiary carboxylic acid, see Glycidyl ester of C10 trialkyl acetic acid.</i>			GLT	GLU
[ADD] <i>Glycidyl ester of tridecyl acetic acid, see Glycidyl ester of C10 trialkyl acetic acid.</i>			GLT	GLU
[REVISE] <i>Glycidyl ester of Versatic acid, see Glycidyl ester of C10 trialkyl acetic acid</i>			GLT	GLU
Glycine, sodium salt solution	7		GSS.	
<i>Glycol diacetate, see Ethylene glycol diacetate</i>				EGY
Glycol mixture, crude	20		GMC.	
<i>Glycol triacetate, see Glyceryl triacetate</i>				GCT
Glycolic acid solution (70% or less)	4	3	GLC.	
Glyoxal solution (40% or less)	19	3	GOS.	
Glyoxylic acid solution (50% or less)	4	3	GAC.	
[ADD] <i>Grape Seed Oil, see Oil, edible: Grape seed</i>				
[REVISE] <i>Groundnut oil, see Oil, edible: Groundnut</i>				OGN (VEO)
[ADD] <i>Hazelnut oil, see Oil, edible: Hazelnut</i>				OHN (VEO)
[REVISE] <i>Heptadecane (all isomers), see n-Alkanes (C10+) (all isomers)</i>				ALV (ALJ)
<i>Heptane (all isomers), see Alkanes (C6–C9)</i>			HMX	ALK(HPI/HPT)
Heptanol (all isomers)	20	3	HTX	HTN
Heptene (all isomers)	30	2, 3	HPX	THE
<i>Heptylbenzenes, see Alkyl (C5–C8) benzenes</i>				AKD
<i>Herbicide (C15–H22–NO2–Cl), see Metolachlor</i>				MCO
<i>Hexadecanol (Cetyl alcohol), see Alcohols (C13+)</i>				ALY (ASY/AYL)
<i>Hexaethylene glycol, see Polyethylene glycol</i>			HMG ...	PEG
Hexamethylene diisocyanate	12		HMS ...	HDI
Hexamethylene glycol	20		HMG ...	HXG
Hexamethylenediamine (molten)	7	3	HME ...	HMD/HMC
Hexamethylenediamine adipate (50% in water)	43		HAM ...	HAN
Hexamethylenediamine adipate solution	43		HAN ...	HAM
Hexamethylenediamine solution	7		HMC ...	HMD/HME
Hexamethyleneimine	7		HMI.	
Hexamethylenetetramine solutions	7		HTS	HMT
<i>Hexane (all isomers), see Alkanes (C6–C9)</i>		2	HXS ...	ALK (IHA/HXA)
1,6-Hexanediol, distillation overheads	4	2, 3	HDO.	
Hexene (all isomers)	30	2, 3	HEX	HXE/HXT/HXU/HXV/MPN/ MTN
<i>Hexylbenzenes, see Alkyl (C5–C8) benzenes</i>				AKD
<i>Hexylene glycol, see Hexamethylene glycol</i>			HXG	HMG
<i>Hog grease, see Lard</i>				LRD
<i>Hydrofluorosilicic acid (25% or less), see Fluorosilicic acid (30% or less)</i>				FSJ(FSK/FSL/HFS)
bis(Hydrogenated tallow alkyl)methyl amines	7		HTA.	
Hydrogen peroxide solutions (over 8% but not more than 60% by mass)	0	1, 3	HPN	HPO/HPS
Hydrogen peroxide solutions (over 60% but not more than 70% by mass) ...	0	1, 3	HPS	HPN/HPO
Hydrogenated starch hydrolysate	0	1, 3	HSH.	
2-Hydroxyethyl acrylate	14	2	HAI.	

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
N-(Hydroxyethyl)ethylenediamine triacetic acid, trisodium salt solution	43	.....	HET.	
[ADD]				
N,N-bis(2-Hydroxyethyl) oleamide	10	.....	HOO.	
* * * *				
[REVISE]				
<i>Hydroxyl terminated polybutadiene, see Polybutadiene, hydroxyl terminated</i>				PHT
alpha-Hydro-omega-hydroxytetradeca(oxytetramethylene)	40	.....	HTO	PYS/PYT
<i>Illipe oil, see Oil, edible: Illipe</i>				ILO (VEO)
Isoamyl alcohol	20	3	IAA	AAI/AAL/AAN/APM/ASE
Isobutyl alcohol	20	2, 3	IAL	BAN/BAS/BAT/BAY
Isobutyl formate	34	3	BFI	BFN/BFO
Isobutyl methacrylate	14	3	BMI	BMH/BMN
[ADD]				
Isodecaldehyde	19			
* * * *				
[REVISE]				
Isopropanolamine	8	3	MPA	IPF/PAX/PLA
Isopropanolamine solution	8	3	PAI	MPA/PAY/PLA/PRG
Isopropyl acetate	34	3	IAC	PAT
Isopropyl alcohol	20	2, 3	IPA	IPB/PAL
Isopropylamine	7	3	IPP	IPO/IPQ/PRA
Isopropylamine (70% or less) solution	7	3	IPQ	IPO/IPP/PRA
<i>Isopropylbenzene, see Alkyl (C3-C4) benzenes</i>				AKC(CUM/PBY/PBZ)
Isopropylcyclohexane	31	3	IPX.	
Isopropyl ether	41	3	IPE	PRL/PRN
<i>Jatropha oil, see Oil, misc.: Jatropha</i>				JTO
Jet fuels:			JPO	JPT/JPF/JPV
JP-4	33		JPF.	
JP-5	33		JPV.	
JP-8	33		JPE.	
* * * *				
[ADD]				
Ketone residue	18	.....	KTR.	
* * * *				
[REVISE]				
Kraft pulping liquors (free alkali content 3% or more) (Black, Green, or White).	5	.....	KPL	KBL
Lactic acid	0	1, 2	LTA.	
Lactonitrile solution (80% or less)	37	3	LNI.	
* * * *				
Latex, ammonia (1% or less)-inhibited	30	3	LTX.	
Latex: Carboxylated Styrene-Butadiene copolymer; Styrene-Butadiene rubber.	43	3	LCC	LCB/LSB
* * * *				
<i>Lauryl polyglucose, see Alkyl (C12-C14) polyglucoside solution (55% or less).</i>				AGM/LAP
<i>Lauryl polyglucose (50% or less), see Alkyl (C12-C14) polyglucoside solution (55% or less).</i>			LAP	AMG
* * * *				
Ligninsulfonic (alternately Ligninsulphonic) acid, magnesium salt solution	43	3	LGM	LGA/LNL/LSL
<i>Ligninsulfonic (alternately Ligninsulphonic) acid, sodium salt solution, see Lignin liquor or Sodium lignosulfonate (alternately lignosulphonate) solution.</i>			LGA	LNL or SLG
<i>d-Limonene, see Dipentene</i>				DPN
* * * *				
<i>Linseed oil, see Oil, misc.: Linseed</i>				OLS
<i>Liquefied Natural Gas, see Methane</i>			LNG	MTH
Liquid chemical wastes	0	1, 3	LCW.	
[ADD]				
Liquid Streptomyces solubles	43			
* * * *				
[REVISE]				

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Long-chain alkaryl sulfonic (alternately sulphonic) acid (C16–C60)	0	1	LCS.	
* * * *	*		*	*
Long-chain alkylphenate/Phenol sulfide (alternately sulphide) mixture	21	.....	LPS.	
Long-chain alkyl (C13+) salicylic acid	4	.....	LAS.	
[ADD]				
Long-chain polyetheramine in alkyl (C2–C4)benzenes	7	.....	LCE.	
[REVISE]				
L-Lysine solution (60% or less)	43	3	LYS.	
* * * *	*		*	*
Magnesium long-chain alkaryl sulfonate (alternately sulphonate) (C11–C50)	34	.....	MAS	MSE
Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8–C20)	34	.....	MPS.	
Magnesium long-chain alkyl salicylate (C11+)	34	.....	MLS.	
* * * *	*		*	*
<i>Magnesium nonyl phenol sulfide (alternately sulphide), see Magnesium</i>				
<i>long-chain alkyl phenate sulfide (alternately sulphide) (C8–C20).</i>				MPS
<i>Magnesium sulfonate (alternately sulphonate), see Magnesium long-chain</i>				
<i>alkaryl sulfonate (alternately sulphonate) (C11–C50).</i>			MSE	MAS
* * * *	*		*	*
[ADD]				
Maleic anhydride/sodium allylsulphonate copolymer solution	11	.....	.....	PHN (CFO/CRL/CRO/ CRS/CSO)
[REVISE]				
Maltitol solution	0	1, 3	MTI.	
<i>Mango kernel oil, see Oil, edible: Mango kernel</i>				MKO (VEO)
Mercaptobenzothiazol, sodium salt solution	5	.....	SMB	MBT
2-Mercaptobenzothiazol (in liquid mixture)	5	.....	BTM	SMD
Mesityl oxide	18	2	MSO.	
* * * *	*		*	*
Methacrylic acid—Alkoxy poly(alkylene oxide) methacrylate copolymer, so-	20	3	MAQ.	
dium salt aqueous solution (45% or less).				
* * * *	*		*	*
<i>Methoxy triglycol, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether</i>			MTG	PAG (TGY)
* * * *	*		*	*
Methylamine solutions (42% or less)	7	3	MSZ.	
Methyl amyl acetate	34	.....	MAC.	
Methyl amyl alcohol	20	.....	MAA	MIC
* * * *	*		*	*
N-Methylaniline	9	3	MAN.	
alpha-Methylbenzyl alcohol with Acetophenone (15% or less)	20	3	MBA.	
* * * *	*		*	*
<i>Methyl butanol, see the Amyl alcohols</i>				AAI/AAL/AAN/APM/ASE/ IAA
<i>Methyl butenes, see Pentene (all isomers)</i>				PTX (AMW/AMZ/PTE)
Methyl butenol	20	.....	MBL.	
* * * *	*		*	*
[ADD]				
3-Methyl butyraldehyde	19	.....	MBR.	
[REVISE]				
Methyl butyrate	34	.....	MBU.	
* * * *	*		*	*
Methylcyclopentadienyl manganese tricarbonyl	0	1, 3	MCT	MCW
* * * *	*		*	*
Methyl diethanolamine	8	.....	MDE	MAB
Methyl ethyl ketone	18	2	MEK.	
2-Methyl-6-ethyl aniline	9	.....	MEN.	
Methyl formate	34	.....	MFM.	
N-Methylglucamine solution (70% or less)	43	3	MGC.	
2-Methylglutaronitrile	37	.....	MLN	MGN
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	37	3	MGE	MLN

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Methyl heptyl ketone	18	.....	MHK.	
2-Methyl-2-hydroxy-3-butyne	20	.....	MHB	MBY
<i>Methyl isoamyl ketone, see Methyl amyl ketone</i> .....	.....	.....	MAJ	MAK
<i>Methyl isobutyl carbinol, see Methyl amyl alcohol</i> .....	.....	.....	MIC	MAA
Methyl isobutyl ketone	18	.....	MIK	MBB/MBK
Methyl methacrylate	14	.....	MMM.	
Methylene bridged isobutylene phenols	21	.....	MBP.	
<i>Methylene chloride, see Dichloromethane</i> .....	.....	.....	.....	DCM
3-Methyl-3-methoxybutanol	20	.....	MXB.	
* * * * *				
Methyl naphthalene (molten)	32	3	MNA.	
Methylolurea	19	.....	MUS.	
<i>2-Methyl pentane, see Hexane (all isomers)</i> .....	.....	.....	.....	HXS (ALK/HXA/IHA/NHX)
* * * * *				
<i>2-Methyl-1-pentene, see Hexene (all isomers)</i> .....	.....	.....	MPN	HEX (HXE/HXT/HXU/ HXV/MTN)
<i>4-Methyl-1-pentene, see Hexene (all isomers)</i> .....	.....	.....	MTN	HEX (HXE/HXT/HXU/ HXV/MPN)
<i>Methyl tert-pentyl ether, see tert-Amyl methyl ether</i> .....	.....	.....	.....	AYE
* * * * *				
2-Methyl-5-ethylpyridine	9	.....	MEP.	
<i>Methylpyridine, see the Methylpyridines</i> .....	.....	.....	MPQ	MPE/MPF/MPR
2-Methylpyridine	9	3	MPR	MPE/MPF/MPQ
3-Methylpyridine	9	3	MPE	MPF/MPQ/MPR
4-Methylpyridine	9	3	MPF	MPE/MPQ/MPR
* * * * *				
Microsilica slurry	43	.....	MOS.	
* * * * *				
Molybdenum polysulfide (alternately polysulphide) long-chain alkyl dithiocarbamide complex.	0	1, 3	MOP.	
* * * * *				
<i>Monoethylamine, see Ethylamine</i> .....	.....	.....	.....	EAM (EAN/EAO)
<i>Monoisopropanolamine, see Isopropanolamine</i> .....	.....	.....	.....	MPA (PLA/PLX)
<i>Monoethylamine, see Ethylamine</i> .....	.....	.....	.....	EAM (EAN/EAO)
* * * * *				
<i>MTBE, see Methyl tert-butyl ether</i> .....	.....	.....	.....	MBE
* * * * *				
Naphthalene (molten)	32	3	NTM.	
[ADD]				
Naphthalene still residue	32	2	NSR.	
[REVISE]				
Naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution	34	.....	NSB	NSA
Naphthalene sulfonic (alternately sulphonic) acid-Formaldehyde copolymer, sodium salt solution.	0	1	NFS.	
Naphthenic acid	4	.....	NTI.	
* * * * *				
Nitrating acid (mixture of Sulfuric (alternately Sulphuric) and Nitric acids)	0	1	NIA.	
Nitric acid (70% and over)	3	2, 3	NCE	NAC/NCD
* * * * *				
[ADD]				
<i>Nitric Acid, fuming, see Nitric acid (70% and over)</i> .....	.....	1, 2, 3	.....	NCE
<i>Nitric Acid, red fuming, see Nitric acid (70% and over)</i> .....	.....	1, 2, 3	.....	NCE
[REVISE]				
Nitrioltriacetic acid, trisodium salt solution	34	3	NCA.	
* * * * *				
<i>o-Nitrochlorobenzene, see o-Chloronitrobenzene</i> .....	.....	.....	.....	CNO (CNP)
* * * * *				
Nitroethane (80%)/Nitropropane (20%)	42	2, 3	NNL	NNM/NNO/NPM/NPN/ NPP/NTE

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
* * * *				
Nitrophenol (mixed isomers)	42		NPX	NIP/NPH
o-Nitrophenol (molten)	0	1, 2	NTP	NIP/NPH/NPX
Nitropropane (60%)/Nitroethane (40%) mixture	42		NNM	NNL/NNO/NPM/NPN/NPP/ NTE
1-or 2-Nitropropane	42		NPM	NPN/NPP
o- or p-Nitrotoluenes	42	3	NIT	NIE/NTR/NTT
Nonane (all isomers), see Alkanes (C6–C9)			NAX	ALK (NAN)
* * * *				
Non-edible industrial grade palm oil, see Oil, misc.: Palm, non-edible industrial grade.				OPB
Nonene (all isomers)	30	2	NOO	NNE/NON/OAM/OFX/OFY
Nonyl acetate	34		NAE.	
Nonyl alcohol (all isomers)	20	2	NNS	ALR/DBC/NNI/NNN
Nonylbenzene, see Alkyl (C9+) benzenes				AKB
* * * *				
Nonyl phenol	21		NNP.	
Nonyl phenol poly(4+)ethoxylate, see Alkyl (C7–C11) phenol poly(4–12) ethoxylate.			NPE	APN
Nonyl phenol sulfide (alternately sulphide) (90% or less) solution, see Alkyl (C8–C40) phenol sulfide (alternately sulphide).				AKS (NPS)
Nonylphenol (48–62%)/Phenol (42–48%)/Dinonylphenol (1–10%) mixture	21		NYL.	
[ADD]				
Noxious Liquid Substance, NF, (1) n.o.s. (“trade name” contains “principal components”) Cat X.	0	1		
Noxious Liquid Substance, F, (2) n.o.s. (“trade name” contains “principal components”) Cat X.	0	1		
Noxious Liquid Substance, NF, (3) n.o.s. (“trade name” contains “principal components”) Cat X.	0	1		
Noxious Liquid Substance, F, (4) n.o.s. (“trade name” contains “principal components”) Cat X.	0	1		
Noxious Liquid Substance, NF, (5) n.o.s. (“trade name” contains “principal components”) Cat Y.	0	1		
Noxious Liquid Substance, F, (6) n.o.s. (“trade name” contains “principal components”) Cat Y.	0	1		
Noxious Liquid Substance, NF, (7) n.o.s. (“trade name” contains “principal components”) Cat Y.	0	1		
Noxious Liquid Substance, F, (8) n.o.s. (“trade name” contains “principal components”) Cat Y.	0	1		
Noxious Liquid Substance, NF, (9) n.o.s. (“trade name” contains “principal components”) Cat Z.	0	1		
Noxious Liquid Substance, F, (10) n.o.s. (“trade name” contains “principal components”) Cat Z.	0	1		
Noxious Liquid Substance, (11) n.o.s. (“trade name” contains “principal components”) Cat Z.	0	1		
Non-noxious Liquid Substance, (12) n.o.s. (“trade name” contains “principal components”) Cat OS.	0	1	NOL.	
Nutmeg butter oil, see Oil, edible: Nutmeg butter				ONB (VEO)
[REVISE]				
1-Octadecene, see the olefin or alpha-olefin entries				OAM/OFZ
1-Octadecanol, see Stearyl alcohol				SYL (ALY/ASY)
Octadecenoamide solution	10		ODD.	
Octadecanol (oleyl alcohol), see Alcohols (C13+)				ALY (AYL/ASY/OYL)
Octamethylcyclotetrasiloxane	34	3	OSA.	
Octane (all isomers), see Alkanes (C6–C9)			OAX	ALK (IOO/OAN)
Octanoic acid (all isomers)	4		OAY	OAA/EHO
* * * *				
Octyl alcohol, see Octanol (all isomers)		2		OCX (EHX/IOA/OTA)
* * * *				
Octylbenzenes, see Alkyl (C5–C8) benzenes				AKD
* * * *				
n-Octyl mercaptan	0		OME.	
Octyl nitrates (all isomers), see Alkyl (C7–C9) nitrates		2	ONE	AKN

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Octyl phthalate, see</i> Diocetyl phthalate				DAH (DIE/DIO/DLK/DOP)
Oil, edible:				
Beechnut	34		OBN	VEO
Castor	34		OCA	VEO
Cocoa butter	34		OCB	VEO
Coconut	34		OCC	VEO
Cod liver	34		OCL	AFN
Corn	34		OCO	VEO
Cotton seed	34		OCS	VEO
Fish	34	2	OFS	AFN
Grape seed	34			
Groundnut	34		OGN	VEO
Hazelnut	34		OHN	VEO
Illipe	34		ILO	VEO
Lard	34		OLD	AFN
<i>Maize, see</i> Oil, edible: Corn				OCO (VEO)
Mango kernel	34	3	MKO.	
Nutmeg butter	34		ONB	VEO
Olive	34		OOL	VEO
Palm	34	2, 3	OPM	VEO
Palm kernel	34		OPO	VEO
Palm kernel olein	34		PKO	VEO
Palm kernel stearin	34		PKS	VEO
Palm mid fraction	34		PFM	VEO
Palm olein	34		PON	VEO
Palm stearin	34		PMS	VEO
Peanut	34		OPN	VEO
Poppy	34		OPY	VEO
Poppy seed	34		OPS	VEO
Raisin seed	34		ORA	VEO
Rapeseed	34		ORP	VEO
Rapeseed (low erucic acid containing less than 4% free fatty acids)	34	3	ORO	ORP/VEO
Rice bran	34		ORB	VEO
Safflower	34		OSF	VEO
Salad	34		OSL	VEO
Sesame	34		OSS	VEO
Shea butter	34		OSH	VEO
Soyabean	34	2	OSB	VEO
<i>Sunflower, see</i> Oil, edible: Sunflower seed				OSN (VEO)
Sunflower seed	34		OSN	VEO
Tucum	34		OTC	VEO
Vegetable	34		OVG	VEO
Walnut	34		OWN	VEO
Oil, misc.:				
Acid mixture from soyabean, corn (maize) and sunflower oil refining	34		AOM.	
Aliphatic	33		OML.	
Animal	34		OMA	AFN
Aromatic	33		OMR.	
Camelina	34		OCI.	
Cashew nut shell (untreated)	34		OCN.	
Clarified	33		OCF.	
Coal	33		OMC.	
Coconut fatty acid	34	2	CFA.	
Coconut, fatty acid methyl ester	34		OCM.	
Cotton seed oil, fatty acid	34		CFY.	
Crude	33		OFA.	
Diesel	33		ODS.	
Disulfide (alternately Disulphide)	0	1	ODI.	
Gas, cracked	33		GOC.	
Gas, high pour	33		OGP.	
Gas, low pour	33		OGL.	
Gas, low sulfur (alternately sulphur)	33		OGS.	
Heartcut distillate	33		OHD.	
Jatropha	34	3	JTO.	
Lanolin	34		OLL	AFN
Linseed	33		OLS.	
Lubricating	33	2	OLB.	
Mineral	33		OMN.	

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Mineral seal	33		OMS.	
Motor	33		OMT.	
Neatsfoot	33		ONF	AFN
Oiticica	34		OOI.	
Palm acid	34		PLM.	
Palm fatty acid distillate	34		PFD.	
Palm oil, fatty acid methyl ester	34		OPE.	
Palm kernel acid	34		OPK.	
Palm kernel fatty acid distillate	34		PNG.	
Palm, non-edible industrial grade	34		OPB.	
Penetrating	33		OPT.	
Perilla	34		OPR.	
Pilchard	34		OPL	AFN
Pine	33		OPI	PNL
Rapeseed fatty acid methyl esters	34	3	ORP.	
Residual	33		ORL.	
Resin, distilled	30	3	ORR.	
Road	33		ORD.	
Rosin	33		ORN.	
Seal	34		OSE.	
Soapstock	34		OIS.	
Soyabean (epoxidized)	34			OSC/EVO
Soyabean fatty acid methyl ester	34			OST
Spindle	33		OSD.	
Tall	34		OTL	OTI/OTJ
Tall, crude	34	2	OTI	OTJ/OTL
Tall, distilled	34	2	OTJ	OTI/OTL
Tall, fatty acid	34	2	OTT.	
Tall fatty acid (resin acids less than 20%)	34	2	OTK	OTT
Tall pitch	34		OTP.	
Transformer	33		OTF.	
Tung	34		OTG.	
Turbine	33		OTB.	
Vacuum gas oil	33		OVC.	
<i>Oleamide solution, see Octadecenoamide solution</i>				ODD
* * * * *				
Olefin-Alkyl ester copolymer (molecular weight 2000+)	30		OCP.	
Olefin mixture (C7–C9) C8 rich, stabilized	30	3	OFC	OFW/OFY/OFX
Olefin mixtures (C5–C7)	30	3	OFX	OAM/OFY/OFW/OFX/OFZ
Olefin mixtures (C5–C15)	30	3	OFY	OAM/OFY/OFW/OFX/OFZ
Olefins (C13+, all isomers)	30		OFZ	OAM/OFW
* * * * *				
Oleic acid	4		OLA.	
* * * * *				
<i>Oleyl alcohol, see Alcohols (C13+)</i>			OYL	ALY (ASY)
* * * * *				
<i>Olive oil, see Oil, edible: Olive</i>				OOL (VEO)
Orange juice (concentrated)	0	1, 3	OJC	OJN
Orange juice (not concentrated)	0	1, 3	OJN	OJC
* * * * *				
<i>ORIMULSION, see Asphalt emulsion</i>				ASQ
* * * * *				
Oxygenated aliphatic hydrocarbon mixture	0	1, 3	OAH.	
<i>Palm acid oil, see Oil, misc.: Palm acid</i>		3		PLM
<i>Palm fatty acid distillate, see Oil, misc.: Palm fatty acid distillate</i>		3		PFD
<i>Palm kernel acid oil, see Oil, misc.: Palm kernel acid</i>				PNO
<i>Palm kernel acid oil, methyl ester, see Oil, misc.: Palm kernel acid, methyl ester.</i>				PNF
<i>Palm kernel oil, see Oil, edible: Palm kernel</i>				OPO (VEO)
<i>Palm kernel oil fatty acid distillate, see Oil, misc.: Palm kernel fatty acid distillate.</i>				PNG
<i>Palm kernel olein, see Oil, edible: Palm kernel olein</i>		3		PKO (VEO)
<i>Palm kernel stearin, see Oil, edible: Palm kernel stearin</i>		3		PKS (VEO)
<i>Palm mid fraction, see Oil, edible: Palm mid fraction</i>		3		PFM (VEO)
<i>Palm oil, see Oil, edible: Palm</i>		2, 3	OPM	VEO/OPE

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Palm oil fatty acid methyl ester, see Oil, misc.: Palm fatty acid methyl ester</i>	.....		3	OPE
<i>Palm olein, see Oil, edible: Palm olein</i>	.....		3	PON (VEO)
<i>Palm stearin, see Oil, edible: Palm stearin</i>	.....			PMS (VEO)
Parachlorobenzotrifluoride	32		PBF.	
<i>Paraffin wax, see Waxes: Paraffin</i>	.....		3	WPF
<i>n-Paraffins (C10–C20), see n-Alkanes (C10+) all isomers</i>	.....		PFN	ALJ
* * * *			*	*
[ADD]				
<i>Peanut, see Oil, edible: Peanut</i>	.....			OPN (VEO)
* * * *			*	*
Pentacosane (oxypropane-2,3-diyl)s	20		POY.	
[REVISE]				
<i>Pentadecanol, see Alcohols (C13+)</i>	.....		PDC	ALY
* * * *			*	*
1,3-Pentadiene (greater than 50%), Cyclopentene and isomers, mixtures	30	3	PMM.	
<i>Pentaethylene glycol, see Polyethylene glycols</i>	.....			PEG
<i>Pentaethylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>	.....			PAG
* * * *			*	*
n-Pentanoic acid (64%)/2-Methyl butyric acid (36%) mixture	4		POJ	POC
<i>Pentasodium salt of Diethylenetriaminepentaacetic acid solution, see Diethylenetriaminepentaacetic acid, pentasodium salt solution.</i>	.....			DYS
* * * *			*	*
[ADD]				
Pentyl aldehyde	19		PYL.	
* * * *			*	*
[REVISE]				
Phosphoric acid	1	2	PAC.	
* * * *			*	*
Phosphosulfurized (alternately Phosphosulphurized) bicycle terpene	0	1	PBT.	
* * * *			*	*
[ADD]				
<i>PIB, see Poly(4+)isobutylene (molecular weight > 224).</i>	.....		
* * * *			*	*
[REVISE]				
<i>Pine oil, see Oil, misc.: Pine</i>	.....		PNL	OPI
Piperazine (70% or less)	7	3	PIZ	PPB/PPZ
Piperazine (crude)	7		PZC	PPZ/PIZ
Piperazine, 68% solution	7			
* * * *			*	*
Polyalkyl (C18–C22) acrylate in Xylene	14		PIX.	
Polyalkylalkenaminesuccinimide, molybdenum oxysulfide (alternately oxysulphide).	0	3	PSO.	
Polyalkylene glycols/Polyalkylene glycol monoalkyl ethers mixtures	40		PPX.	
<i>Polyalkylene glycol butyl ether, see Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether.</i>	.....		PGB	PAG
Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether	40	2	PAG.	
<i>Including:</i>				
<i>Diethylene glycol butyl ether</i>	40			
<i>Diethylene glycol ethyl ether</i>	40			
<i>Diethylene glycol n-hexyl ether</i>	40			
<i>Diethylene glycol methyl ether</i>	40			
<i>Diethylene glycol propyl ether</i>	40			
<i>Dipropylene glycol butyl ether</i>	40			
<i>Dipropylene glycol methyl ether</i>	40			
<i>Polyalkylene glycol butyl ether</i>	40			
<i>Polyethylene glycol monoalkyl ether</i>	40			
<i>Polypropylene glycol methyl ether</i>	40			
<i>Tetraethylene glycol methyl ether</i>	40			
<i>Triethylene glycol butyl ether</i>	40			
<i>Triethylene glycol ethyl ether</i>	40			

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Triethylene glycol methyl ether</i>	40			
<i>Tripropylene glycol methyl ether</i>	40			
Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether acetate	34		PAF.	
<i>Including:</i>				
<i>Diethylene glycol butyl ether acetate</i>	34			
<i>Diethylene glycol ethyl ether acetate</i>	34			
<i>Diethylene glycol methyl ether acetate</i>	34			
Polyalkylene oxide polyol	20		PAO.	
* * * *				
Polyaluminum (alternately Polyaluminium) chloride solution	1		PLS.	
* * * *				
Polyalkyl(C10–C18) methacrylate/Ethylene-propylene copolymer mixture	14		PEM.	
* * * *				
<i>Polycarboxylic ester (C9+), see Ditridecyl adipate</i>				DTY
Poly(2+)cyclic aromatics	32		PCA.	
<i>Polydimethylsiloxane, see Dimethylpolysiloxane</i>				DMP
* * * *				
Polyether (molecular weight 1350+)	41		PYR.	
* * * *				
Poly(ethylene glycol) methylbutenyl ether (molecular weight >1000)	40		PBN.	
<i>Polyethylene glycol monoalkyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>			PEE	PAG
* * * *				
Polyethylene polyamines (more than 50% C5–C20 Paraffin oil)	7	2, 3	PEY	PEB
Polyferric sulfate (alternately sulphate) solution	34		PSS.	
* * * *				
Poly(iminoethylene)-graft-N-poly(ethyleneoxy) solution (90% or less)	7	3	PIG	PIM
Polyisobutene in aliphatic (C10–C14) solvent	7	2	PIB	PIA
[ADD]				
(Polyisobutene) amino products in aliphatic hydrocarbons	7	3		
* * * *				
[REVISE]				
Poly(4+)isobutylene (molecular weight > 224)	30	3	PIL.	
[ADD]				
Polyisobutylene (molecular weight ≤ 224)	30	3	PIL.	
[REVISE]				
* * * *				
Polymethylene polyphenyl isocyanate	12	2	PPI.	
[ADD]				
Polymethylsiloxane	34		PMX.	
[REVISE]				
Polyolefin (molecular weight 300+)	33		PMW ...	PLF
Polyolefin amide alkeneamine (C17+)	33		POH	POD
<i>Polyolefin amide alkeneamine (C28+), see Polyolefin amide alkenamine (C17+).</i>			POD	POH
Polyolefin amide alkeneamine borate (C28–C250)	33		PAB.	
* * * *				
Polyolefin amide alkeneamine/Molybdenum oxysulfide (alternately oxysulphide) mixture.	7		PMO.	
* * * *				
[ADD]				
Polyolefin amine (C17+)	7		POG.	
[REVISE]				
* * * *				
Polyolefinamine in aromatic solvent	32	3	POR	POF
Polyolefin aminoester salts (molecular weight 2000+)	34		PAE.	
* * * *				
Polyolefin phosphorosulfide (alternately phosphorosulphide), barium derivative (C28–C250).	34		PPS.	

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Poly (oxyalkylene) alkenyl ether (molecular weight > 1000)	41	3	PXY.	
* * * *	*		*	*
Polyoxypropylenediamine (molecular weight 2000)	7		PYD.	
Poly(5+) propylene	30		PLQ	PLP
Polypropylene glycol	40	2	PGC.	
<i>Polypropylene glycol methyl ether, see Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.</i>			PGM	PAG
* * * *	*		*	*
Polysiloxane/White spirit, low (15–20%) aromatic	34		PWS.	
[ADD]				
<i>Poly(tetramethylene ether) glycols (molecular weight 950–1050), see alpha-hydro-omega-Hydroxytetradeca(oxytetramethylene).</i>			PYU	HTO
Polytetramethylene ether glycol	40		PYT	HTO/PYU/PYS
<i>Poppy seed, see Oil, edible: Poppy seed</i>				OPS (VEO)
<i>Poppy, see Oil, edible: Poppy</i>				OPY (VEO)
* * * *	*		*	*
[REVISE]				
<i>Potassium hydroxide solution, see Caustic potash solution</i>		2		CPS/PTH
* * * *	*		*	*
Potassium polysulfide (alternately polysulphide)/Potassium thiosulfide (alternately thiosulphide) solution (41% or less).	0	1	PYP	PSF/PTF
* * * *	*		*	*
Potassium thiosulfate (alternately thiosulphate) (50% or less)	43		PTF.	
* * * *	*		*	*
<i>iso-Propanolamine, see Isopropanolamine</i>				MPA (PAX/PLA)
* * * *	*		*	*
2-Propene-1-aminium, N,N-dimethyl-N–2-propenyl-, chloride, homopolymer solution.	0	1, 3	PLN.	
Propionaldehyde	19		PAD.	
beta-Propiolactone	18	3	PLT.	
* * * *	*		*	*
<i>n-Propoxypropanol, see Propylene glycol monoalkyl ether</i>			PXP	PGE
* * * *	*		*	*
[ADD]				
n-Propyl chloride	36		PRC.	
Propyl ether	41			IPE/PRE
[REVISE]				
n-Propylamine	7		PRA	IPO/IPP/IPQ
<i>iso-Propylamine solution, see Isopropylamine (70% or less) solution</i>				IPQ (IPO/IPP/PRA)
<i>Propylbenzenes (all isomers), see Alkyl (C3–C4) benzenes</i>			PBY	AKC (CUM/PBZ)
<i>iso-Propyl cyclohexane, see Isopropylcyclohexane</i>				IPX
* * * *	*		*	*
<i>Propylene glycol n-butyl ether, see Propylene glycol monoalkyl ether</i>			PGD	PGE
<i>Propylene glycol ethyl ether, see Propylene glycol monoalkyl ether</i>			PGY	PGE
<i>Propylene glycol methyl ether, see Propylene glycol monoalkyl ether</i>		2	PME	PGE
Propylene glycol methyl ether acetate	34	2	PGN.	
Propylene glycol monoalkyl ether	40		PGE.	
<i>Including:</i>				
<i>n-Propoxypropanol</i>	40			
<i>Propylene glycol n-butyl ether</i>	40			
<i>Propylene glycol ethyl ether</i>	40			
<i>Propylene glycol methyl ether</i>	40			
<i>Propylene glycol propyl ether</i>	40			
Propylene glycol phenyl ether	40		PGP.	
<i>Propylene glycol propyl ether, see Propylene glycol monoalkyl ether</i>				PGE
* * * *	*		*	*
Propylene trimer	30		PTR.	
[ADD]				
Propylene/Propane/MAPP gas mixture	30	2	PPM.	
[REVISE]				

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Pseudocumene</i> , see Trimethylbenzene (all isomers)				TMB/TMD/TME/TRE
* * * *				*
<i>Pyridine bases</i> , see Paraldehyde-Ammonia reaction product				PRB
Pyrolysis gasoline (containing Benzene)	32	3	PYG	GPY
<i>Rapeseed oil (low erucic acid containing less than 4% free fatty acids)</i> , see Oil, edible: Rapeseed (low erucic acid containing less than 4% free fatty acids)		3		ORO (VEO)
<i>Rapeseed oil fatty acid methyl esters</i> , see Oil, misc.: Rapeseed fatty acid methyl esters		3		RSO
<i>Rapeseed oil</i> , see Oil, edible: Rapeseed				ORO (VEO)
* * * *				*
<i>Resin oil, distilled</i> , see Oil, misc.: Resin, distilled		3		ORR (ORS)
<i>Rice bran oil</i> , see Oil, edible: Rice bran				ORB
[ADD]				
Rosin soap (disproportionated) solution	43		RSP	
[REVISE]				
<i>Rosin</i> , see Oil, misc.: Rosin				ORN
<i>Rum</i> , see Alcoholic beverages, n.o.s.				ABV
<i>Safflower oil</i> , see Oil, edible: Safflower				OSF (VEO)
* * * *				*
<i>Shea butter</i> , see Oil, edible: Shea butter		3		OSH (VEO)
* * * *				*
Sodium acetate solutions	34		SAN	
Sodium acetate, Glycol, Water mixture (containing 1% or less Sodium hydroxide) (if non-flammable or non-combustible)	5	2	SAY	SAO/SAP/SAQ/SAY
Sodium acetate, Glycol, Water mixture (containing Sodium hydroxide)	5		SAQ	SAO/SAP/SAW/SAY
Sodium acetate, Glycol, Water mixture (not containing Sodium hydroxide) ..	34	2	SAW	SAO/SAP/SAQ/SAY
Sodium alkyl (C14–C17) sulfonates (alternately sulphonates) (60–65% solution) ..	34		SSU	AKA/AKE
* * * *				*
Sodium benzoate	34		SBN	SBM
Sodium bicarbonate solution (less than 10%)	34	3	SBC	
* * * *				*
Sodium bromide solution (less than 50%)	43	3	SBL	SBR
* * * *				*
[ADD]				
<i>Sodium dimethyl naphthalene sulfonate solution</i> , see Dimethyl naphthalene sulfonic (alternately sulphononic) acid, sodium salt solution				DNS
[REVISE]				
Sodium hydrogen sulfide (alternately sulphide) (6% or less)/Sodium carbonate (3% or less) solution	0	1, 2, 3	SSS	SCE/SHW
Sodium hydrogen sulfite (alternately sulphite) solution (45% or less)	43		SHY	SHX
Sodium hydrosulfide (alternately hydrosulphide)/Ammonium sulfide (alternately sulphide) solution	5	2	SSA	ASF/ASS
Sodium hydrosulfide (alternately hydrosulphide) solution (45% or less)	5	2	SHR	
<i>Sodium hydroxide solution</i> , see Caustic soda solution		2		CSS (SHD)
* * * *				*
Sodium lignosulfonate (alternately lignosulphonate) solution	43		SLG	LNL
Sodium long-chain alkyl salicylate (C13+)	34		SLS	
<i>Sodium-2-mercaptobenzothiazol solution</i> , see Mercaptobenzothiazol, sodium salt solution				SMB
Sodium methoxide (25% in methanol)	0	1	SMO	
Sodium methylate 21–30% in methanol	0	1, 2, 3	SMT	SMS
<i>Sodium naphthalene sulfonate</i> (alternately <i>sulphonate</i>) solution, see Naphthalene sulfonic (alternately sulphononic) acid (40% or less), sodium salt solution (40% or less) ..			SNS	NSA (NSB)
<i>Sodium naphthenate solution</i> , see Naphthenic acid, sodium salt solution ..				NTS
* * * *				*
[ADD]				
<i>Sodium N-methyl dithio carbamate solution</i> , see Metam sodium solution			MSS	SMD
[REVISE]				
Sodium petroleum sulfonate (alternately sulphonate)	34		SPS	

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Sodium poly(4+)acrylate solution	43	2	SOP	SOO
Sodium polyacrylate solution	43	2	SOO	SOP
<i>Sodium salt of Ferric hydroxyethylethylenediaminetriacetic acid solution, see Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution.</i>			STA	FHX
* * * * *				
Sodium sulfate (alternately sulphate) solution	34	3	SST	SSO
Sodium sulfide (alternately sulphide) solution (15% or less)	43		SDR	SDS
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H ₂ S 15 ppm or less).	0	1, 2	SSH	SDS/SHR/SSI/SSJ
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H ₂ S greater than 15 ppm but less than 200 ppm).	0	1, 2	SSI	SDS/SHR/SSH/SSJ
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H ₂ S greater than 200 ppm).	0	1, 2	SSJ	SDS/SHR/SSH/SSI
Sodium sulfite (alternately sulphite) solution (25% or less)	43		SUP	SSF/SUS
[ADD] Sodium tartrates/Sodium succinates solution	43		STM.	
* * * * *				
[REVISE] <i>Soyabean fatty acid methyl ester, see Oil, misc.: Soyabean fatty acid methyl ester.</i>				OST
[ADD] Soyabean oil (epoxidized)	34			OSC/EVO
[REVISE] <i>Soyabean oil, see Oil, edible: Soyabean</i>		2		OSB (VEO)
<i>Stearic acid, see Fatty acids (saturated, C13+)</i>			SRA	FAD (FAB/FAE/FDI/FDT)
* * * * *				
<i>Stoddard solvent, see Naphtha: Stoddard solvent</i>				NSS
* * * * *				
Sulfohydrocarbon (alternately Sulphohydrocarbon) (C3–C88)	33		SFO.	
Sulfohydrocarbon (alternately Sulphohydrocarbon), long-chain (C18+) alkylamine mixture.	7		SFX.	
Sulfolane (alternately Sulpholane)	39		SFL.	
Sulfonated (alternately Sulphonated) polyacrylate solutions	43	2	SPA.	
Sulfur (alternately Sulphur) (molten)	0	1, 2	SXX.	
Sulfur (alternately Sulphur) dioxide	0	1	SFD.	
Sulfuric (alternately Sulphuric) acid	2	2	SFA	SAC
Sulfuric (alternately Sulphuric) acid, spent	2	2	SAC	SFA
Sulfurized (alternately Sulphurized) fat (C14–C20)	33		SFT.	
Sulfurized (alternately Sulphurized) polyolefinamide	10		SPY.	
Sulfurized (alternately Sulphurized) polyolefinamide alkene (C28–C250) amine.	33		SPO.	
<i>Sunflower seed oil, see Oil, edible: Sunflower seed</i>	34			OSN (VEO)
[ADD] <i>Sym-trichlorobenzene, see 1,2,4-Trichlorobenzene.</i>				
[REVISE] <i>Tall oil, see Oil, misc.: Tall</i>				OTL (OTI/OTJ)
<i>Tall oil, crude, see Oil, misc.: Tall, crude</i>		2, 3		OTI (OTJ/OTL)
<i>Tall oil, distilled, see Oil, misc.: Tall, distilled</i>		3		OTJ (OTI/OTL)
<i>Tall oil, fatty acid, see Oil, misc.: Tall fatty acid</i>		2		OTT
<i>Tall oil fatty acid (resin acids less than 20%), see Oil, misc.: Tall oil fatty acid (resin less than 20%).</i>		2		OTK (OTT)
[ADD] Tall oil fatty acid, barium salt	0	1, 2	TOB.	
[REVISE] <i>Tall oil pitch, see Oil, misc.: Tall pitch</i>		3		OTP (OTI/OTJ/OTL)
Tall oil soap (crude)	34		TOR	TOS
[ADD] Tall oil soap (disproportionated) solution	43		TOS.	
[REVISE] Tallow	34	2	TLO.	
<i>Tallow alcohol, see Alcohols (C13+)</i>		2	TFA	ALY (ASY)
* * * * *				
<i>Tallow fatty alcohol, see Alcohols (C13+)</i>		2	TFA	ALY
<i>TAME, see tert-Amyl methyl ether</i>				AYE

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Tertiary butylphenols	21	.....	BLT	BTP
[ADD]				
Tetrachloroethane	36	.....	TEC.	
[REVISE]				
<i>1,1,2,2-Tetrachloroethane, see</i> Tetrachloroethane	36	.....	TEC	TEE
<i>Tetradecanol, see</i> Alcohols (C13+)			TTN	ALY
<i>Tetradecene, see</i> olefins or alpha-olefin entries				OAM/OFY/OFW/OFZ/TDD
<i>Tetradecylbenzene, see</i> Alkyl (C9+) benzenes			TDB	AKB
Tetraethyl silicate monomer/oligomer (20% in ethanol)	0	1, 3	TSM.	
* * * * *				
<i>Tetraethylene glycol methyl ether, see</i> Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.				PAG
Tetraethylenepentamine	7	2	TTP.	
Tetrahydrofuran	41	.....	THF.	
* * * * *				
[ADD]				
<i>1,2,3,5-Tetramethylbenzene, see</i> Tetramethylbenzene (all isomers)			TTB	TTC
[REVISE]				
<i>Tetrapropylbenzene, see</i> Alkyl(C9+)benzenes				AKB
<i>Tetrasodium salt of ethylenediaminetetraacetic acid solution, see</i> Ethylenediaminetetraacetic acid, tetrasodium salt solution.				EDS
* * * * *				
Toluene	32	2	TOL.	
Toluene diisocyanate	12	2	.....	TDI
Toluenediamine	9	.....	TDA.	
o-Toluidine	9	2	TLI	TOD/TOI
<i>Triarylphosphate, see</i> Triisopropylated phenyl phosphates			TRA	TPL
* * * * *				
1,2,3-Trichlorobenzene (molten)	36	3	TBZ	TCB
* * * * *				
[ADD]				
<i>1,2,3-Trichlorobenzol, see</i> 1,2,3-Trichlorobenzene (molten)			TBZ	TCB
* * * * *				
[REVISE]				
Trichloroethylene	36	2	TCL.	
1,1,2-Trichloro-1,2,2-trifluoroethane	36	.....	TTF.	
Tricresyl phosphate (containing 1% or more ortho-isomer)	34	3	TCO	TCP/TCQ
Tricresyl phosphate (containing less than 1% ortho-isomer)	34	3	TCP	TCO/TCQ
1,2,3-Trichloropropane	36	2	TCN.	
<i>Tridecane (all isomers), see</i> n-Alkanes (C10+) (all isomers)			TRD	ALV (ALJ)
* * * * *				
<i>Tridecanol, see</i> Alcohols (C13+)			TDN	ALY (ASK/ASY/AYK/LAL)
<i>Tridecene, see</i> Olefins (C13+ all isomers)			TRD	OAM/OFY/OFW/OFZ/TDC
* * * * *				
<i>Tridecylbenzene, see</i> Alkyl (C9+) benzenes			TRB	AKB
* * * * *				
<i>Triethylene glycol butyl ether, see</i> Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.			TBE	PAG
* * * * *				
[ADD]				
Triethylene glycol dibenzoate	34	.....	TGB.	
[REVISE]				
Triethylene glycol ether mixture	40	.....	TYM.	
<i>Triethylene glycol ethyl ether, see</i> Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.			TGE	PAG
<i>Triethylene glycol methyl ether, see</i> Poly(2–8)alkylene glycol monoalkyl (C1–C6) ether.			TGY	PAG
* * * * *				
<i>Triisopropanolamine salt of 2,4-Dichlorophenoxyacetic acid solution, see</i> 2,4-Dichlorophenoxyacetic acid, Triisopropanolamine salt solution.				DTI

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Trimethyl nonanol, see</i> Dodecyl alcohol				DDN (ASK/ASY/LAL)
Trimethylol propane polyethoxylated	20		TPR.	
[ADD]				
Trimethyl phosphite	34	2	TPP.	
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-)	12		THI.	
Trimethylhexamethylenediamine (2,2,4- and 2,4,4-)	7		THA.	
[REVISE]				
<i>Tripropylene, see</i> Propylene trimer				PTR
<i>Tripropylene glycol methyl ether, see</i> Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether.			TGM	PAG
<i>Trisodium nitrilotriacetate solution, see</i> Nitrilotriacetic acid, trisodium salt solution.			TSO	NCA (TSN)
<i>Trisodium salt of N-(Hydroxyethyl)ethylenediaminetriacetic acid solution, see</i> N-(Hydroxyethyl)ethylenediaminetriacetic acid, trisodium salt solution.				HET
Trixylyl phosphate	34			TRP
<i>Trixylenyl phosphate, see</i> Trixylyl phosphate				TRP
<i>Tung oil, see</i> Oil, misc.: Tung				OTG
<i>Turpentine substitute, see</i> White spirit (low (15–20%) aromatic)				WSL (WSP)
<i>Undecane (all isomers), see</i> Alkanes (C10+) (all isomers)			UDN	ALV (ALJ)
<i>Undecanol, see</i> Undecyl alcohol				UND (ALR)
<i>Undecylbenzene, see</i> Alkyl (C9+) benzenes			UDB	AKB
Urea solution	43		USL	URE
Urea, Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution.	0	1	UPX.	
Urea/Ammonium nitrate solution (containing less than 1% free Ammonia)	43	2	UAU	ANU/UAS/UAT/UAV
Urea/Ammonium nitrate solution (containing 1% or more free Ammonia)	6		UAT	ANU/UAS
Urea/Ammonium phosphate solution	43		UAP.	
[ADD]				
Vacuum gas oil, <i>see</i> oil misc.: Vacuum gas oil	33		OVC.	
[REVISE]				
Valeraldehyde (all isomers)	19		VAK	IVA/VAL
Vegetable acid oils, n.o.s.	34		VAD.	
<i>Including:</i>				
<i>Corn acid oil</i>	34			
<i>Cottonseed acid oil</i>	34			
<i>Dark mixed acid oil</i>	34			
<i>Groundnut acid oil</i>	34			
<i>Mixed acid oil</i>	34			
<i>Mixed general acid oil</i>	34			
<i>Mixed hard acid oil</i>	34			
<i>Mixed soft acid oil</i>	34			
<i>Rapeseed acid oil</i>	34			
<i>Safflower acid oil</i>	34			
<i>Soya acid oil</i>	34			
<i>Sunflower seed acid oil</i>	34			
Vegetable fatty acid distillates, n.o.s.	34	3	VFD.	
<i>Including:</i>				
<i>Palm kernel fatty acid distillate</i>	34			
<i>Palm oil fatty acid distillate</i>	34			
<i>Tall fatty acid distillate</i>	34			
<i>Tall oil fatty acid distillate</i>	34			
Vegetable oils, n.o.s.	34		VAD.	
<i>Including:</i>				
<i>Beechnut oil</i>	34			
<i>Camelina oil</i>	34			

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
Cashew nut shell	34			
Castor oil	34			
Cocoa butter	34			
Coconut oil	34	2		
Corn oil	34			
Cottonseed oil	34			
Croton oil	34			
Grape seed oil	34			
Groundnut acid oil	34			
Hazelnut oil	34			
Illipe oil	34			
Jatropha oil	34	3		
Linseed oil	34			
Mango kernel oil	34			
Nutmeg butter	34			
Oiticica oil	34			
Olive oil	34			
Palm kernel oil	34			
Palm kernel olein	34			
Palm kernel stearin	34			
Palm mid fraction	34			
Palm, non-edible industrial grade	34			
Palm oil	34	2, 3		
Palm olein	34			
Palm stearin	34			
Peanut oil	34			
Peel oil (oranges and lemons)	34			
Perilla oil	34			
Pine oil	34			
Poppy seed oil	34			
Poppy oil	34			
Raisin seed oil	34			
Rapeseed oil	34			
Rapeseed (low erucic acid containing less than 4% free fatty acids)	34	3		
Resin oil, distilled	30	3		
Rice bran oil	34			
Rosin oil	34			
Safflower oil	34			
Salad oil	34			
Sesame oil	34			
Shea butter	34			
Soyabean oil	34	2		
Sunflower seed oil	34			
Tall	34			
Tall, crude	34			
Tall, distilled	34			
Tall, pitch	34			
Tucum oil	34			
Tung oil	34			
Walnut oil	34			
* * * * *				
Waxes			WAX.	
Including:				
Candelilla	34		WCD.	
Carnauba	34		WCA.	
Paraffin	31		WPF.	
Petroleum	33		WPT.	
White spirit, see White spirit (low (15–20%) aromatic)			WSP	WSL
* * * * *				
Wine, see Alcoholic beverages			ABV.	
* * * * *				
Wood lignin with Sodium acetate/oxalate	0	1, 3	WOL.	
Xylenes	32	2	XLX	XML/XLO/XLP
* * * * *				
Xylenols	21		XYL.	
* * * * *				
Zinc alkenyl carboxamide	10		ZAA	WSL

TABLE 1 TO PART 150—ALPHABETICAL LIST OF CARGOES—Continued

Chemical name	Group No.	Footnote	CHRIS code	Related CHRIS codes
<i>Zinc bromide/Calcium bromide solution, see</i> Drilling brine (containing Zinc salts).				DZB

Notes:

1. Because of very high reactivity, unusual conditions of carriage, or potential compatibility problems, this commodity is not assigned to a specific group in Figure 1 to 46 CFR part 150 (Compatibility Chart).

2. See Appendix I to 46 CFR part 150 (Exceptions to the Chart).

3. Entry was 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).

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

■ 8. Amend Table II to Part 150 as follows:

■ a. Revise the table heading;

■ b. In section 0. Unassigned, revise the group heading to read as “Unassigned Cargoes” and remove the entries for:

■ i. “Alkyl (C8–C10)/(C12–C14): (60% or more/40% or less)”;

■ ii. “polyglucoside solution (55% or less)”;

■ iii. “Aluminium chloride, Hydrochloric acid solution”;

■ iv. “tert-Dodecanethiol”;

■ v. “Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid solution”;

■ vi. “Fuming sulfuric acid”;

■ vii. “Ligninsulfonic acid, sodium salt solution”;

■ viii. “NIAX POLYOL APP 240C”;

■ ix. “Noxious Liquid Substance, n.o.s (NLS’s)”;

■ x. “SAP 7001”.

■ c. In section 2. Sulfuric Acids, revise the group heading to read “Sulfuric (Alternately Sulphuric) Acids”;

■ d. In section 3. Nitric Acids, remove the entry for “Nitric acid (70% and over)”;

■ e. In section 4. Organic Acids, remove the entries for:

■ i. “Acid oil mixture from soya bean, corn (maize) and sunflower oil refining”;

■ ii. “i-Butyric acid”; “Cashew nut shell oil (untreated)”;

■ iii. “Chloroacetic acid solution”;

■ iv. “2-Ethylhexanoic acid”;

■ v. “Fatty acids, (C8–C10)”;

■ vi. “Fatty acids, (C12 +)”;

■ vii. “Fatty acids, (C16 +)”;

■ viii. “Fatty acids, essentially linear (C6–C18) 2-ethylhexyl ester”;

■ ix. “Fatty acid methyl esters”;

■ x. “Metal fatty acid salt”;

■ xi. “Metal long chain alkyl salt”; and

■ xii. “Microsilica slurry”.

■ f. In section 5. Caustics, remove the entries for:

■ i. “Calcium hypochlorite solutions”;

■ ii. “Cresylate spent caustic”;

■ iii. “Sodium hydroxide solution”; and

■ iv. “Sodium naphthenate solution”.

■ g. In section 6. Ammonia, remove the entries for “Ammonia, aqueous” and “Ammonium nitrate, Urea solution (containing Ammonia)”;

■ h. In section 7. Aliphatic Amines, remove the entries for:

■ i. “Alkenylamine mixtures”;

■ ii. “Alkyl (greater than C8) amine, Alkenyl (greater than C12) acid ester in mineral oil”;

■ iii. “Calcium long chain alkyl phenolic amine (C8–C40)”;

■ iv. “Diphenylamine, reaction product with 2,2,4-Trimethylpentene”;

■ v. “Diphenylamines, alkylated”;

■ vi. “Hexamethylenediamine”;

■ vii. “Hexamethylenetetramine”;

■ viii. “HiTec 321”;

■ ix. “Polyalkyl alkeneamine succinimide, molybdenum oxysulfide”;

■ x. “Polyolefin amide alkeneamine (C28 +)”;

■ xi. “Polyolefin amide alkeneamine polyol”;

■ xii. “Propanil, Mesityl oxide, Isophorone mixture”; and

■ xiii. “Roundup”.

■ i. In section 8. Alkanolamines, remove the entries for “Diethylethanolamine”, “N,N-bis (2-Hydroxyethyl) oleamide”, and “Ucarsol CR Solvent 302 SG”;

■ j. In section 9. Aromatic Amines, remove the entries for “Dimethylamine salt of 4-Chloro-2-methylphenoxyacetic acid solution” and “Diphenylamine”;

■ k. In section 11. Organic Anhydrides, remove the entries for “Alkyl succinic anhydride” and “Phthalate based polyester polyol”;

■ l. In section 14. Acrylates, remove the entries for:

■ i. “i-Butyl methacrylate”;

■ ii. “Butyl methacrylate, Decyl methacrylate, Cetyl-Eicosyl methacrylate mixture”;

■ iii. “Polyalkyl methacrylate”;

■ iv. “Polyalkyl methacrylate solution (containing max 40% active material)”;

■ v. “Propylene copolymer mixture”;

■ vi. “Roehm monomer 6615”.

■ m. In section 18. Ketones, remove the entries for “Amyl methyl ketone”,

“Epoxy resin”, and “Trifluralin in Xylene”;

■ n. In section 19. Aldehydes, remove the entry for “Ethylhexaldehyde”;

■ o. In section 20. Alcohols, Glycols, remove the entries for:

■ i. “Brake fluid base mixtures”;

■ ii. “iso-Butyl alcohol”;

■ iii. “t-Butyl alcohols”;

■ iv. “Cetyl-Stearyl alcohol”;

■ v. “Cyclopentanol”;

■ vi. “Diethyl hexanol”;

■ vii. “Diethylene glycol”;

■ viii. “Diethylene glycol dibenzoate”;

■ ix. “Diisobutyl carbinol”;

■ x. “Dodecanol”;

■ xi. “Dodecyl hydroxypropyl sulfide”;

■ xii. “2-Ethoxyethanol”;

■ xiii. “2-Ethylhexanol”;

■ xiv. “Glycol”;

■ xv. “Hydroxy terminated polybutadiene”;

■ xvi. “Icosa(oxypropane-2,3-diyl)s”;

■ xvii. “Lauryl polyglucose (50% or less)”;

■ xviii. “Pentadecanol”;

■ xix. “Rum”;

■ xx. “Sodium methylate solution (21–30% in Methanol)”;

■ xxi. “Tetradecanol”; and

■ xxii. “Tridecanol”.

■ p. In section 22. Caprolactam Solutions, remove the entry for “Caprolactam solution”;

■ q. In section 30. Olefins, remove the entries for:

■ i. “Amylene”;

■ ii. “Butadiene Feedstock [Kirby]”;

■ iii. “Butene”;

■ iv. “Dichloropropene”;

■ v. “Dicyclopentadiene”;

■ vi. “Ethylene-Propylene copolymer”;

■ vii. “Olefin mixtures”;

■ viii. “alpha-Olefins (C13 +)”;

■ ix. “Polybutene”;

■ x. “Polyolefin (molecular weight 300 +)”;

■ xi. “Polypropylene”.

■ r. In section 31. Paraffins, remove the entries for:

■ i. “Aviation alkylates (C8 paraffins and iso-paraffins BPT 95–120 °C)”;

- ii. "Decane";
- iii. "Dodecane";
- iv. "Heptane";
- v. "Hexane";
- vi. "Mineral oil";
- vii. "Polyolefin (molecular weight 300 +)";
- viii. "iso-Propylcyclohexane";
- ix. "Tridecane"; and
- x. "Paraffin".
- s. In section 32 Aromatic Hydrocarbons, revise the group heading to read "Aromatic Hydrocarbon Mixtures" and remove the entries for:
 - i. "Aryl polyolefin (C11–C50)";
 - ii. "Butylbenzene (all isomers)";
 - iii. "Cumene";
 - iv. "Decylbenzene";
 - v. "Dialkyl(C10–C14) benzenes";
 - vi. "Dodecylbenzene";
 - vii. "1-Hexadecylnaphthalene, 1, 4-bis(Hexadecyl)";
 - viii. "Isopropylbenzene";
 - ix. "Naphthalene mixture";
 - x. "Propylbenzene";
 - xi. "Pseudocumene";
 - xii. "Tetradecylbenzene"; and
 - xiii. "Undecylbenzene".
- t. In section 33. Miscellaneous Hydrocarbon Mixtures, remove the entries for:
 - i. "Alachlor";
 - ii. "Alkyl toluene sulfonic acid, calcium salts";
 - iii. "Degummed C9 (DOW)";
 - iv. "Distillates";
 - v. "Maleated ethylene-propylene copolymer reaction product [synthetic rubber]";
 - vi. "Pine oil";
 - vii. "Resin oil, distilled"; and
 - viii. "Sodium petroleum sulfonate".
- u. In section 34. Esters, remove the entries for:
 - i. "Acid oil mixture from soybean, corn (maize) and sunflower oil refining";
 - ii. "Alkane (C14–C17) sulfonic acid, sodium salt solution";
 - iii. "Alkyl ester copolymer (C6–C18)";
 - iv. "Alkylaryl phosphate mixtures (more than 40%)";
 - v. "t-Amyl formate";
 - vi. "iso-Butyl isobutyrate";
 - vii. "Calcium alkaryl sulfonate (C11–C50) Calcium alkyl(C9)phenol sulfide, polyolefin phosphorosulfide mixture";
 - viii. "Calcium long chain alkyl phenates";
 - ix. "Calcium nitrate";
 - x. "Camelina oil";
 - xi. "Cesium formate solution";
 - xii. "Coconut oil, fatty acid";
 - xiii. "Coconut oil, fatty acid methyl ester";
 - xiv. "Copper salt of long chain alkanolic acids";
 - xv. "Cottonseed oil, fatty acid";
 - xvi. "Dialkyl(C7–C13) phthalates";
 - xvii. "Diethylene glycol butyl ether acetate";
 - xviii. "Diethylene glycol ethyl ether acetate";
 - xix. "Diethylene glycol methyl ether acetate";
 - xx. "Diheptyl phthalate";
 - xxi. "Dihexyl phthalate";
 - xxii. "Diisodecyl phthalate";
 - xxiii. "Diisononyl adipate";
 - xxiv. "Diisononyl phthalate";
 - xxv. "Diisooctyl phthalate";
 - xxvi. "Dinonyl phthalate";
 - xxvii. "Dioctyl phthalate";
 - xxviii. "Diphenyl tolyl phosphate, less than 0.02% ortho-isomer";
 - xxix. "Ditridecyl phthalate";
 - xxx. "Diundecyl phthalate";
 - xxxi. "Ethyl propionate";
 - xxxii. "Ethylene glycol";
 - xxxiii. "Ethylene glycol ethyl ether acetate";
 - xxxiv. "Fatty acids (saturated, C14 +)";
 - xxxv. "Glycerol polyalkoxylate";
 - xxxvi. "Lard";
 - xxxvii. "Magnesium long chain alkyl phenate sulfide (C8–C40)";
 - xxxviii. "Magnesium long chain alkyl salicylate (C13 +)";
 - xxxix. "Mango kernel";
 - xl. "Olefin/Alkyl ester copolymer (molecular weight 2000 +)";
 - xli. "Oleic acid";
 - xlii. "Palm acid oil";
 - xliii. "Palm fatty acid distillate";
 - xliv. "Palm kernel acid oil";
 - xlv. "Palm kernel acid oil, methyl ester/Palm kernel oil fatty acid";
 - xlvi. "Palm mid fraction";
 - xlvii. "Palm oil";
 - xlviii. "Palm oil fatty acid";
 - xlix. "Palm oil fatty acid methyl ester";
 - l. "Palm kernel olein";
 - li. "Palm kernel stearin";
 - lii. "Palm olein";
 - liii. "Palm stearin";
 - liv. "Polydimethylsiloxane";
 - lv. "Polyolefin amide alkeneamine borate (C28–C250)";
 - lvi. "Rapeseed oil fatty acid methyl esters";
 - lvii. "Rapeseed oil (low erucic acid containing less than 4% free fatty acids)";
 - lviii. "Siloxanes";
 - lix. "Sodium bromide solution (less than 50%)";
 - lx. "Soyabean oil (epoxidized)";
 - lxi. "Stearic acid";
 - lxii. "Tall oil";
 - lxiii. "Tall oil, crude";
 - lxiv. "Tall oil, distilled";
 - lxv. "Tall oil fatty acid (*Resin acids less than 20%*)";
 - lxvi. "Tall oil, pitch";
 - lxvii. "Tricresyl phosphate"; and
 - lxviii. "Urea/Ammonium nitrate solution".
- v. In section 36. Halogenated Hydrocarbons, remove the entries for:
 - i. "Chlorodifluoromethane";
 - ii. "Chlorotoluene";
 - iii. "Dibutylphenols"; and
 - iv. "1,2,3-Trichlorobenzene".
- w. In section 38. Carbon Disulfide, revise the group name to read "Carbon Disulfide (Alternately Disulphide)";
- x. In section 39. Sulfolane, revise the group name to read "Sulfolane (Alternately Sulpholane)";
- y. In section 40. Glycol Ethers, remove the entries for:
 - i. "Alcohol (C9–C11) poly (2.5–9) ethoxylates";
 - ii. "Alcohol (C6–C17) (secondary) poly (3–6) ethoxylates";
 - iii. "Alcohol (C6–C17) (secondary) poly (7–12) ethoxylates";
 - iv. "Alcohol (C12–C16) poly (1–6) ethoxylates";
 - v. "Alcohol (C12–C16) poly (7–19) ethoxylates";
 - vi. "Alcohol (C12–C16) poly (20 +) ethoxylates";
 - vii. "Hexaethylene glycol";
 - viii. "Polyether glycol";
 - ix. "Polyether glycol (MW 600–700) (TETRAETHANE 650)";
 - x. "Polyether glycol (MW 950–1050) (TETRAETHANE 1000)";
 - xi. "Polyether glycol (MW 1350–1450) (TETRAETHANE 1400)";
 - xii. "Polyether glycol (MW 1900–2100) (TETRAETHANE 2000)";
 - xiii. "Polyether glycol (MW 2825–2975) (TETRAETHANE 2900)"; and
 - xiv. "Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether acetate".
- z. In section 41. Ethers, remove the entries for:
 - i. "Brominated Epoxy Resin in Acetone";
 - ii. "Diethylene glycol propyl ether";
 - iii. "Diglycidyl ether of Bisphenol A";
 - iv. "Diglycidyl ether of Bisphenol F"; and
 - v. "Ethyl ether".
- aa. In section 42. Nitrocompounds, remove the entry for "Nitropropane";
- bb. In section 43. Miscellaneous Water Solutions, remove the entries for:
 - i. "Alkyl polyglucoside solutions";
 - ii. "Aluminum hydroxide, sodium hydroxide, sodium carbonate solution (40% or less)";
 - iii. "Ammonium chloride solution (less than 25%) drilling brines";
 - iv. "Ammonium lignosulfonate solution";
 - v. "Ammonium nitrate, Urea solution (not containing Ammonia)";
 - vi. "Barium sulfate slurry";
 - vii. "Calcium bromide solution";
 - viii. "Calcium chloride solution";
 - ix. "Calcium formate solution";
 - x. "Calcium lignosulfate solution";
 - xi. "Calcium lignosulfate solution (free alkali content 1% or less)";

- | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> ■ xii. “Diethanolamine salt of 2,4-Dichlorophenoxyacetic acid solution”; ■ xiii. “Ferrous chloride solution (less than 40%, containing less than 10% Manganese and Aluminum chlorides)”; ■ xiv. “Potassium thiosulfate solution”; | <ul style="list-style-type: none"> ■ xv. “Sodium alkyl sulfonate solution”; and ■ xvi. “Sodium sulfite solution”. ■ cc. In the following table, for the “Cargo” column, under the appropriate “Group” heading, add the entries marked “[ADD]” in the appropriate | <p>alphabetical order and revise the entries marked “[REVISE]”; and</p> <ul style="list-style-type: none"> ■ dd. Revise the notes at the end of the table. <p>The revisions and additions read as follows:</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

TABLE 2 TO PART 150—GROUPING OF CARGOES

0. UNASSIGNED CARGOES**[REVISE]**

Acetone cyanohydrin.
 Alkenoic acid, polyhydroxy ester borated.
 Alkylbenzene distillation bottoms.
 Alkyl (C11–C17) benzene sulfonic (alternately sulphonic) acid.
 Alkylbenzene sulfonic (alternately sulphonic) acid (less than 4%).
 Alkyl (C18–C28) toluenesulfonic (alternately toluenesulphonic) acid.
 Aluminium (alternately Aluminium) chloride/Hydrogen chloride solution.
 Ammonium hydrogen phosphate solution.
 Ammonium nitrate solution (45% or less).

[ADD]

Ammonium nitrate solution (93% or less).

[REVISE]

Ammonium thiocyanate/Ammonium thiosulfate (alternately thiosulphate) solution.

[ADD]

Argon, liquefied.

[REVISE]

Benzenesulfonyl (alternately Benzenesulphonyl) chloride.¹
 gamma-Butyrolactone.¹

[ADD]

Carbon dioxide (high purity).
 Carbon dioxide (reclaimed quality).
 Carbon dioxide, liquefied.

[REVISE]

Chlorine.

[ADD]

2-Chloro-4-ethylamino-6-isopropylamino-5-triazine solution.

[REVISE]

Chlorosulfonic (alternately Chlorosulphonic) acid.
 Decyloxytetrahydro-thiophene dioxide.
 2,4-Dichlorophenoxyacetic acid, Dimethylamine salt solution (70% or less).¹
 Dimethyl disulfide (alternately disulphide).
 Diphenylol propane-Epichlorohydrin resins.

[ADD]

Disulfide (alternately Disulphide).

[REVISE]

Dodecyl hydroxypropyl sulfide (alternately sulphide).¹
 Dodecylbenzenesulfonic (alternately Dodecylbenzenesulphonic) acid.¹
 Ethylene oxide.
 Hydrogen peroxide solutions (over 60% but not more than 70% by mass).

[ADD]

Hydrogen peroxide solutions (over 8% but not more than 60% by mass).

[REVISE]

Hydrogenated starch hydrolysate.

Lactic acid.¹

Liquid chemical wastes.

Long-chain alkaryl sulfonic (alternately sulphonic) acid (C16–C60).¹

Magnesium chloride solution.¹

Maltitol solution.

Methylcyclopentadienyl manganese tricarbonyl.

Methylcyclopentadienyl manganese tricarbonyl (60–70%) in mineral oil.

Molasses residue (from fermentation).

Molybdenum polysulfide (alternately polysulphide) long-chain alkyl dithiocarbamide complex.

Motor fuel anti-knock compound (containing lead alkyls).

Naphthalene sulfonic (alternately sulphonic) acid-formaldehyde copolymer, sodium salt solution.

Nitrating acid (mixture of Sulfuric (alternately Sulphuric) and Nitric acids).

Nitric acid (70% and over).¹

Nitric acid fuming.

[ADD]

Nitric acid red fuming.

Nitrogen.

[REVISE]

o-Nitrophenol (molten).¹

[ADD]

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Noxious Liquid Substance, NF, (1) n.o.s. ("trade name" contains "principal components")	Cat X.
Noxious Liquid Substance, F, (2) n.o.s. ("trade name" contains "principal components")	Cat X.
Noxious Liquid Substance, NF, (3) n.o.s. ("trade name" contains "principal components")	Cat X.
Noxious Liquid Substance, F, (4) n.o.s. ("trade name" contains "principal components")	Cat X.
Noxious Liquid Substance, NF, (5) n.o.s. ("trade name" contains "principal components")	Cat Y.
Noxious Liquid Substance, F, (6) n.o.s. ("trade name" contains "principal components")	Cat Y.
Noxious Liquid Substance, NF, (7) n.o.s. ("trade name" contains "principal components")	Cat Y.
Noxious Liquid Substance, F, (8) n.o.s. ("trade name" contains "principal components")	Cat Y.
Noxious Liquid Substance, NF, (9) n.o.s. ("trade name" contains "principal components")	Cat Z.
Noxious Liquid Substance, F, (10) n.o.s. ("trade name" contains "principal components")	Cat Z.
Noxious Liquid Substance, (11) n.o.s. ("trade name" contains "principal components")	Cat Z.
[REVISE]	
Non-noxious Liquid Substance, (12) n.o.s. ("trade name" contains "principal components")	Cat OS.
[ADD]	
n-Octyl Mercaptan.	
[REVISE]	
Oleum. ¹	
Orange juice (concentrated).	
Orange juice (not concentrated).	
Oxygenated aliphatic hydrocarbon mixture.	
Phosphorus, yellow or white.	
[ADD]	
Phosphosulfurized (alternately Phosphosulphurized) bicycle terpene.	
[REVISE]	
Phthalate-based polyester polyol. ¹	
[ADD]	
Polyalkylalkenaminesuccinimide, molybdenum oxysulfide.	
[REVISE]	
Potassium polysulfide (alternately polysulphide), Potassium thiosulfide (alternately thiosulphide) solution (41% or less).	
2-Propene-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer solution.	
[ADD]	
Refrigerant gases.	
[REVISE]	
Sodium chlorate solution (50% or less). ¹	
Sodium dichromate solution (70% or less). ¹	
Sodium hydrogen sulfide (alternately sulphide) (6% or less)/Sodium carbonate (3% or less) solution. ¹	
[ADD]	
Sodium methoxide (25% in methanol).	
Sodium methylate (21–30% in methanol).	
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H ₂ S 15 ppm or less).	
[REVISE]	
Sodium sulfide (alternately sulphide), Hydrosulfide (alternately Hydrosulphide) solution (H ₂ S greater than 15 ppm but less than 200 ppm). ¹	
[ADD]	
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H ₂ S greater than 200 ppm).	
[REVISE]	
Sodium thiocyanate solution (56% or less). ¹	
Sulfur (alternately Sulphur) (molten).	
[ADD]	
Sulfur (alternately Sulphur) dioxide.	
[REVISE]	
Tall oil fatty acid, barium salt. ¹	
Tetraethyl silicate monomer/oligomer (20% in ethanol).	
Urea, Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution.	
Wood lignin with Sodium acetate/oxalate.	
1. NON-OXIDIZING MINERAL ACIDS	
[REVISE]	
Di-(2-ethylhexyl) phosphoric acid.	
* * * * *	
[ADD]	
Hydrofluorosilicic acid (25% or less).	
* * * * *	
[REVISE]	
Polyaluminum (alternately Polyaluminium) chloride solution.	
2. SULFURIC (ALTERNATELY SULPHURIC) ACIDS	
[REVISE]	
Sulfuric (alternately Sulphuric) acid. ¹	
Sulfuric (alternately sulphuric) acid, spent.	
* * * * *	
3. NITRIC ACIDS	
[REVISE]	
Ferric nitrate/Nitric acid solution.	

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Nitric acid (70% or less).

4. ORGANIC ACIDS

[REVISE]

Acetic acid.¹

Acrylic acid.¹

Butyric acid.

Chloroacetic acid (80% or less).

2- or 3-Chloropropionic acid.

Citric acid (70% or less).

Decanoic acid.

2,2-Dichloropropionic acid.

Dimethyl octanoic acid.

Formic acid.¹

[ADD]

Formic acid (85% or less).

[REVISE]

Formic acid (over 85%).

Formic acid mixture (containing up to 18% Propionic acid and up to 25% Sodium formate).

Glycolic acid (70% or less).

Glyoxylic acid solution (50% or less).

n-Heptanoic acid.

1,6-Hexanediol, distillation overheads.

* * * * *

Long-chain alkyl (C13+) salicylic acid.

Methacrylic acid.

Naphthenic acid.

Neodecanoic acid.

Nonanoic acid (all isomers).

Nonanoic/Tridecanoic acid mixture.

Octanoic acid (all isomers).

[ADD]

Oleic acid.

[REVISE]

Pentanoic acid.

n-Pentanoic acid (64%)/2-Methyl butyric acid (36%) mixture.

Propionic acid.

* * * * *

5. CAUSTICS

[ADD]

Aluminum (alternately Aluminium) hydroxide/sodium hydroxide/sodium carbonate solution (40% or less).

[REVISE]

Ammonium sulfide (alternately sulphide) solution (45% or less).

[ADD]

Calcium hydroxide slurry.

[REVISE]

Calcium hypochlorite solution (15% or less).

Calcium hypochlorite solution (more than 15%).

Caustic potash solution.¹

Caustic soda solution.¹

Cresylic acid, sodium salt solution.

[ADD]

1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution.

[REVISE]

Kraft black liquor.

Kraft pulping liquors (free alkali content 3% or more) (Black, Green, or White).

[ADD]

Magnesium hydroxide slurry.

[REVISE]

Mercaptobenzothiazol, sodium salt solution.

[ADD]

2-Mercaptobenzothiazol (in liquid mixture).

[REVISE]

Potassium hydroxide solution.¹

[ADD]

Sodium acetate, Glycol, Water mixture (containing 1% or less Sodium hydroxide) (if non-flammable or non-combustible).

[REVISE]

Sodium acetate, Glycol, Water mixture (containing Sodium hydroxide).

* * * * *

[ADD]

Sodium aluminate solution (45% or less).

[REVISE]

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Sodium borohydride (15% or less)/Sodium hydroxide solution.
Sodium carbonate solutions.

* * * * *

Sodium hydrosulfide (alternately hydrosulphide) solution (45% or less).¹
Sodium hydrosulfide (alternately hydrosulphide)/Ammonium sulfide (alternately sulphide) solution.¹
Sodium hypochlorite solution (15% or less).

[ADD]

Sodium hypochlorite solution (20% or less).

* * * * *

[REVISE]

Triphenylborane (10% or less)/Caustic soda solution.

* * * * *

Vanillin black liquor (free alkali content 3% or more).

6. AMMONIA

* * * * *

[REVISE]

Urea/Ammonium nitrate solution (containing 1% or more Ammonia).

7. ALIPHATIC AMINES**[REVISE]**

Alkyl amine (C17+).
Alkyl (C12+) dimethylamine.

* * * * *

Butylamine (all isomers).
Crude piperazine.

* * * * *

Diethylamine.¹
Diethylenetriamine.¹

* * * * *

Di-n-propylamine.
Dodecylamine/Tetradecylamine mixture.
Dodecyldimethylamine/Tetradecyldimethylamine mixture.
Ethoxylated tallow alkyl amine.
Ethoxylated tallow alkyl amine, glycol mixture.
Ethoxylated tallow amine (>95%).
Ethylamine.¹
Ethylamine solution (72% or less).
N-Ethylbutylamine.
N-Ethylcyclohexylamine.
Ethyleneamine EA 1302.¹
Ethylenediamine.¹
2-Ethylhexylamine.
N-Ethylmethylallylamine.

[ADD]

Glycine, sodium salt solution.

[REVISE]

Glyphosate solution (not containing surfactant).
Hexamethylenediamine (molten).
Hexamethylenediamine solution.
Hexamethylenimine.
Hexamethylenetetramine solutions.
bis-(Hydrogenated tallow alkyl) methyl amines.
Isophoronediamine.

* * * * *

Isopropylamine (70% or less) solution.
Long-chain alkyl amine.
Long-chain polyetheramine in alkyl (C2–C4) benzenes.

* * * * *

Methylamine solutions (42% or less).

[ADD]

2-Methyl-1,5-pentanediamine.
Monoethylamine.

[REVISE]

Morpholine.¹

* * * * *

Pentaethylenhexamine/Tetraethylenepentamine mixture.

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Phosphate esters, alkyl (C12–C14) amine.

[ADD]

Piperazine (70% or less).

Piperazine (crude).

Piperazine, 68% solution.

[REVISE]

Polyalkenyl succinic anhydride amine.

Polyethylene polyamines.¹

Polyethylene polyamines (more than 50% C5–C20 Paraffin oil).

* * * * *

[ADD]

(Polyisobutene) amino products in aliphatic hydrocarbons.

[REVISE]

Polyolefin amide alkeneamine/Molybdenum oxysulfide (alternately oxysulphide) mixture.

Polyolefin amine (C17+).

Polyoxypropylenediamine (molecular weight 2000).

n-Propylamine.

iso-Propylamine solution.

[ADD]

Sodium N-methyl dithio carbamate solution.

[REVISE]

Sulfohydrocarbon (alternately Sulphohydrocarbon), long-chain (C18+) alkylamine mixture.

Tetraethylenepentamine.¹

* * * * *

Triethylenetetramine.¹

Trimethylamine solution (30% or less).

Trimethylhexamethylenediamine (2,2,4- and 2,4,4-).

8. ALKANOLAMINES**[REVISE]**

Alkyl (C12–C16) propoxyamine ethoxylates.

* * * * *

Aminoethyldiethanolamine/Aminoethylethanolamine solution.

* * * * *

Diethylaminoethanol.

Diisopropanolamine.

Dimethylethanolamine.¹

* * * * *

Ethoxylated long-chain (C16+) alkyloxyalkanamine.

* * * * *

Isopropanolamine solution.

Linear alkyl (C12–C16) propoxyamine ethoxylates.

* * * * *

[ADD]

Monoethanolamine.

Monoisopropanolamine.

[REVISE]

n-Propanolamine.

Triethanolamine.

Triisopropanolamine.

9. AROMATIC AMINES

* * * * *

[ADD]

2,6-Diethylaniline.

2,6-Dimethylaniline.

Diphenylamine (molten).

* * * * *

2-Methyl-5-ethylpyridine.

Methylpyridine.

* * * * *

[ADD]

3-Methylpyridine.

[REVISE]

4-Methylpyridine.

N-Methyl-2-pyrrolidone.¹

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

	*	*	*	*	*	*	*
o-Toluidine.							
10. AMIDES							
	*	*	*	*	*	*	*
[REVISE] Alkenyl (C11+) amide.							
	*	*	*	*	*	*	*
N,N-bis(2-Hydroxyethyl) oleamide. Octadecenoamide solution.							
[ADD] Oleamide solution.							
[REVISE] Organomolybdenum amide.							
	*	*	*	*	*	*	*
Polyisobutenyl succinimide.							
[ADD] Sulfurized (alternately Sulphurized) polyolefinamide.							
	*	*	*	*	*	*	*
11. ORGANIC ANHYDRIDES							
[REVISE] Acetic anhydride.							
[ADD] Alkenyl (C16–C20) succinic anhydride.							
[REVISE] Alkyl succinic anhydride.							
Maleic anhydride.							
[ADD] Maleic anhydride/sodium allylsulphonate copolymer solution.							
[REVISE] Phthalic anhydride (molten).							
	*	*	*	*	*	*	*
13. VINYL ACETATES							
	*	*	*	*	*	*	*
[REVISE] Vinyltoluene.							
14. ACRYLATES							
[REVISE] Butyl acrylate (all isomers). Butyl methacrylate. Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture. Cetyl/Eicosyl methacrylate mixture.							
	*	*	*	*	*	*	*
Dodecyl/Octadecyl methacrylate mixture. Dodecyl/Pentadecyl methacrylate mixture.							
	*	*	*	*	*	*	*
2-Hydroxyethyl acrylate. ¹							
	*	*	*	*	*	*	*
Methacrylic resin in ethylene dichloride.							
	*	*	*	*	*	*	*
Methyl methacrylate. Nonyl methacrylate monomer. Polyalkyl acrylate. Polyalkyl(C18–C22) acrylate in Xylene. Polyalkyl (C10–C20) methacrylate. Polyalkyl methacrylate in mineral oil. Polyalkyl (C10–C18) methacrylate/Ethylene-propylene copolymer mixture.							
15. SUBSTITUTED ALLYLS							
[ADD] Acrylonitrile. ¹							
[REVISE] Allyl alcohol. ¹ Allyl chloride. Dichloropropene (all isomers).							

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

1,3-Dichloropropene.							
Dichloropropene/Dichloropropane mixtures.							
*	*	*	*	*	*	*	*
16. ALKYLENE OXIDES							
[ADD]							
Brominated Epoxy Resin in Acetone.							
[REVISE]							
1,2-Butylene oxide.							
[ADD]							
Diglycidyl ether of Bisphenol A.							
Diglycidyl ether of Bisphenol F.							
Epoxy resin.							
[REVISE]							
Ethylene oxide/Propylene oxide mixture.							
*	*	*	*	*	*	*	*
17. EPICHLOROHYDRINS							
[ADD]							
Chlorohydrins.							
*	*	*	*	*	*	*	*
18. KETONES							
[REVISE]							
Acetone. ¹							
Acetophenone.							
Butyl heptyl ketone.							
Camphor oil (light).							
1-(4-Chlorophenyl)-4,4-dimethyl pentan-3-one. ¹							
*	*	*	*	*	*	*	*
Cyclohexanone/Cyclohexanol mixtures.							
*	*	*	*	*	*	*	*
Ethyl amyl ketone.							
Isophorone.							
Ketone residue.							
Mesityl oxide. ¹							
Methyl amyl ketone.							
[ADD]							
Methyl butyl ketone.							
Methyl ethyl ketone. ¹							
Methyl heptyl ketone.							
Methyl isoamyl ketone.							
Methyl isobutyl ketone. ¹							
Methyl propyl ketone.							
*	*	*	*	*	*	*	*
19. ALDEHYDES							
*	*	*	*	*	*	*	*
[REVISE]							
Acrolein. ¹							
*	*	*	*	*	*	*	*
Crotonaldehyde. ¹							
[ADD]							
Crude isononylaldehyde.							
[REVISE]							
Decaldehyde.							
[ADD]							
n-Decaldehyde.							
[REVISE]							
2-Ethyl-3-propylacrolein. ¹							
Formaldehyde (50% or more)/Methanol mixtures. ¹							
Formaldehyde solutions (37%–50%). ¹							
[ADD]							
Formaldehyde solutions (45% or less). ¹							
[REVISE]							
Furfural.							
Glutaraldehyde solutions (50% or less).							
Glyoxal solution (40% or less).							
[ADD]							
Isodecaldehyde.							

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Isononylaldehyde (crude).

[REVISE]

3-Methyl butyraldehyde.

* * * * *

Propionaldehyde.

Valeraldehyde (all isomers).

20. ALCOHOLS, GLYCOLS

[REVISE]

Acrylonitrile-Styrene copolymer dispersion in Polyether polyol.

[ADD]

Alcohol (C9–C11) poly (2.5–9) ethoxylates.

Alcohol (C6–C17) (secondary) poly (3–6) ethoxylates.

Alcohol (C6–C17) (secondary) poly (7–12) ethoxylates.

Alcohol (C12–C16) poly (1–6) ethoxylates.

Alcohol (C12–C16) poly (7–19) ethoxylates.

Alcohol (C12–C16) poly (20+) ethoxylates.

* * * * *

[REVISE]

Alcohol polyethoxylates, secondary.

Alcoholic beverages, n.o.s.

Alcohols (C12+), primary, linear.

[ADD]

Alcohols (C8–C11), primary, linear and essentially linear.

[REVISE]

Alcohols (C12–C13), primary, linear and essentially linear.

Alcohols (C14–C18), primary, linear and essentially linear.

Alcohols (C13+):

Cetyl Alcohol (Hexadecanol).

Oleyl Alcohol (Octadecanol).

Pentadecanol.

Tallow alcohol.

Tetradecanol.

Tridecanol.

Amyl alcohol, primary.

n-Amyl alcohol.

sec-Amyl alcohol.

tert-Amyl alcohol.

* * * * *

Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume).

Brake fluid base mix: Poly(2–8)alkylene (C2–C3) glycols/Polyalkylene (C2–C10) glycols monoalkyl (C1–C4) ethers and their borate esters.

[ADD]

2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture).

Butyl alcohol (all isomers).¹

[REVISE]

Butylene glycol.

Choline chloride solutions.

[ADD]

Crude Isopropanol.

[REVISE]

Cyclohexanol.

Decyl alcohol (all isomers).¹

Decyl/Dodecyl/Tetradecyl alcohol mixture.

Diacetone alcohol.¹

2,2-Dimethylpropane-1,3-diol (molten or solution).

[ADD]

tert-Dodecanethiol.¹

[REVISE]

Dodecyl alcohol (all isomers).

Ethoxylated alcohols, C11–C15

Ethyl alcohol.¹

* * * * *

Ethylene glycol.¹

Furfuryl alcohol.¹

Glycerine.¹

Glycerine (83%)/Dioxanedimethanol (17%) mixture.

[ADD]

Glycerol.

[REVISE]

Glycerol monooleate.

Glycol mixture, crude.

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Heptanol (all isomers).

[ADD]

Hexadecanol (Cetyl alcohol).

[REVISE]

Hexamethylene glycol.

* * * * *

Hexylene glycol.

Isoamyl alcohol.

Isobutyl alcohol.

Isopropyl alcohol.

Methacrylic acid—Alkylxypoly (alkylene oxide) methacrylate copolymer, sodium salt aqueous solution (45% or less).

3-Methoxy-1-butanol.

Methyl alcohol.¹

* * * * *

alpha-Methylbenzyl alcohol with Acetophenone (15% or less).

[ADD]

Methyl butanol.

[REVISE]

Methyl butenol.

[ADD]

Methyl 3- (3,5 di-tert-butyl-4-hydroxyphenyl) propionate crude melt.

[REVISE]

Methylbutynol.

[ADD]

Methylcyclohexanemethanol (crude).

[REVISE]

2-Methyl-2-hydroxy-3-butyne.

* * * * *

Molasses.

Nonyl alcohol (all isomers).¹

[ADD]

1-Octadecanol.

Octadecenol (oleyl alcohol).

[REVISE]

Octanol (all isomers).¹

Octyl alcohol.¹

Pentacos(oxypropane-2,3-diyl)s.

Polyalkylene oxide polyol.

Polybutadiene, hydroxyl terminated.

Polyglycerine/Sodium salts solution (containing less than 3% Sodium hydroxide).¹

Polyglycerol.

Polyolefin amide alkeneamine polyol.

n-Propyl alcohol.¹

Propylene glycol.¹

Sorbitol solution.

Stearyl alcohol.

[ADD]

Tallow alcohol.

[REVISE]

Tallow fatty alcohol (C13+).

Trimethyl nonanol.

Trimethylol propane polyethoxylated.

* * * * *

[ADD]

Wine.

21. PHENOLS, CRESOLS

[ADD]

Alkyl (C4–C9) phenols.

[REVISE]

Alkylated (C4–C9) hindered phenols.

* * * * *

Creosote.¹

Creosote (coal tar).

Creosote (wood tar).

Cresols (all isomers).

[ADD]

Cresols with 5% or more phenol.

Cresols with less than 5% phenol.

[REVISE]

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Cresylic acid.

* * * * *

Cresylic acid tar.

[ADD]

Cresylic acid with 5% or more phenol.

* * * * *

[REVISE]

2,4-Dichlorophenols.

Di-tert-butylphenol.

2,4-Di-tert-butylphenol.

2,6-Di-tert-butylphenol.

[ADD]

2,4-Dichlorophenol.

[REVISE]

Dodecyl phenol.

o-Ethyl phenol.

Long-chain alkylphenate/Phenol sulfide (alternately sulphide) mixture.

Methylene bridged isobutylated phenols.

Nonylphenol.

Nonylphenol (48–62%)/Phenol (42–48%)/Dinonylphenol (1–10%) mixture.

* * * * *

[ADD]

Tertiary butylphenols.

* * * * *

30. OLEFINS**[REVISE]**

Acrylic acid/ethenesulfonic (alternately ethenesulphonic) acid copolymer with phosphonate groups, sodium salt solution.

Aryl polyolefin (C11–C50).

Butadiene (all isomers).

Butadiene/Butylene mixtures (containing Acetylenes).

Butene oligomer.

Butylenes (all isomers).

1,5,9-Cyclododecatriene.

Cyclopentadiene/Styrene/Benzene mixture.

1,3-Cyclopentadiene dimer (molten).

Cyclopentene.

Decene.

Dicyclopentadiene, Resin Grade, 81–89%.

* * * * *

Dodecene (all isomers).

Ethylene.

Ethylidene norbornene.¹

Heptene (all isomers).

Hexene (all isomers).

Isoprene (all isomers).

[ADD]

Isoprene (part refined).

[REVISE]

Isoprene concentrate (Shell).

Latex (ammonia (1% or less)-inhibited).

[ADD]

d-Limonene.

[REVISE]

Methyl acetylene/Propadiene mixture.

Methyl butenes.

Methylcyclopentadiene dimer.

2-Methyl-1-pentene.

4-Methyl-1-pentene.

alpha-Methylstyrene.

[ADD]

Mixed C4 Cargoes.

[REVISE]

Myrcene.

Nonene (all isomers).

1-Octadecene.

Octene (all isomers).

[ADD]

Olefin-Alkyl ester copolymer (molecular weight 2000+).

[REVISE]

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Olefin mixture (C7–C9) C8 rich, stabilized.

[ADD]

Olefins (C13+, all isomers).

[REVISE]

alpha-Olefins (C6–C18) mixtures.

1,3-Pentadiene.

1,3-Pentadiene (greater than 50%), Cyclopentene and isomers, mixtures.

Pentene (all isomers).

* * * * *

beta-Pinene.

[ADD]

Piperylene concentrate.

[REVISE]

Poly(4+)isobutylene (molecular weight >224).

[ADD]

Polyisobutylene (molecular weight ≤224).

[REVISE]

Polyolefin in mineral oil.

Poly(5+)propylene.

Propylene.

* * * * *

Propylene dimer.

Propylene tetramer.

Propylene trimer.

Propylene/Propane/MAPP gas mixture.

Styrene monomer.

* * * * *

Undecene.

[ADD]

1-Undecene.

31. PARAFFINS

[REVISE]

Alkanes (C10–C26) linear and branched (flash point >60 °C).

Alkanes (C10–C26) linear and branched (flash point ≤60 °C).

Alkanes (C6–C9).

[ADD]

n-Alkanes (C9–C11).

n-Alkanes (C10+) (all isomers).

[REVISE]

iso- & cyclo-Alkanes (C10–C11).

iso- & cyclo-Alkanes (C12+).

Butane (all isomers).

[ADD]

Butane/Propane mixture.

* * * * *

[REVISE]

Cyclopentane.

Ethane.

* * * * *

[ADD]

Ethylene-Propylene copolymer (in liquid mixtures).

Heptadecane (all isomers).

[REVISE]

Isopropylcyclohexane.

Methane.

* * * * *

2-Methyl pentane.

Nonane (all isomers).

Octane (all isomers).

Paraffin wax.

Pentane (all isomers).

Polyalpha olefins.

Propane.

Waxes: Paraffin.

32. AROMATIC HYDROCARBON MIXTURES

[REVISE]

Alkyl acrylate-Vinyl pyridine copolymer in Toluene.

Alkyl (C3–C4) benzenes:

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Butylbenzenes.							
Cumene.							
Propylbenzenes.							
Alkyl (C5–C8) benzenes:							
Amylbenzenes.							
Heptylbenzenes.							
Hexylbenzenes.							
Octylbenzenes.							
Alkyl (C9+) benzenes:							
Decylbenzenes.							
Dodecylbenzenes.							
Nonylbenzenes.							
Tetradecylbenzenes.							
Tetrapropylbenzenes.							
Tridecylbenzenes.							
Undecylbenzenes.							
Alkylbenzene mixtures (containing at least 50% of Toluene).							
Alkylbenzene, Alkylindane, Alkylindene mixture (each C12–C17).							
Alkyl toluene.							
Alkyl (C18+) toluenes.							
Benzene.							
[ADD]							
Benzene and mixtures having 10% Benzene or more.							
[REVISE]							
Benzene hydrocarbon mixtures (containing Acetylenes) (having 10% Benzene or more).							
Benzene/Toluene/Xylene mixtures (having 10% Benzene or more).							
	*	*	*	*	*	*	*
Butyl toluene.							
C9 Resinfeed (DSM). ¹							
p-Cymene.							
[ADD]							
Detergent alkylate.							
[REVISE]							
Diethylbenzene.							
	*	*	*	*	*	*	*
Diisopropylnaphthalene.							
Diphenyl.							
Dodecyl xylene.							
	*	*	*	*	*	*	*
Ethyl toluene.							
1-Hexadecylnaphthalene/1,4-bis (Hexadecyl) naphthalene mixture.							
1,n-Hexadecylnaphthalene (90%)/1,4-Di-n-(Hexadecyl) naphthalene (10%).							
[ADD]							
Hexylbenzenes.							
[REVISE]							
Methyl naphthalene (molten).							
Naphthalene (molten).							
Naphthalene still residue.							
Parachlorobenzotrifluoride.							
1-Phenyl-1-xylyl ethane.							
Poly(2+) cyclic aromatics.							
Polyolefinamine in alkyl (C2–C4) benzenes.							
Polyolefinamine in aromatic solvent.							
Pyrolysis gasoline (containing Benzene).							
Tetrahydronaphthalene.							
[ADD]							
Tetramethylbenzene (all isomers).							
[REVISE]							
1,2,3,5-Tetramethylbenzene.							
Toluene.							
Triethylbenzene.							
Trimethylbenzene (all isomers).							
Xylenes.							
Xylenes/Ethylbenzene (10% or more) mixture.							
33. MISCELLANEOUS HYDROCARBON MIXTURES							
[REVISE]							
Alachlor technical (90% or more).							
Alkylbenzene sulfonic (alternately sulphonic) acid, sodium salt solution.							
Alkyl dithiothiadiazole (C6–C24).							
Alkyl (C18–C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, high overbase.							
Alkyl (C18–C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, low overbase.							

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

[ADD]

Asphalt.

Asphalt blending stocks, roofers flux.

* * * * *

Aviation alkylates (C8 paraffins and isoparaffins BPT 95 to 120 °C).

[REVISE]

* * * * *

Bio-fuel blends of Diesel/gas oil and Alkanes (C10–C26), linear and branched with a flash point ≤60 °C (>25% but <99% by volume).

Calcium sulfonate (alternately sulphonate)/Calcium carbonate/Hydrocarbon solvent mixture.

Coal tar.

[ADD]

Coal tar crude bases.

[REVISE]

Coal tar distillate.

Coal tar pitch (molten).

Coal tar, high temperature.

Decahydronaphthalene.

Diphenyl/Diphenyl ether mixture.

Distillates, flashed feed stocks.

* * * * *

Drilling mud (low toxicity) (if flammable or combustible).

* * * * *

Gasolines:

Automotive (containing not over 4.23 grams lead per gal.).

Aviation (containing not over 4.86 grams lead per gal.).

Casinghead (natural).

Polymer.

Straight run.

Jet Fuels:

JP-4.

JP-5.

JP-8.

Kerosene.

Mineral spirits.

Naphtha:

Aromatic.

Coal tar solvent.

Heavy.

Paraffinic.

Petroleum.

Solvent.

Stoddard solvent.

Varnish Makers' and Painters'.

Oil, fuel:

No. 1.

No. 1–D.

No. 2.

No. 2–D.

No. 4.

No. 5.

No. 6.

Oil, misc.:

Aliphatic.

Aromatic.

Clarified.

Coal.

Crude.

Diesel.

Gas, cracked.

Gas, high pour.

Gas, low pour.

Gas, low sulfur (alternately sulphur).

Heartcut distillate.

Lubricating.

Mineral.

Mineral seal.

Motor.

Neatsfoot.

Penetrating.

Pine.

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

[ADD]

Calcium alkyl (C9) phenol sulfide (alternately sulphide), polyolefin phosphorosulfide (alternately phosphorosulphide) mixture.

[REVISE]

Calcium carbonate slurry.

Calcium long-chain alkaryl sulfonate (alternately sulphonate) (C11–C50).

Calcium long-chain alkyl (C5–C10) phenate.

Calcium long-chain alkyl (C5–C20) phenate.

Calcium long-chain alkyl (C11–C40) phenate.

Calcium long-chain alkyl phenate sulfide (alternately sulphide) (C8–C40).

Calcium long-chain alkyl (C18–C28) salicylate.

Calcium nitrate solutions (50% or less).

Calcium nitrate/Magnesium nitrate/Potassium chloride solution.

Calcium salts of fatty acids.

Calcium stearate.

Cobalt naphthenate in solvent naphtha.

Copper salt of long-chain (C17+) alkanolic acid.

Copper salt of long-chain (C3–C16) fatty acid.

Cyclohexyl acetate.

Decyl acetate.

Dialkyl (C7–C13) phthalates:

Di-(2-ethylhexyl) phthalate.

Diheptyl phthalate.

Dihexyl phthalate.

Diisooctyl phthalate.

Dioctyl phthalate.

Diisodecyl phthalate.

Diisononyl phthalate.

Dinonyl phthalate.

Ditridecyl phthalate.

Diundecyl phthalate.

Dialkyl thiophosphates sodium salts solution.

* * * * *

Dibutyl terephthalate.

Di-(2-ethylhexyl) adipate.

Di-(2-ethylhexyl) terephthalate.

Diethylene glycol dibenzoate.

Diethylene glycol phthalate.

Diethyl phthalate.

Diethyl sulfate (alternately sulphate).

* * * * *

Dimethyl hydrogen phosphite.¹Dimethyl naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution.¹

* * * * *

Dimethylpolysiloxane.

* * * * *

Ditridecyl adipate.

2-Dodecenylsuccinic acid, dipotassium salt solution.

2-Ethoxyethyl acetate.

* * * * *

S-Ethyl dipropylthiocarbamate.

Ethylene carbonate.

* * * * *

Ethylene glycol diacetate.

Ethylene glycol methyl ether acetate.

* * * * *

[ADD]

Ethyl hexyl tallate.

[REVISE]

2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8–C10) ester.

[ADD]

Ethyl lactate.

Ethyl propionate.

Fatty acid methyl esters.

Fatty acids (C8–C10).

Fatty acids (C12+).

Fatty acids (saturated, C13+).

Fatty acids (C16+).

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Fatty acids, essentially linear (C6–C18) 2-ethylhexyl ester.

[REVISE]

Glyceryl triacetate.

Glycidyl ester of C10 trialkyl acetic acid.

[ADD]

Glycidyl ester of tertiary carboxylic acid.

[REVISE]

Glycidyl ester of tridecyl acetic acid.

[ADD]

Glycidyl ester of Versatic acid.

Glycol diacetate.

Glycol triacetate.

[REVISE]

Heptyl acetate.

[ADD]

Herbicide (C15–H22–NO2–Cl).

[REVISE]

Hexyl acetate.

[ADD]

Hog grease.

* * * * *

Lauric acid methyl ester/Myristic acid methyl ester mixture.

* * * * *

[REVISE]

Magnesium long-chain alkaryl sulfonate (alternately sulphonate) (C11–C50).

Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8–C20).

Magnesium long-chain alkyl salicylate (C11+).

[ADD]

Magnesium nonyl phenol sulfide (alternately sulphide).

Magnesium sulfonate (alternately sulphonate).

* * * * *

[REVISE]

Methyl salicylate.

[ADD]

N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroacetanilide.

[REVISE]

Metolachlor.

Naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution.

* * * * *

[ADD]

Nonyl phenol sulfide (90% or less) solution.

* * * * *

Octyl nitrate.

Octyl phthalate.

[REVISE]

Oil, edible:

Beechnut.

Castor.

Cocoa butter.

Coconut.

Cod liver.

Corn.

Cotton seed.

Fish.

Grape seed.

Groundnut.

Hazelnut.

Illipe.

Lard.

Maize.

Mango kernel.

Nutmeg butter.

Olive.

Palm.

Palm kernel.

Palm kernel olein.

Palm kernel stearin.

Palm mid fraction.

Palm olein.

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

n-Propyl acetate.

* * * * *

Propylene glycol methyl ether acetate.
Siloxanes.

Sodium acetate solution.
Sodium acetate/Glycol/Water mixture (not containing Sodium hydroxide).
Sodium alkyl (C14–C17) sulfonates (alternately sulphonates) 60–65% solution.

[ADD]

Sodium aluminosilicate slurry.

[REVISE]

Sodium benzoate.
Sodium bicarbonate solution (less than 10%).
Sodium dimethyl naphthalene sulfonate (alternately sulphonate) solution.²
Sodium long-chain alkyl salicylate (C13+).
Sodium naphthalene sulfonate (alternately sulphonate) solution.
Sodium petroleum sulfonate (alternately sulphonate).
Sodium sulfate (alternately sulphate) solution.
Tall oil soap, crude.
Tallow.
Tallow fatty acid.

* * * * *

Tridecyl acetate.
Triethylene glycol di-(2-ethylbutyrate).
Triethylene glycol dibenzoate.
Triethyl phosphate.
Triethyl phosphite.¹
Triisooctyl trimellitate.¹
Triisopropylated phenyl phosphates.
Trimethyl phosphite.¹
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate.

* * * * *

2,2,4-Trimethyl-3-pentanol-1-isobutyrate.
Trisodium nitrilotriacetate solution.

* * * * *

Trixylenyl phosphite.

Vegetable acid oils, n.o.s.:

Corn acid oil.
Cottonseed acid oil.
Dark mixed acid oil.
Groundnut acid oil.
Mixed acid oil.
Mixed general acid oil.
Mixed hard acid oil.
Mixed soft acid oil.
Rapeseed acid oil.
Safflower acid oil.
Soya acid oil.
Sunflower seed acid oil.

Vegetable fatty acid distillates, n.o.s.:

Palm kernel fatty acid distillate.
Palm oil fatty acid distillate.
Tall fatty acid distillate.
Tall oil fatty acid distillate.

Vegetable oils, n.o.s.:

Beechnut oil.
Camelina oil.
Cashew nut shell.
Castor oil.
Cocoa butter.
Coconut oil.
Corn oil.
Cotton seed oil.
Croton oil.
Grape seed oil.
Groundnut oil.
Hazelnut oil.
Illipe oil.
Linseed oil.
Mango kernel oil.
Nutmeg butter.

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Oiticica oil.							
Olive oil.							
Palm kernel oil.							
Palm kernel olein.							
Palm kernel stearin.							
Palm mid fraction.							
Palm, non-edible industrial grade.							
Palm oil.							
Palm olein.							
Palm stearin.							
Peanut oil.							
Peel oil (oranges and lemons).							
Perilla oil.							
Pine oil.							
Poppy seed oil.							
Poppy oil.							
Raisin seed oil.							
Rapeseed oil.							
Rapeseed (low erucic acid containing less than 4% free fatty acids).							
Rice bran oil.							
Rosin oil.							
Safflower oil.							
Salad oil.							
Sesame oil.							
Shea butter.							
Soyabean oil.							
Sunflower seed oil.							
Tall.							
Tall, crude.							
Tall, distilled.							
Tall, pitch.							
Tucum oil.							
Tung oil.							
Walnut oil.							
Waxes:							
Candelilla.							
Carnauba.							
	*	*	*	*	*	*	*
36. HALOGENATED HYDROCARBONS							
	*	*	*	*	*	*	*
[REVISE]							
Carbon tetrachloride. ¹							
Catoxid feedstock. ¹							
	*	*	*	*	*	*	*
Chlorinated paraffins (C14–C17) (with 52% Chlorine).							
Chlorinated paraffins (C18+) with any level of Chlorine.							
	*	*	*	*	*	*	*
Dibromomethane.							
Dichlorobenzene (all isomers).							
3,4-Dichloro-1-butene.							
Dichlorodifluoromethane.							
	*	*	*	*	*	*	*
Dichloropropane.							
[ADD]							
1,1-Dichloropropane.							
1,2-Dichloropropane.							
1,3-Dichloropropane.							
	*	*	*	*	*	*	*
[REVISE]							
Ethylene dichloride. ¹							
	*	*	*	*	*	*	*
[ADD]							
Methylene chloride.							
[REVISE]							
Monochlorodifluoromethane.							
Pentachloroethane.							
Perchloroethylene.							

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Tetraethylene glycol methyl ether.							
Triethylene glycol butyl ether.							
Triethylene glycol ethyl ether.							
Triethylene glycol methyl ether.							
Tripropylene glycol methyl ether.							
Polyethylene glycol.							
	*	*	*	*	*	*	*
Poly (ethylene glycol) methylbutenyl ether (molecular weight >1000).							
Polypropylene glycol.							
Poly (tetramethylene ether) glycols (molecular weight 950–1050).							
Polytetramethylene ether glycol.							
Propylene glycol monoalkyl ethers:							
n-Propoxypropanol.							
Propylene glycol n-butyl ether.							
Propylene glycol ethyl ether.							
Propylene glycol methyl ether.							
Propylene glycol propyl ether.							
Propylene glycol phenyl ether.							
Tetraethylene glycol.							
Triethylene glycol.							
Triethylene glycol butyl ether mixture.							
Triethylene glycol ether mixture.							
Tripropylene glycol.							
41. ETHERS							
[REVISE]							
Alcohol (C12–C13, branched and linear) poly (4–8) propoxy sulfates (alternately sulphates), sodium salt 25–30% solution.							
Alkaryl polyethers (C9–C20).							
	*	*	*	*	*	*	*
n-Butyl ether.							
Dichloroethyl ether.							
2,2'-Dichloroisopropyl ether.							
[ADD]							
Diethyl ether.							
Dimethyl ether.							
	*	*	*	*	*	*	*
[REVISE]							
Diphenyl ether/Diphenyl phenyl ether mixture.							
Ethyl tert-butyl ether. ¹							
	*	*	*	*	*	*	*
Methyl-tert-butyl ether. ¹							
	*	*	*	*	*	*	*
Methyl tert-pentyl ether.							
Polyether, borated.							
Polyether (molecular weight 1350+).							
Polyether polyols.							
Poly(oxyalkylene) alkenyl ether (molecular weight >1000).							
	*	*	*	*	*	*	*
1,3,5-Trioxane.							
42. NITROCOMPOUNDS							
	*	*	*	*	*	*	*
[REVISE]							
Dinitrotoluene (molten).							
Nitrobenzene.							
[ADD]							
o-Nitrochlorobenzene.							
	*	*	*	*	*	*	*
[REVISE]							
Nitroethane/1-Nitropropane (each 15% or more) mixture.							
Nitrophenol (mixed isomers).							
Nitropropane (60%)/Nitroethane (40%) mixtures.							
[ADD]							
1- or 2-Nitropropane.							
[REVISE]							
o- or p-Nitrotoluenes.							
43. MISCELLANEOUS WATER SOLUTIONS							
[REVISE]							

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Alkyl (C8–C10) polyglucoside solution (65% or less).							
Alkyl (C8–C10)/(C12–C14):(40% or less/60% or more) polyglucoside solution (55% or less).							
	*	*	*	*	*	*	*
Alkyl (C8–C10)/(C12–C14):(60% or more/40% or less) polyglucoside solution (55% or less).							
Alkyl (C12–C14) polyglucoside solution (55% or less).							
Aluminum sulfate (alternately Aluminium sulphate) solution. ¹							
	*	*	*	*	*	*	*
Ammonium bisulfite (alternately bisulphite) solution (70% or less). ¹							
Ammonium chloride solution (less than 25%).							
	*	*	*	*	*	*	*
Ammonium sulfate (alternately sulphate) solution.							
[ADD]							
Ammonium sulfate (alternately sulphate) solution (20% or less).							
[REVISE]							
Ammonium thiosulfate (alternately thiosulphate) solution (60% or less).							
[ADD]							
Apple juice.							
	*	*	*	*	*	*	*
Cesium formate solution.							
	*	*	*	*	*	*	*
[REVISE]							
2,4-Dichlorophenoxyacetic acid, Triisopropanolamine salt solution. ¹							
Diethylenetriaminepentaacetic acid, pentasodium salt solution.							
Dodecyl diphenyl ether disulfonate (alternately disulphonate) solution.							
Drilling brines (containing Calcium, Potassium, or Sodium salts).							
Drilling brines (containing Zinc salts).							
Drilling brines, including: Calcium bromide solution, Calcium chloride solution, and Sodium chloride solution.							
Drilling mud (low toxicity) (if non-flammable or non-combustible).							
Ethylenediaminetetracetic acid/tetrasodium salt solution.							
Ethylene-Vinyl acetate copolymer (emulsion).							
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution. ¹							
Fish solubles (water-based fish meal extracts).							
	*	*	*	*	*	*	*
[ADD]							
Glucose solution.							
Hexamethylenediamine adipate (50% in water).							
	*	*	*	*	*	*	*
[REVISE]							
N-(Hydroxyethyl)ethylenediamine triacetic acid, trisodium salt solution.							
[ADD]							
Kaolin clay solution.							
[REVISE]							
Kaolin slurry.							
Latex, liquid synthetic.							
Latex: Carboxylated Styrene-Butadiene copolymer; Styrene-butadiene rubber.							
[ADD]							
Lauryl polyglucose.							
Lauryl polyglucose (50% or less).							
	*	*	*	*	*	*	*
[REVISE]							
Ligninsulfonic (alternately Ligninsulphonic) acid, magnesium salt solution.							
[ADD]							
Ligninsulfonic (alternately Ligninsulphonic) acid, sodium salt solution.							
	*	*	*	*	*	*	*
[ADD]							
Microsilica slurry.							
Milk.							
	*	*	*	*	*	*	*
Pentasodium salt of Diethylenetriaminepentaacetic acid solution.							
Phenol solutions (2% or less).							
	*	*	*	*	*	*	*
Potassium chloride solution (10% or more).							
[REVISE]							

TABLE 2 TO PART 150—GROUPING OF CARGOES—Continued

Potassium thiosulfate (alternately thiosulphate) (50% or less).

*	*	*	*	*	*	*
Sewage sludge.						
[ADD]						
Silica slurry.						
Sludge, treated.						

*	*	*	*	*	*	*
---	---	---	---	---	---	---

[REVISE]

Sodium hydrogen sulfite (alternately sulphite) solution (45% or less).
Sodium lignosulfonate (alternately lignosulphonate) solution.

[ADD]

Sodium naphthalene sulfonate solution (40% or less), see Naphthalene sulphonic acid, sodium salt solution (40% or less).
Sodium naphthenate solution, see Naphthenic acid, sodium salt solution.
Sodium poly(4+)acrylate solution.

[REVISE]

Sodium polyacrylate solution.¹
Sodium salt of Ferric hydroxyethylethylenediaminetriacetic acid solution.
Sodium silicate solution.¹
Sodium sulfide (alternately sulphide) solution (15% or less).
Sodium sulfite (alternately sulphite) solution (25% or less).
Sodium tartrates/Sodium succinates solution.
Sulfonated (alternately Sulphonated) polyacrylate solution.¹

*	*	*	*	*	*	*
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Tetrasodium salt of ethylenediaminetetraacetic acid solution.

*	*	*	*	*	*	*
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[ADD]

Trisodium salt of N-(Hydroxyethyl)ethylenediaminetriacetic acid solution.

[REVISE]

Urea solution.
Urea/Ammonium nitrate solution (containing less than 1% free Ammonia).
Urea/Ammonium phosphate solution.
Vegetable protein solution (hydrolyzed).
Water.

Note:

¹ See Appendix I to 46 CFR part 150 (Exceptions to the Chart).

■ 9. Amend Appendix I to Part 150 by revising the table in paragraph (a) and revising paragraph (b) to read as follows: (a) * * *

Appendix I to Part 150—Exceptions to the Chart

Member of reactive group	Compatible with
Acetone (18)	Diethylenetriamine (7).
Acetone cyanohydrin (0)	Acetic acid (4).
	Acrylates (14).
	Alcohols, Glycols (20).
	Aldehydes (19).
	Aromatic Hydrocarbon Mixtures (32).
	Carbon Disulfide (alternately Disulphide) (38).
	Esters (34).
	Ethers (41).
	Glycol Ethers (40).
	Halogenated Hydrocarbons (36).
	Ketones (18).
	Miscellaneous Hydrocarbon Mixtures (33).
	Nitriles (37).
	Nitrocompounds (42).
	Olefins (30).
	Paraffins (31).
	Phenols, Cresols (21).
	Substituted Allyls (15).
	Sulfolane (alternately Sulpholane) (39).
	Vinyl Acetate (13).
	Vinyl Halides (35).
Acrylonitrile (15)	Triethanolamine (8).
1,3-Butylene glycol (20)	Morpholine (7).
1,4-Butylene glycol (20)	Ethylamine (7).
	Triethanolamine (8).

Member of reactive group	Compatible with
gamma-Butyrolactone (0) Caustic potash, 50% or less (5)	N-Methyl-2-pyrrolidone (9). Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume) (20). n-Butyl alcohol (20). Cetyl alcohol (Hexadecanol) (20). Ethyl alcohol (20). Ethylene glycol (20). Isobutyl alcohol (20). Isooctyl alcohol (20). Isopropyl alcohol (20). Methyl alcohol (20). Propylene glycol (20).
Caustic soda, 50% or less (5)	Acrylonitrile/Styrene copolymer dispersion in Polyether polyol (20). Alcohol (C12–C16) poly(1–6)ethoxylates (20). Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume) (20). Butyl alcohol (20). tert-Butyl alcohol, Methanol mixtures (20). Cetyl alcohol (Hexadecanol) (20). Decyl alcohol (20). Diacetone alcohol (20). Diethylene glycol (40). Dodecyl alcohol (20). Ethyl alcohol (20). Ethyl alcohol (40% whiskey) (20). Ethylene glycol (20). Ethylene glycol, Diethylene glycol mixture (20). Ethyl hexanol (Octyl alcohol) (20). Isobutyl alcohol (20). Isodecyl alcohol (20). Isononyl alcohol (20). Isopropyl alcohol (20). Isotridecanol (20). Methyl alcohol (20). Nonyl alcohol (20). Propyl alcohol (20). Propylene glycol (20). Sodium chlorate solution (0).
Dimethyl disulfide (0)	Acrylates (14). Alcohols, Glycols (20). Aromatic Hydrocarbon Mixtures (32). Esters (34). Halogenated Hydrocarbons (36). Ketones (18). Methyl tert-butyl ether (41). Olefins (30). Organic Acids (4). Organic Anhydrides (11). Paraffins (31). Phenols, Cresols (21).
Diphenylmethane diisocyanate (12)	2,2-Dimethylpropane-1,3-diol (20). Polypropylene glycol (40).
tert-Dodecanethiol (20)	Caustic soda solution (50%) (5). Isopropylamine solution (70%) (7). Polymethylene polyphenyl isocyanate (12). Toluene diisocyanate (12).
Dodecyl and Tetradecylamine mixture (7)	Tall oil, fatty acid (34).
Ethylenediamine (7)	Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume) (20). Butyl alcohol (20). tert-Butyl alcohol (20). Butylene glycol (20). Creosote (21). Diethylene glycol (40). Diisobutyl ketone (18). Ethyl alcohol (20). Ethylene glycol (20). Ethyl hexanol (20). Fatty alcohols (C12–C14). Glycerine (20). Isononyl alcohol (20). Isophorone (18). Methyl butyl ketone (18). Methyl ethyl ketone (18).

Member of reactive group	Compatible with
Lactic acid (0)	Methyl isobutyl ketone (18). Propyl alcohol (20). Propylene glycol (20). Acetic acid (4). Benzene (32). Ethanol (20). Polypropylene glycol (40). Vinyl acetate (13). Hexane (31).
Oleum (0)	Dichloromethane (36). Perchloroethylene (36). Diethylenetriamine (7). Polyethylene polyamines (7). Triethylenetetramine (7).
1,2-Propylene glycol (20)	Methyl alcohol (20). Acetone (18). n-Butyl alcohol (20). Ethyl acetate (34). 1-Hexene (30). Methyl alcohol (20). Octene (all isomers) (30). Phosphoric acid (1). Isopropyl alcohol (20).
Sodium cresylate as Cresylate spent caustic (5)	Methyl alcohol (20).
Sodium dichromate solution (70% or less) (0)	Acetone (18). n-Butyl alcohol (20). Ethyl acetate (34). 1-Hexene (30). Methyl alcohol (20). Octene (all isomers) (30). Phosphoric acid (1). Isopropyl alcohol (20).
Sodium hydrosulfide (alternately hydrosulphide) solution (45% or less) (5).	Isopropyl alcohol (20).
Sodium Methylate 21–30% in methanol (0)	Methyl alcohol (20). 1,2-Dichloropropane (36). Chlorobenzene (36). Cyclohexanone (18). Cyclohexanone, Cyclohexanol mixtures (18). Diethanolamine (8). Diisononyl phthalate (34). Dimethylformamide (10). Ethyl alcohol (20). Ethylene glycol (20). Furfuryl alcohol (20). Heptene (all isomers) (30). Isobutyl alcohol (20). Isopropyl alcohol (20). Lubricating oil (33). Methyl ethyl ketone (18). Nonene (all isomers) (30). Nonyl alcohol (all isomers) (20). Octene (all isomers) (30). Perchloroethylene (36). Polyisobutenamine in aliphatic (C10–C14) solvent (7). o-Toluidine (9). Xylene (32). Coconut oil (34). Coconut oil, fatty acid (34). Palm oil (34). Soyabean oil (34). Tallow (34). Choice white grease tallow (34). Magnesium chloride solutions (0).
Sulfuric (alternately Sulphuric) acid (2)	Methyl alcohol (20). 1,2-Dichloropropane (36). Chlorobenzene (36). Cyclohexanone (18). Cyclohexanone, Cyclohexanol mixtures (18). Diethanolamine (8). Diisononyl phthalate (34). Dimethylformamide (10). Ethyl alcohol (20). Ethylene glycol (20). Furfuryl alcohol (20). Heptene (all isomers) (30). Isobutyl alcohol (20). Isopropyl alcohol (20). Lubricating oil (33). Methyl ethyl ketone (18). Nonene (all isomers) (30). Nonyl alcohol (all isomers) (20). Octene (all isomers) (30). Perchloroethylene (36). Polyisobutenamine in aliphatic (C10–C14) solvent (7). o-Toluidine (9). Xylene (32). Coconut oil (34). Coconut oil, fatty acid (34). Palm oil (34). Soyabean oil (34). Tallow (34). Choice white grease tallow (34). Magnesium chloride solutions (0).
Sulfuric (alternately Sulphuric) acid, 98% or less (2)	Choice white grease tallow (34).
Urea/Ammonium Nitrate solution (containing less than 1% free Ammonia) (43).	Magnesium chloride solutions (0).

(b) The binary combinations listed below have been determined to be dangerously reactive, based either on data obtained in the literature or on laboratory testing that has been carried out in accordance with procedures prescribed in Appendix III. These combinations are exceptions to Figure 1 of part 150 (Compatibility Chart) and may not be stowed in adjacent tanks.

Acetone cyanohydrin (0) is not compatible with Groups 1–12, 16, 17 or 22.

Acrolein (19) is not compatible with Group 1, Non-Oxidizing Mineral Acids.

Acrylic acid (4) is not compatible with Group 9, Aromatic Amines.

Acrylonitrile (15) is not compatible with Group 5, Caustics.

Alkyl (C7–C9) nitrates (34) is not compatible with Group 1, Non-Oxidizing Mineral Acids.

Alkylbenzene sulfonic (alternately sulphononic) acid (less than 4%) (0) is not compatible with Groups 1–3, 5–9, 15, 16, 18, 19, 30, 34, 37, or strong oxidizers.

Allyl alcohol (15) is not compatible with Group 12, Isocyanates.

Aluminum sulfate (alternately Aluminium sulphate) solution (43) is not compatible with Groups 5–11.

Ammonium bisulfite (alternately bisulphite) solution (70% or less) (43) is not compatible with Groups 1 or 3–5.

Benzenesulfonyl (alternately Benzenesulphonyl) chloride (0) is not compatible with Groups 5–7, or 43.

Butylene glycol (20) is not compatible with Caustic soda solution (5).

gamma-Butyrolactone (0) is not compatible with Groups 1–9.

C9 Resinfeed (DSM) (32) is not compatible with Group 2, Sulfuric (alternately Sulphuric) Acids.

Carbon tetrachloride (36) is not compatible with Tetraethylenepentamine or Triethylenetetramine, both Group 7, Aliphatic Amines.

Catoxid feedstock (36) is not compatible with Groups 1–5, or 12.

Caustic soda solution (5) is not compatible with Butylene glycol (20).

1-(4-Chlorophenyl)-4,4-dimethyl pentan-3-one (18) is not compatible with Group 5, Caustics, or Group 10, Amides.

Crotonaldehyde (19) is not compatible with Group 1, Non-Oxidizing Mineral Acids.

Cyclohexanone/Cyclohexanol mixture (18) is not compatible with Group 12, Isocyanates.

2,4-Dichlorophenoxyacetic acid, Dimethylamine salt solution (70% or less) (0) is not compatible with Groups 1–5, 11, 12, or 16.

2,4-Dichlorophenoxyacetic acid, Triisopropanolamine salt solution (43) is not compatible with Group 3, Nitric Acids.

Diethylenetriamine (7) is not compatible with 1,2,3-Trichloropropane, Group 36, Halogenated Hydrocarbons.

Dimethyl hydrogen phosphite (34) is not compatible with Groups 1 or 4.

Dimethyl naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution (34) is not compatible with Group 12, or Formaldehyde, or with strong oxidizing agents.

Dodecylbenzenesulfonic (alternately Dodecylbenzenesulphonic) acid (0) is not compatible with oxidizing agents or Groups 1–3, 5–9, 15, 16, 18, 19, 30, 34, or 37.

Ethyl tert-butyl ether (41) is not compatible with Group 1, Non-Oxidizing Mineral Acids.

Ethylenediamine (7) and Ethyleneamine EA 1302 (7) are not compatible with either Ethylene dichloride (36) or 1,2,3-Trichloropropane (36).

Ethylene dichloride (36) is not compatible with Ethylenediamine (7) or Ethyleneamine EA 1302 (7).

Ethylidene norbornene (30) is not compatible with Groups 1–3 or 5–8.

2-Ethyl-3-propylacrolein (19) is not compatible with Group 1, Non-Oxidizing Mineral Acids.

Fatty acids, essentially linear (C6–C18) 2-ethylhexyl ester (34) is not compatible with Group 3, Nitric Acids.

Ferric hydroxyethylethylenediamine triacetic acid, Triodium salt solution

(43) is not compatible with Group 3, Nitric Acids.

Fish oil (34) is not compatible with Sulfuric (alternately Sulphuric) acid (2).

Formaldehyde (50% or more) in Methyl alcohol (over 30%) (19) is not compatible with Group 12, Isocyanates.

Formic acid (4) is not compatible with Furfuryl alcohol (20).

Furfuryl alcohol (20) is not compatible with Group 1, Non-Oxidizing Mineral Acids, or with Formic acid (4).

1,6-Hexanediol distillation overheads (4) is not compatible with Group 3, Nitric Acids, or Group 9, Aromatic Amines.

2-Hydroxyethyl acrylate (14) is not compatible with Groups 5, 6, or 12.

Isophorone (18) is not compatible with Group 8, Alkanolamines.

Lactic acid (0) is not compatible with Caustic soda solution (5).

Magnesium chloride solution (0) is not compatible with Groups 2, 3, 5, 6, or 12.

Mesityl oxide (18) is not compatible with Group 8, Alkanolamines.

Methacrylonitrile (15) is not compatible with Group 5, Caustics.

Methyl tert-butyl ether (41) is not compatible with Group 1, Non-Oxidizing Mineral Acids.

Nitroethane/1-Nitropropane (each 15% or more) mixture (42) is not compatible with Group 7, Aliphatic Amines; Group 8, Alkanolamines; or Group 9, Aromatic Amines.

o-Nitrophenol (0) is not compatible with Groups 2, 3, or 5–10.

Nitropropane (60%)/Nitroethane (40%) mixture (42) is not compatible with Group 7, Aliphatic Amines; Group 8, Alkanolamines; or Group 9, Aromatic Amines.

Oleum (0) is not compatible with Sulfuric (alternately Sulphuric) acid (2) or 1,1,1-Trichloroethane (36).

Phthalate-based polyester polyol (0) is not compatible with Groups 2, 3, 5, 7, or 12.

Polyglycerine, Sodium salts solution (containing less than 3% sodium hydroxide) (20) is not compatible with Groups 1, 4, 11, 16, 17, 19, 21, or 22.

Propylene, Propane, MAPP gas mixture (containing 12% or less MAPP gas) (30) is not compatible with Group 1, Non-Oxidizing Mineral Acids, Group 36, Halogenated Hydrocarbons, or with nitrogen dioxide, oxidizing agents, or molten sulfur (alternately sulphur) (0).

Sodium acetate, Glycol, Water mixture (containing 1% or less Sodium hydroxide) (5) is not compatible with Group 12, Isocyanates.

Sodium chlorate solution (50% or less) (0) is not compatible with Groups 1–3, 5, 7, 8, 10, 12, 13, 17, or 20.

Sodium dichromate solution (70% or less) (0) is not compatible with Groups 1–3, 5, 7, 8, 10, 12, 13, 17, or 20.

Sodium dimethyl naphthalene sulfonate solution (34) is not compatible with Group 12, or Formaldehyde, or strong oxidizing agents.

Sodium hydrogen sulfide (alternately sulphide) (6% or less)/Sodium carbonate solution (3% or less) (0) is not compatible with Group 6, Ammonia, or Group 7, Aliphatic Amines.

Sodium hydrosulfide (alternately hydrosulphide) solution (45% or less) (5) is not compatible with Group 6, Ammonia, or Group 7, Aliphatic Amines.

Sodium hydrosulfide (alternately hydrosulphide), Ammonium sulfide (alternately sulphide) solution (5) is not compatible with Group 6, Ammonia, or Group 7, Aliphatic Amines.

Sodium polyacrylate solution (43) is not compatible with Group 3, Nitric Acids.

Sodium silicate solution (43) is not compatible with Group 3, Nitric Acids.

Sodium sulfide, hydrosulfide (alternately sulphide, hydrosulphide) solution (0) is not compatible with Group 6, Ammonia, or Group 7, Aliphatic Amines.

Sodium thiocyanate (56% or less) (0) is not compatible with Groups 1–4.

Sulfonated (alternately Sulphonated) polyacrylate solution (43) is not compatible with Group 5, Caustics.

Sulfuric (alternately Sulphuric) acid (2) is not compatible with Fish oil (34), or Oleum (0).

Tall oil fatty acid (Resin acids less than 20%) (34) is not compatible with Group 5, Caustics.

Tallow fatty acid (34) is not compatible with Group 5, Caustics.

Tetraethylenepentamine (7) is not compatible with Carbon tetrachloride, Group 36, Halogenated Hydrocarbons.

1,1,1-Trichloroethane (36) is not compatible with Oleum (0).

Trichloroethylene (36) is not compatible with Group 5, Caustics.

1,2,3-Trichloropropane (36) is not compatible with Diethylenetriamine, Ethylenediamine, Ethyleaneamine EA 1302, or Triethylenetetramine, all Group 7, Aliphatic Amines.

Triethylenetetramine (7) is not compatible with Carbon tetrachloride, or 1,2,3-Trichloropropane, both Group 36, Halogenated Hydrocarbons.

Triethyl phosphite (34) is not compatible with Group 1, Non-Oxidizing Mineral Acids, or Group 4, Organic Acids.

Trimethyl phosphite (34) is not compatible with Group 1, Non-Oxidizing Mineral Acids, or Group 4, Organic Acids.

1,3,5-Trioxane (41) is not compatible with Group 1, Non-Oxidizing Mineral Acids, or Group 4, Organic Acids.

Vinyl neodecanoate (13) is not compatible with Group 5, Caustics.

PART 153—SHIPS CARRYING BULK LIQUID, LIQUEFIED GAS, OR COMPRESSED GAS HAZARDOUS MATERIALS

■ 10. The authority citation for part 153 continues to read as follows:

Authority: 46 U.S.C. 3703; Department of Homeland Security Delegation No. 0170.1. Section 153.40 issued under 49 U.S.C. 5103. Sections 153.470 through 153.491, 153.1100 through 153.1132, and 153.1600 through 153.1608 also issued under 33 U.S.C. 1903(b).

■ 11. Amend Table 2 to Part 153 by revising the introductory text, the entries marked “[REVISE]”, and the notes at the end of the table to read as follows:

Table 2 to Part 153—Cargoes Not Regulated Under Subchapters D or O of This Chapter When Carried in Bulk on Non-Oceangoing Barges

The cargoes listed in this table are not regulated under subchapter D or O of this title when carried in bulk on non-oceangoing barges. Category X, Y, or Z noxious liquid substance (NLS) cargo, as defined in Annex II of MARPOL 73/78, listed in this table, or any mixture containing one or more of these cargoes, must be carried under this subchapter if carried in bulk on an oceangoing ship.

Cargoes	Pollution category
[REVISE] Acrylic acid/ethenesulfonic (alternately ethenesulphonic) acid copolymer with phosphonate groups, sodium salt solution	Z
Aluminum sulfate (alternately Aluminium sulphate) solution	Y
* * * * *	
Ammonium lignosulfonate (alternately lignosulphonate) solutions, <i>see also</i> Lignin liquor	Z
* * * * *	
Ammonium phosphate, urea solution, <i>see also</i> Urea/Ammonium phosphate solution	#
* * * * *	
Ammonium sulfate (alternately sulphate) solution	Z
Ammonium thiosulfate (alternately thiosulphate) solution (60% or less)	Z
* * * * *	
Calcium lignosulfonate (alternately lignosulphonate) solution, <i>see also</i> Lignin liquor	Z
Calcium nitrate solutions (50% or less)	Z
* * * * *	
Chlorinated paraffins (C14–C17) (with 50% Chlorine or more, and less than 1% C13 or shorter chains)	X
* * * * *	
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	Y
* * * * *	
<i>Dextrose solution, see</i> Glucose solution.	
Diethylenetriaminepentaacetic acid, pentasodium salt solution	Z
* * * * *	
Fish solubles (water-based fish meal extracts)	#
* * * * *	
Glyphosate solution (not containing surfactant)	Y
* * * * *	
Lignin liquor (free alkali content, 1% or less)	Z
<i>including:</i>	
Ammonium lignosulfonate (alternately lignosulphonate) solution	Z
Calcium lignosulfonate (alternately lignosulphonate) solution	Z
Sodium lignosulfonate (alternately lignosulphonate) solution	Z
Ligninsulfonic (alternately ligninsulphonic) acid, Sodium salt solution	Z
* * * * *	
Magnesium sulfonate (alternately sulphonate) solution	#
Maltitol solution	OS
Microsilica slurry	OS
* * * * *	
Naphthalenesulfonic (alternately Naphthalenesulphonic) acid-Formaldehyde copolymer, sodium salt solution	Z
* * * * *	
Nitrotriacetic acid, trisodium salt solution	Y
Noxious liquid, NF, (1) n.o.s. (“trade name” contains “principal components”) ST 1, Cat X (if non-flammable and non-combustible)	X
Noxious liquid, NF, (3) n.o.s. (“trade name” contains “principal components”) ST 2, Cat X (if non-flammable and non-combustible)	X

Cargoes	Pollution category
Noxious liquid, NF, (5) n.o.s. ("trade name" contains "principal components") ST 2, Cat Y (if non-flammable and non-combustible)	Y
Noxious liquid, NF, (7) n.o.s. ("trade name" contains "principal components") ST 3, Cat Y (if non-flammable and non-combustible)	Y
Noxious liquid, NF, (9) n.o.s. ("trade name" contains "principal components") ST 3, Cat Z (if non-flammable and non-combustible)	Z
Noxious liquid, NF, (11) n.o.s. ("trade name" contains "principal components") Cat Z (if non-flammable and non-combustible)	Z
Noxious liquid, NF, (12) n.o.s. ("trade name" contains "principal components") Cat OS (if non-flammable and non-combustible)	OS
Orange juice (concentrated)	OS
Orange juice (not concentrated)	OS
<i>Pentasodium salt of Diethylenetriaminepentaacetic acid solution, see Diethylenetriaminepentaacetic acid, pentasodium salt solution.</i>	
Polyaluminum (alternately Polyaluminium) chloride solution	Z
<i>Potassium chloride solution (26% or more), see Drilling brines, including: Calcium bromide solution, Calcium chloride solution, and Sodium chloride solution.</i>	
Potassium chloride solution (less than 26%)	OS
Potassium formate solutions	Z
Potassium thiosulfate (alternately thiosulphate) (50% or less)	Y
* * * * *	
Sodium alkyl (C14–C17) sulfonates (alternately sulphonates) (60–65% solution)	Y
* * * * *	
Sodium bicarbonate solution (less than 10%)	OS
* * * * *	
Sodium hydrogen sulfide (alternately sulphide) (6% or less)/Sodium carbonate (3% or less) solution	Z
Sodium lignosulfonate (alternately lignosulphonate) solution, <i>see also</i> Lignin liquor	Z
<i>Sodium naphthenate solution (free alkali content 3% or less), see Naphthenic acid, sodium salt solution.</i>	
Sodium poly(4+)acrylate solutions	Z
* * * * *	
Sodium sulfate (alternately sulphate) solutions	Z
Sodium sulfite (alternately sulphite) solution (25% or less)	Y
Sodium thiocyanate solution (56% or less)	Y
* * * * *	
Sulfonated (alternately Sulphonated) polyacrylate solution	Z
<i>Tetrasodium salt of Ethylenediaminetetraacetic acid solution, see Ethylenediaminetetraacetic acid, tetrasodium salt solution.</i>	
* * * * *	
<i>Trisodium salt of N-(Hydroxyethyl)ethylenediaminetriacetic acid solution, see N-(Hydroxyethyl)ethylenediaminetriacetic acid, trisodium salt solution.</i>	
* * * * *	
Urea/Ammonium phosphate solution	Z
* * * * *	
Vanillin black liquor (free alkali content, 1% or less)	#
Vegetable protein solution (hydrolyzed) (if non-flammable and non-combustible)	OS
* * * * *	
<i>Zinc bromide, Calcium bromide solution, see Drilling brines (containing Zinc salts).</i>	

Explanation of symbols and abbreviations used in this table:

"#" = No determination of noxious liquid substance status. For shipping on an oceangoing vessel, see 46 CFR 153.900(c).

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.

"NF" = Non-flammable (flash point greater than 60 °C (140 °F) closed cup).

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

"OS" = Other substances, at present considered to present 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 "*Tetrasodium salt of Ethylenediaminetetraacetic acid solution, see Ethylenediaminetetraacetic acid, tetrasodium salt solution,*" the pollution category for "*Tetrasodium salt of Ethylenediaminetetraacetic acid solution*" will be found under the preferred, alternative cargo name "*Ethylenediaminetetraacetic acid, tetrasodium salt solution.*"

"ST" = Ship type, as defined in Chapter 2 of the IBC Code.

"X, Y, Z" = Noxious liquid substance category of Annex II of MARPOL 73/78.

Dated: December 17, 2019.

R.V. Timme,

*Rear Admiral, U.S. Coast Guard, Assistant
Commandant for Prevention Policy.*

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