

RESOLUTION MEPC.33(27)

adopted on 17 March 1989

ADOPTION OF AMENDMENTS TO THE CODE FOR THE CONSTRUCTION
AND EQUIPMENT OF SHIPS CARRYING DANGEROUS
CHEMICALS IN BULK (BCH CODE)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the function of the Committee conferred upon it by International Conventions for the Prevention and Control of Marine Pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol"), which together specify the amendment procedure of the 1978 Protocol and confers upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

BEING DESIROUS of keeping the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) up-to-date, and compatible with the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), as well as appendices II and III of Annex II of MARPOL 73/78,

NOTING FURTHER resolution MEPC.32(27) by which the Committee adopted amendments to the IBC Code,

RECOGNIZING the need to bring the corresponding amendments to the BCH Code into force on the date on which the amendments to the IBC Code enter into force,

HAVING CONSIDERED, at its twenty-seventh session, the amendments to the BCH Code proposed by the Sub-Committee on Bulk Chemicals at its eighteenth session and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS in accordance with article 16(2)(d) of the 1973 Convention amendments to the BCH Code, the text of which is set out in the Annex to the present resolution;
2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on the date on which the conditions for the entry into force of the amendments to the IBC Code adopted by the Committee by resolution MEPC 32(27) are met, unless prior to that date, not less than one third of the Parties or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;
3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force six months after their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to the 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;
5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to the 1978 Protocol copies of the resolution and its Annex.

ANNEX

AMENDMENTS TO THE CODE FOR THE CONSTRUCTION
AND EQUIPMENT OF SHIPS CARRYING DANGEROUS
CHEMICALS IN BULK (BCN CODE)

1 Chapter III, Section E - FIRE PROTECTION: The introductory sentence is amended to read:

"Fire-extinguishing media determined to be effective for certain products are listed in column "1" in the table of chapter VI."

and the same sentence which appears in the Explanatory Notes to chapter VI under "Fire Protection" is deleted.

2 Regulation 3.14.2: The last sentence is amended to read; "Regular protein foams should not be used".

3 Regulation 4.4 Acetone cyanohydrin

.1 The words "and Lactonitrile solution (80% or less)" are added to the title.

.2 The first sentence is amended to read:

"Acetone cyanohydrin and Lactonitrile solution should ...".

4 New regulation 4.22 Octyl nitrates

New regulation 4.22 Octyl nitrates is added as follows:

"4.22 Octyl nitrates, all isomers

4.22.1

The carriage temperature of the cargo should be maintained below 100°C to prevent the occurrence of a self-sustaining exothermic decomposition reaction.

4.22.2

The cargo may not be carried in independent pressure vessels permanently affixed to the vessel's deck unless:

- .1 the tanks are sufficiently insulated from fire; and
- .2 the vessel has a water deluge system for the tanks such that the cargo temperature is maintained below 100°C and the temperature rise in the tanks does not exceed 1.5°C/hour for a fire of 650°C (1200°F)."

5 Chapter VI - Explanatory note for fire protection:

- .1 a footnote is added to "D: dry chemical", as follows:

"Dry chemical powder systems when used may require an additional water system for boundary cooling. This is normally provided in sufficient quantities by the standard fire main system required by regulation II-2/4 of the 1974 SOLAS Convention as amended."

- .2 A new note is added as follows:

"Further information on the suitability of fire-fighting media listed in column "1" of chapter VI may be found in column "1" of chapter 17 in the IBC Code."

6 Chapter VI - The Table

The Table of Summary of Minimum Requirements are replaced by the following:

Product name	a	b	c	d	e	f	g	h	i	j	k	l	m	Special requirements
Acetic acid	D	S	3	2G	Cont.	No	SP	R F	A	4.8.2 to 4.8.4, 4.8.6 to 4.8.8, 4.12.6, 4.17				
Acetic anhydride	1715	D	S	2	2G	Cont.	No	SP	R F-T	A	4.8.2 to 4.8.4, 4.8.6 to 4.8.8, 4.12.6, 4.17			
Acetone cyanohydrin	1541	A	S/P	2	2G	Cont.	No	ST	C T	A	4.4., 4.9, 4.12.6, 4.13,			
Acetonitrile	1648	III	S	2	2G	Cont.	No	SP	R F-T	A	4.14, 4.17, 4.18			
Acrylamide solution (50% or less)	2074	D	S	2	2G	Open	No	ST	C No	No	4.9.3, 4.10, 4.14.1, 4.15.1, 4.18.1			
Acrylic acid	2218	D	S	3	2G	Cont.	No	SP	R F-T	A	4.10, 4.12.6, 4.18.1			
Acrylonitrile	1093	B	S/P	2	2G	Cont.	No	SP	C F-T	A	4.9, 4.10, 4.12.3, 4.13.1, 4.14, 4.17			
Adiponitrile	2205	D	S	3	2G	Cont.	No	ST	R T	A				
Alcohol (C12-C15) poly(1-3) ethoxylates		A	P	2	2G	Open	No	ST	O No	A	4.14.1			
Alcohol (C12-C15) poly(3-11) ethoxylates		A	P	2	2G	Open	No	ST	O No	A	4.14.1			
Alcohol (C6-C17)(secondary) poly(3-6) ethoxylates		A	P	2	2G	Open	No	ST	O No	A	4.14.1			
Alcohol (C6-C17)(secondary) poly(7-12) ethoxylates		B	P	3	2G	Open	No	ST	O No	A	4.14.1, 5.2.5, 5.2.8			
Alkyl acrylate-vinyl pyridine copolymer in toluene	2584,	C	P	3	2G	Cont.	No	SP	R F	A	4.14.1			
Alkyl benzene sulphonic acid	2586	C	S/P	3	2G	Open	No	ST	O No	B	5.2.6, 5.2.7			
Alkyl benzene sulphonlic acid, sodium salt solution		C	P	3	2G	Open	No	ST	O No	No	5.2.6 to 5.2.8			
Allyl alcohol	1095	B	S/P	2	2G	Cont.	No	SP	C F-T	A	4.9, 4.13.1, 4.14, 4.17			
Allyl chloride	1100	B	S/P	2	2G	Cont.	No	SP	C F-T	A	4.9, 4.13.1, 4.14, 4.17			
Aluminium chloride (30% or less)/hydrochloric acid	D	S	3	1G	Cont.	No	ST	R T	No	4.8, 4.17(f)				
(20% or less) solution														
2-(2-Aminoethoxy) ethanol	3055	D	S	3	2G	Open	No	ST	O No	A,C,D	4.14.1, 4.12.2			

a	b	c	d	e	f	g	h	i	j	k	l	m
Aminoethyl ethanolamine N-Aminoethylpiperazine 2-Amino-2-methyl-1-propanol (90% or less)	2815	(D) S	3	2G	Open	No	St	O No	A	4.12.1		
Ammonia aqueous (28% or less)	2672(o)	D S	3	2G	Cont.	No	St	R T	A,C,D	4.12.2,	4.14.1	
Ammonium nitrate solution (93% or less)		D S/P	3	2G	Open	No	St	O No	A	4.12.1		
Ammonium sulphide solution (45% or less)	2683	B S/P	2	2G	Cont.	No	SP	R T	C	4.12.4,	4.12.9,	4.17(a)
							St	O No	No	4.8.4,	4.8.6,	4.12.10,
							St	O No	No	4.13.2,	4.14.1,	4.19
							SP	C F-T	A,C	4.9,	4.11,	4.12.1,
										4.13.1,	4.14,	4.15.1,
										4.17,	4.18	
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution		(C) P	3	2G	Open	No	St	O No	No			
Ammonium thiosulphate solution (60% or less)		(C) P	3	2G	Open	No	St	O No	No	5.2.8		
n-Amyl acetate	1104	C P	3	2G	Cont.	No	SP	R F	A	4.14.1		
sec-Amyl acetate	1104	C P	3	2G	Cont.	No	SP	R F	A	4.14.1		
Amyl acetate, commercial	1104	C P	3	2G	Cont.	No	SP	R F	A	4.14.1		
Aniline	1547	C S/P	2	2G	Cont.	No	St	C T	A	4.9,	4.13.1,	4.14
Aviation alkylates (CB paraffins and iso-paraffins		(C) P	3	2G	Cont.	No	SP	R F	B	4.14.1		
BPT 95 - 120°C)												
Benzene and mixtures having 10% benzene or more	1114(s)	C S/P	3	2G	Cont.	No	SP	R F-T	B	4.9.1,	4.13.1,	5.2.8
Benzene sulphonyl chloride	2225	D S	3	2G	Cont.	No	St	R T	B,D	4.12.1,	4.14.1	
Benzyl acetate		C P	3	2G	Open	No	St	O No	A			
Benzyl alcohol		C P	3	2G	Open	No	St	C T	B	4.9,	4.10,	4.13.1,
Benzyl chloride	1738	B S/P	2	2G	Cont.	No	St			4.17		
Butene oligomer		B P	3	2G	Open	No	St	O No	A	4.14.1		
o-Butyl acetate	1123	C P	3	2G	Cont.	No	SP	R F	A	4.14.1		

a	b	c	d	e	f	g	h	i	j	k	l	m
n-Butyl acrylate	2348	B	S/P	2	2G	Cont.	No	SP	R F-T	A		
Butylamine (all isomers)	1125,	C	S/P	2	2G	Cont.	No	SP	R F-T	A	4.9, 4.12.1, 4.12.2, 4.13.1, 4.14.1, 4.17	
Butylbenzenes (all isomers)	1214											
Butyl benzyl phthalate	2709	(A)	P	2	2G	Cont.	No	SP	R F	A	4.14.1	
n-Butyl butyrate		A	P	2	2G	Open	No	St	O No	A	4.14.1	
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture		(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
1,2-Butylene oxide	3022	D	S	3	2G	Cont.	No	St	R No	A,C,D	4.10, 4.18.1, 4.18.2	
	C	S/P	3	2G	Cont.	Inert	SP	R F	A,C	4.7.1, 4.7.2, 4.7.4, 4.7.5, 4.7.8 to 4.7.11, 4.7.13, 4.7.17, 4.7.19, 4.7.21, 4.14.1		
n-Butyl ether	1149	C	S/P	3	2G	Cont.	Inert	SP	R F-T	A,D	4.2.7, 4.9	
Butyl methacrylate		D	S	3	2G	Cont.	No	SP	R F-T	A,D	4.10, 4.18.1, 4.18.2	
n-Butyraldehyde	1129	B	S/P	3	2G	Cont.	No	SP	O F-T	A	4.14.1, 4.15.1	
Butyric acid	2820	D	S	3	2G	Cont.	No	St	R No	A	4.8.2 to 4.8.4, 4.8.6 to 4.8.8, 4.12.6	
Calcium alkyl salicylate		C	P	3	2G	Open	No	St	O No	A	5.2.6, 5.2.7	
Calcium hypochlorite solution (15% or less)		C	S/P	3	2G	Cont.	No	St	R No	NO	4.12.5, 4.15.1	
Calcium hypochlorite solution (more than 15%)		B	S/P	3	2G	Cont.	No	St	R No	NO	4.12.5, 4.14.1, 4.15.1	
Calcium naphthenate in mineral oil		A	P	3	2G	Open	No	St	O No	A	4.14.1	
Camphor oil	1130	B	S/P	2	2G	Cont.	No	SP	O F	B	4.14.1	
Carbolic oil		A	S/P	2	2G	Cont.	No	St	C F-T	A	4.9, 4.14	
Carbon disulphide	1131	B	S/P	2	1G	Cont.	Pad+Inert use	C F-T	C	4.1, 4.9, 4.14, 4.17		
Carbon tetrachloride	1846	B	S/P	3	2G	Cont.	No	St	C T	NO	4.9, 4.13.1, 4.14.1, 4.17	

	a	b	c	d	e	f	g	h	i	j	k	l	m
Cashew nut shell oil (untreated)		D	S	3	2G	Cont.	No		St	R T	B		
Cetyl/Eicosyl methacrylate mixture		111	S	3	2G	Open	No		St	O No	A,C,D	4.10.	4.18.1, 4.18.2
Chlorinated paraffins (C10-C13)		A	P	1	2G	Open	No		St	O No	A	4.14	
Chloroacetic acid (80% or less)	1750	C	S/P	2	2G	Cont.	No		St	C No	No	4.8.2.	4.8.4. 4.8.6 to 4.8.8. 4.9.3. 4.12.6(z).
Chlorobenzene	1134	B	S/P	2	2G	Cont.	No		SP	R F-T	B	4.14.1	
Chloroform	1888	B	S/P	3	2G	Cont.	No		St	R T	No	4.9.	4.14.1, 4.17
Chlorohydrins (crude)		(D)	S	2	2G	Cont.	No		SP	C F-T	A	4.9.	4.14
o-Chloronitrobenzene	1578	B	S/P	2	2G	Cont.	No		St	C T	B,C,D	4.9.	4.13, 4.14. 5.2.5.
2- or 3-Chloropropionic acid	2511(k)	(C)	S/P	3	2G	Open	No		St	O No	A	5.2.8.	5A.2.2
Chlorosulphonic acid	1754	C	S/P	1	2G	Cont.	No		St	O No	A	4.8.2 to 4.8.4.	4.8.6 to 4.8.8, 4.12.6, 5.2.6 to 5.2.8
m-Chlorotoluene	2238	B	S/P	3	2G	Cont.	No		St	C T	No	4.8.2 to 4.8.8, 4.9.	
o-Chlorotoluene	2238	A	S/P	3	2G	Cont.	No		SP	R F-T	B,C	4.14.1	
p-Chlorotoluene	2238	B	S/P	2	2G	Cont.	No		SP	R F-T	B,C	4.14.1	
Chlorotoluenes (mixed isomers)	2238	A	S/P	2	2G	Cont.	No		SP	R F-T	B,C	4.14.1	
Coal tar		A	S/P	2*	2G	Cont.	No		St	R No	B,D	4.14.1	
Coal tar naphtha solvent		B	S/P	3	2G	Cont.	No		SP	R F-T	A,D	4.14.1	
Coal tar Pitch (molten)		D	S	3	1G	Cont.	No		St	R No	B,D	4.14.1	
Coconut oil fatty acid		C	P	3	2G	Open	No		St	O No	A	5.2.6 to 5.2.8	
Creosote (coal tar)		A	S/P	2	2G	Open	No		St	O No	B,D	4.14.1	
Creosote (wood)		A	S/P	2	2G	Open	No		St	O No	B,D	4.14.1	

*For ships constructed before the date of entry into force of the present amendments which are engaged solely on voyages between ports or terminals within the State the flag of which the ship is entitled to fly, the ship-type requirement applies ten years after entry into force of the amendments.

For ships constructed before the date of entry into force of the present amendments, which are engaged on voyages from, to or between port terminals within States other than the State the flag of which the ship is entitled to fly, the ship-type requirement applies five years after the entry into force of the amendments, provided that the ship satisfies all the following conditions:

1. the ship has been regularly engaged in the trade of coal tar (or at least five years before the date of entry into force of the present amendments);
2. the ship is solely engaged on restricted voyages as determined by the Administration;
3. the Certificate of Fitness is endorsed to the effect that the ship is solely engaged in such restricted voyages,
4. with the expiry date of the period of grace; and
4. the five year period of grace is agreed among the Governments concerned.

	a	b	c	d	e	f	g	h	i	j	k	l	m
Cresols (all isomers)													
Cresylic acid, sodium salt solution													
Crotonaldehyde													
Cycloheptane													
Cyclohexane	2076	A	S/P 2	2G	Open	No			St	O No	B		4.14.1
Cyclohexanol	1143	A	S/P 2	2G	Open	No			St	O No	No		4.12.1, 4.14.1
Cyclohexanone		B	S/P 2	2G	Cont.	No			SP	R F-T	A		4.9, 4.13.1, 4.14.1,
Cyclohexyl acetate													4.15.1, 4.17
Cyclohexylamine	2241	{C}	P	3	2G	Cont.	No		SP	R F	A		4.14.1
1,3-Cyclopentadiene dimer (molten)	1145	C	P	3	2G	Cont.	No		SP	R F	A		4.14.1, 5.2.8
Cyclopentene		C	P	3	2G	Open	No		St	O No	A		5.2.6, 5.2.8
p-Cymene	1915	D	S	3	2G	Cont.	No		SP	R F-T	A		4.12.5
Decanoic acid	2243	{B}	P	3	2G	Cont.	No		SP	R F	A		4.14.1
Decene	2357	C	S/P 3	2G	Cont.	No			SP	R F-T	A,D		4.12.1, 4.12.2
Decyl acrylate		B	P	2	2G	Cont.	No		SP	R F	A		4.14.1, 5.2.5, 5.2.8,
Decyl alcohol (all isomers)	1146	{C}	P	3	2G	Cont.	No		SP	R F	A		5A.2.2
Dibutylamine	2246	(B)	P	3	2G	Cont.	No		SP	R F	A		4.14.1
Dibutyl phthalate	2046	C	P	3	2G	Cont.	No		SP	R F	A		4.14.1
Dichlorobenzenes (all isomers)		C	P	3	2G	Open	No		St	O No	A		5.2.6 to 5.2.8
1,1-Dichloroethane	2362	B	S/P 3	2G	Cont.	No			St	O No	A,C,D		4.10, 4.12.2, 4.14.1,
		B	P	3	2G	Open	No						4.18.1, 4.18.2
		C	S/P 3	2G	Cont.	No			St	O No	A		4.14.1, 5.2.8(p)
		A	P	2	2G	Open	No		SP	R F-T	B,D		4.12.4
		B	S/P 2	2G	Cont.	No			St	O No	A		4.14.1
									St	R T	B,D		4.12.5, 4.14.1,
													5.2.5(v), 5.2.8(w), 5A.2.2(x)
									SP	R F-T	B		4.14.1, 4.17

	a	b	c	d	e	f	g	h	i	j	k	l	m
Dichlorethyl ether 2,2-Dichloroisopropyl ether	1916 2490	B C	S/P 2 S/P 2	2G 2G	Cont. Cont.	No No	SP ST	R F-T R T	A B,C,D	4.12.5, 4.12.5,	4.14.1 4.13.1, 4.14		
Dichloremethane	1593	D	S S/P S/P	3 2G 3	2G Cont. Open	No Dry No	ST ST ST	R T R T O No	No B,C,D No	4.12.1, 4.12.1, 4.14.1			
2,4-Dichlorophenol	2021	A	S/P S/P S/P	2 3 3	2G 2G 2G	Cont. Open Open	ST ST ST	R T R T O No	No B,C,D No	4.12.1, 4.12.1, 4.14.1			
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution													
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)													
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	1279	B	S/P S/P S/P S/P S/P S/P S/P	2 2G 2G 2G 2G 2G 2G	2G Cont. Cont. Cont. Cont. Cont. Cont.	No No No No No No No	SP SP SP SP SP SP SP	R F-T R F-T C F-T C F-T C F-T R No	B B B B B A	4.9, 4.9, 4.9, 4.9, 4.9, 4.8.2, 4.8.2,	4.14.1 4.14.1 4.14.1 4.14.1 4.14.1 4.8.4, 4.8.6 to		
1,2-Dichloropropane													
1,3-Dichloropropane	2047	B	S/P S/P S/P S/P S/P S/P	2 2G 2G 2G 2G 2G	2G Cont. Cont. Cont. Cont. Cont.	No No No No No	SP SP SP SP SP	C F-T C F-T C F-T C F-T	B B B B	4.9, 4.9, 4.9, 4.9,	4.14, 4.14, 4.14, 4.14		
1,3-Dichloropropane													
Dichloropropene/Dichloropropane mixtures													
2,2-Dichloropropionic acid													
Diethanolamine	1154	III C	S S/P S/P S/P P P P	3 2G 2G 2G 3 2G 3	2G Cont. Cont. Cont. Cont. Cont. Open	No No No No No No	ST SP SP SP SP ST	O No R F-T R F-T R F-T R F	A A A,C A	4.12.2 4.9, 4.12.1, 4.12.1, 4.14.1			
Diethylamine	2686	C	S/P S/P S/P S/P S/P S/P S/P	3 2G 2G 2G 2G 2G 2G	2G Cont. Cont. Cont. Cont. Cont. Open	No No No No No No	SP SP SP SP SP ST	R F-T R F-T R F-T R F	A,C A	4.12.1, 4.12.1, 4.12.1, 4.14.1			
Diethylbenzene	2049	C	P P P P P P P	3 2G 2G 2G 2G 2G 2G	2G Cont. Cont. Cont. Cont. Cont. Open	No No No No No No	SP SP SP SP SP ST	O No O No O No O No O No A	A A A A A	4.12.2 4.12.2 4.12.2 4.12.2 4.12.2			
Diethylene glycol methyl ether	2079	D	S III S	3 2 1G	2G Open- Cont.	No Inert	SP SP	C F-T C F-T	A A	4.2, 4.2,	4.11, 4.11,	4.14, 4.14,	
Diethylenetriamine	1155												
Diethyl ether													
Di-(2-ethylhexyl) phosphoric acid	1902	C	S/P S/P S/P	3 2G 2G	Open No	No	ST ST ST	O No O No O No	B,C,D B,C,D B,C,D	4.12.2 4.12.2 4.12.2			

	a	b	c	d	e	f	g	h	i	j	k	l	m
Diethyl phthalate		C P 3	2G	Open	No				St	O No	A		4.12.3, 4.14.1
Diethyl sulphate		(B) S/P 2	2G	Cont.	No	St	C T	A,D	St	O No	A,D		4.14.1, 5.2.5
Diglycidyl ether of bisphenol A	1594	B P 3	2G	Open	No	St	O No	A	St	O No	A		4.14.1, 5.2.5
Diglycidyl ether of bisphenol F		B P 3	2G	Open	No	St	O No	A	St	O No	A		4.14.1, 5.2.5
Di-n-hexyl adipate		B P 3	2G	Open	No	St	O No	A	St	O No	A		4.14.1
Diisobutylamine	2361	(C) S/P 2	2G	Cont.	No	SP	R F-T	B,D	4.9.3, 4.12.1,	4.14.1			4.14.1
Diisobutylene	2050	B P 3	2G	Cont.	No	SP	R F	A	4.14.1				4.14.1, 5.2.5
Diisobutyl phthalate		B P 3	2G	Open	No	St	O No	A	4.12.2,	5.2.6	to	5.2.8	
Diisopropanolamine		C S/P 3	2G	Open	No	St	O No	A	SP	C F-T	A		4.9, 4.12.2, 4.14, 4.17
Diisopropylamine	1158	C S/P 2	2G	Cont.	No	St	O No	A	4.14.1				
Diisopropylbenzene (all isomers)		A P 2	2G	open	No	St	R T	B	4.9.1, 4.12.4,	4.13.1			
N,N-Dimethylacetamide solution (40% or less)		D S 3	2G	Cont.	No	St	O No	A	4.14.1,	5.2.8			
Dimethyl adipate		B P 3	2G	Open	No	St	SP	R F-T	C,D	4.9,	4.12.1,	4.17	
Dimethylamine solution (45% or less)	1160	C S/P 3	2G	Cont.	No	SP	C F-T	A,C,D	4.9,	4.12.1,	4.13.1,		
Dimethylamine solution (greater than 45% but not greater than 55%)	1160	C S/P 2	2G	cont.	No	SP	C F-T	A,C,D	4.14,	4.17			
Dimethylamine solution (greater than 55% but not greater than 65%)	1160	C S/P 2	2G	Cont.	No	SP	C F-T	A,C,D	4.9,	4.11,	4.12.1,		
N,N-Dimethylcyclohexylamine	2264	C S/P 2	2G	Cont.	No	SP	R F-T	A,C	4.13.1,	4.14,	4.17		
Dimethylethanolamine		D S 3	2G	Cont.	No	SP	R F-T	A,D	4.12.2				
Dimethylformamide	2051	D S 3	2G	Cont.	No	SP	R F-T	A,D					
Dimethyl glutarate	2265	D S 3	2G	Cont.	No	SP	R F-T	A,D					
Dimethyl hydrogen phosphite		C P 3	2G	Open	No	St	O No	A					
Dimethyl octanoic acid		S 3	2G	Cont.	No	St	R T	A,D	4.9.1				
Dimethyl phthalate		(C) P 3	2G	Open	No	St	O No	A	5.2.7,	5.2.8			
	C P 3	2G	Open	No	St	O No	A						

a	b	c	d	e	f	g	h	i	j	k	l	m		
Dimethyl succinate		C	P	3	2G	Open	No	ST	O	No	A	5.2.8		
Dinitrotoluene (molten)	.	1600	B	S/P	2	2G	Cont.	No	ST	C	T	A	4.9, 4.13.1, 4.14,	
1,4-Dioxane		1165	D	S	2	2G	(1)		SP	C	F-T	A	5.2.5, 5.2.8, 5A.2.2(m)	
Dipentene		2052	C	P	3	2G	Cont.	No	SP	R	F	A	4.9, 4.14	
Diphenyl			A	P	1	2G	Open	No	ST	O	No	B	4.14	
Diphenyl/Diphenyl ether mixtures			A	P	1	2G	Open	No	ST	O	No	B	4.14	
Diphenyl ether			A	P	3	2G	Open	No	ST	O	No	A	4.14	
Diphenyl ether/Diphenyl phenyl ether mixture		2489	A	P	3	2G	Open	No	ST	O	No	A	4.14.1	
Diphenylmethane diisocyanate			(B)	S/P	2	2G	Cont.	Dry	ST	C	T(b)	C(c), D	4.9, 4.12.5, 4.13.1,	
								(b)					4.14.1, 4.15.2, 5.2.5,	
													5.2.8, 5A.2.2	
Diphenyloxy propane-epichlorohydrin resins		2383	B	P	3	2G	Open	No	ST	O	No	A	4.14.1, 5.2.5	
Di-n-propylamine			C	S/P	3	2G	Cont.	No	SP	R	F-T	A	4.9.3, 4.12.2, 4.14.1	
Dodecene (all isomers)			(B)	P	3	2G	Open	No	ST	O	No	A	4.14.1	
Dodecyl alcohol			B	P	3	2G	Open	No	ST	O	No	A	4.14.1, 5.2.5, 5.2.8,	
Dodecyl diphenyl ether disulphonate solution			B	S/P	3	2G	Open	No	ST	O	No	No	SA.2.2	
Dodecyl methacrylate			III	S	3	2G	Open	No	ST	O	No	A,C	4.10	
Dodecyl/Pentadecyl methacrylate mixture	.		III	S	3	2G	Open	No	ST	O	No	A,C,D	4.10, 4.18.1, 4.18.2	
Dodecyl phenol			A	P	1	2G	Open	No	ST	O	No	A	4.14	
Drilling brines, containing Zinc salts			(A)	P	2	2G	Open	No	ST	O	No	No	4.14.1	
Epichlorohydrin			C	S/P	2	2G	Cont.	No	SP	C	F-T	A	4.9, 4.13.1, 4.14, 4.17	
Ethanalamine			2491	D	S	3	2G	Open	No	ST	O	F-T	A	4.12.2
2-Ethoxyethyl acetate		1172	C	P	3	2G	Cont.	No	SP	R	F	A	4.14.1	

a	b	c	d	e	f	g	h	i	j	k	l	m
Ethyl acrylate	1917	A	S/P	2	2G	Cont.	No	SP	R F-T	A	4.10, 4.14.1, 4.17, 4.18.1, 4.18.2	
Ethylenamine solutions (72% or less)	1036	(C)	S/P	2	1G	Cont.	No	SP	C F-T	C,D	4.9, 4.11, 4.12.2, 4.17	
Ethylenamine	2270	(C)	S/P	2	2G	Cont.	No	SP	C F-T	A,C	4.13.1, 4.14, 4.17	
Ethyl amyl ketone	2271	C	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Ethylbenzene	1175	C	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
N-Ethylbutylamine		(C)	S/P	3	2G	Cont.	No	SP	R F-T	A	4.9.3, 4.12.1, 4.14.1	
Ethyl butyrate	1180	C	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Ethylcyclohexane		(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
N-Ethylcyclohexylamine		D	S	3	2G	Cont.	No	SP	R F-T	A,C	4.12.1, 4.14.1	
Ethylene chlorohydrin	1135	C	S/P	2	2G	Cont.	No	SP	C F-T	D	4.9, 4.13.1, 4.14, 4.17	
Ethylene cyanohydrin		(D)	S	3	2G	Open	No	St	O No	A		
Ethylenediamine	1604	C	S/P	2	2G	Cont.	No	SP	R F-T	A	4.12.2, 5.2.8	
Ethylene dibromide	1605	B	S/P	2	2G	Cont.	No	St	C T	No	4.9, 4.14.1, 4.17, 5.2.8	
Ethylene dichloride	1184	B	S/P	2	2G	Cont.	No	SP	R F-T	B	4.12.4, 4.14	
Ethylene glycol butyl ether acetate		(C)	P	3	2G	Open	No	St	O No	A		
Ethylene oxide/propylene oxide mixture with an ethylene oxide content of not more than 30% in weight	2983	D	S	2	1G	Cont.	Inert	SP	C F-T	A,C	4.7, 4.9, 4.11, 4.14	
2-Ethylhexyl acrylate		B	S/P	3	2G	Open	No	St	O No	A	4.10, 4.14.1, 4.18.1, 4.18.2	
2-Ethylhexylamine	2276	B	S/P	2	2G	Cont.	No	SP	R F-T	A	4.9, 4.12.2, 4.14.1	
Ethyldiene norbornene		B	S/P	3	2G	Cont.	No	SP	R F-T	B,C,D	4.9.1, 4.12.4, 4.14.1, 4.15.1	

a	b	c	d	e	f	g	h	i	j	k	l	m
Hydrogen peroxide solutions (over 60% but not over 70%)	C	S/P	2	2G	Cont.	No	St	C	No	No	4.14.1, 4.20.1 to 4.20.14	
2-Hydroxyethyl acrylate	B	S/P	2	2G	Cont.	No	St	C	T	A	4.9, 4.10, 4.14.1, 4.18.1, 4.18.2	
Isoamyl acetate	1104	C	P	3	2G	Cont.	No	SP	R	F	A	4.14.1
Isobutyl acetate	1213	C	P	3	2G	Cont.	No	SP	R	F	A	4.14.1
Isobutyl acrylate	2527	B	S/P	2	2G	Cont.	No	SP	R	F-T	A	4.10, 4.14.1, 4.18.1, 4.18.2
Isobutyraldehyde	2045	C	S/P	3	2G	Cont.	No	SP	O	F-T	A	4.15.1
Isophoronediamine	2289	D	S	3	2G	Cont.	No	St	R	T	A	4.12.2
Isophorone diisocyanate	2290	B	S/P	2	2G	Cont.	Dry	St	C	T	C(c),D	4.9, 4.12.5, 4.13.1, 4.14.1, 4.15.2
Isoprene	1218	C	S/P	3	2G	Cont.	No	SP	R	F	B	4.10, 4.11, 4.18.1, 4.18.2
Isopropanolamine	1221	C	S/P	3	2G	Open	No	St	O	F-T	A	4.12.2, 5.2.7, 5.2.8
Isopropylamine		C	S/P	2	2G	Cont.	No	SP	C	F-T	C,D	4.9, 4.11, 4.12.2, 4.14, 4.17
Isopropylbenzene	1918	B	P	3	2G	Cont.	No	SP	R	F	A	4.14.1
Isopropylcyclohexane		(C)	P	3	2G	Cont.	No	SP	R	F	A	4.14.1, 5.2.6, 5.2.7
Isopropyl ether	1159	D	S	3	2G	Cont.	Inert	SP	R	F	A	4.2.7, 4.10.3, 4.14.1
Isovaleraldehyde	2058	C	S/P	3	2G	Cont.	Inert	SP	R	F-T	A	4.2.7, 4.15.1
Lactonitrile solution (80% or less)		B	S/P	2	1G	Cont.	No	St	C	T	A,C,D	4.4, 4.9, 4.12.6, 4.13, 4.14, 4.17, 4.18, 5.2.5
Lauric acid	2215	B	P	3	2G	Open	No	St	O	No	A	4.14.1, 5.2.5, 5.2.8, 5A.2.2
Maleic anhydride		D	S	3	2G	Cont.	No	St	R	No	A(g),C	4.12.1, 4.14.1, 5.2.8
Mercaptobenzothiazol, sodium salt solution		B	S/P	3	2G	Open	No	St	O	No	No	

	a	b	c	d	e	f	g	h	i	j	k	l	m
Mesityl oxide		1229	D	S	3	2G	Cont.	No	SP	R F-T	A	4.14.1	
Methyl sodium solution			A	S/P	3	2G	Open	No	St	O No	No	4.12.1,	4.14.1
Methacrylic acid		2531	D	S	3	2G	Cont.	No	St	R T	A	4.10,	4.12.6,
Methacrylonitrile		3079	(B)	S/P	2	2G	Cont.	No	SP	C F-T	A	4.9,	4.10,
Methyl acrylate		1919	B	S/P	2	2G	Cont.	No	SP	R F-T	B	4.13.1,	4.14,
Methylamine solutions (42% or less)		1235	C	S/P	2	2G	Cont.	No	SP	C F-T	A,C,D	4.18.1,	4.18.2
Methylamyl acetate		1233	(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Methylamyl alcohol		2053	(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Methyl amyl ketone		1110	(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Methyl butyrate		1237	(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Methylcyclohexane		2296	(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Methylcyclopentadiene dimer			(B)	P	3	2G	Cont.	No	SP	R F	B	4.14.1	
2-Methyl-6-ethyl aniline			C	S/P	3	2G	Open	No	St	O No	B,C,D		
2-Methyl-5-ethyl pyridine		2300	(B)	S/P	3	2G	Open	No	St	O No	D	4.12.4,	4.14.1
Methyl formate		1243	D	S	2	2G	Cont.	No	SP	R F-T	A	4.9,	4.11,
Methyl heptyl ketone			B	P	3	2G	Cont.	No	SP	R F	A	4.14.1	4.17
2-Methyl-2-hydroxy-3-butyne			III	S	3	2G	Cont.	No	SP	R F-T	A,C,D	4.12.8,	4.14.1
Methyl methacrylate		1247	D	S	2	2G	Cont.	No	SP	R F-T	B	4.10,	4.18.1,
2-Methyl-1-pentene		2288	C	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
2-Methylpyridine		2313	B	S/P	2	2G	Cont.	No	SP	C F	A,C	4.9.3,	4.12.4,
4-Methylpyridine		2313	B	S/P	2	2G	Cont.	No	SP	C F-T	A,C,D	4.9.3,	4.12.4,
N-Methyl-2-pyrrolidone			B	P	3	2G	Open	No	St	O No	A	4.14.1	

	a	b	c	d	e	f	g	h	i	j	k	l	m
Methyl salicylate alpha-Methylstyrene		2303	(B) P 3 2G	Open	No				St	O No	A	4.14.1	
			A S/P 3 2G	Cont.	No				SP	R F-T	D	4.10, 4.14.1, 4.18.1,	
Morpholine	2054	D S 3 2G	Cont.	No				SP	R F	A	4.18.2		
Motor fuel anti-knock compounds	1649	A S/P 2 1G	Cont.	No				SP	C F-T	B,C	4.12.2		
Naphthalene (molten)	2304	A S/P 2 2G	Cont.	No				SP	R No	A,D	4.17		
Naphthenic acids		A P 2 2G	Open	No				St	O No	A	4.14.1		
Neodecanoic acid		C P 3 2G	Open	No				St	O No	A	5.2.7		
Nitrating acid (mixture of sulphuric and nitric acids)	1796	(C) S/P 2 2G	Cont.	No				St	C T	No	4.8, 4.13.1, 4.14,		
Nitric acid (less than 70%)	2031	C S/P 2 2G	Cont.	No				St	R T	No	4.8, 4.14, 4.17		
Nitric acid (70% and over)	2031, 2032(h)	C S/P 2 2G	Cont.	No				St	C T	No	4.8, 4.14, 4.17		
Nitrobenzene	1662	B S/P 2 2G	Cont.	No				St	C T	D	4.9, 4.13, 4.14, 5.2.8		
o-Nitrophenol (molten)	1663	B S/P 2 2G	Cont.	No				St	C T	A,C,D	4.9, 4.14.1, 5.2.5,		
1- or 2-Nitropropane	2608	D S 3 2G	Cont.	No				SP	R F-T	A	5.2.8, 5A.2.2		
Nitropropane (60%)/Nitroethane (40%) mixture	1664	D S 3 2G	Cont.	No				SP	R F-T	A,C(n)	4.12.4		
o- or p-Nitrotoluenes		C S/P 2 2G	Cont.	No				St	C T	B	4.9, 4.13.1, 4.14, 5.2.8		
Nonane (all isomers)	1920	(C) P 3 2G	Cont.	No				SP	R F	B,C	4.14.1		
Nonene		B P 3 2G	Cont.	No				SP	R F	A	4.14.1		
Nonyl alcohol (all isomers)		C P 3 2G	Open	No				St	O No	A			
Nonyl phenol		A P 2 2G	Open	No				St	O No	A	4.14.1		
Nonyl phenol poly(4-12) ethoxylates		B P 3 2G	Open	No				St	O No	A	4.14.1, 5.2.5, 5.2.8,		
											5A.2.2(Y)		

a	b	c	d	e	f	g	h	i	j	k	l	m
Noxious liquid, N.F. (1) n.o.s. (trade name, contains ...) S.T.1, Cat.A*	A	P	1	2G	Open	No	St	O	No	A	4.14	
Noxious liquid, F, (2) n.o.s. (trade name, contains ...) S.T.1, Cat.A*	A	P	1	2G	Cont.	No	SP	R	F	A	4.14	
Noxious liquid, N.F, (3) n.o.s. (trade name, contains ...) S.T.2, Cat.A*	A	P	2	2G	Open	No	St	O	No	A	4.14.1	
Noxious liquid, F, (4) n.o.s. (trade name, contains ...) S.T.2, Cat.A*	A	P	2	2G	Cont.	No	SP	R	F	A	4.14.1	
Noxious liquid, N.F, (5) n.o.s. (trade name, contains ...) S.T.2, Cat.B*	B	P	2	2G	Open	No	St	O	No	A	4.14.1, [5.2.5, 5.2.8]**	
Noxious liquid, N.F, (6) n.o.s. (trade name, contains ...) S.T.2, Cat.B*, mp 15°C+	B	P	2	2G	Open	No	St	O	No	A	4.14.1, [5.2.5]**, 5.2.8, 5A.2.2	
Noxious liquid, F, (7) n.o.s. (trade name, contains ...) S.T.2, Cat.B*	B	P	2	2G	Cont.	No	SP	R	F	A	4.14.1, [5.2.5, 5.2.8]**	
Noxious liquid, F, (8) n.o.s. (trade name, contains ...) S.T.2, Cat.B*, mp 15°C+	B	P	2	2G	Cont.	No	SP	R	F	A	4.14.1, [5.2.5]**, 5.2.8, 5A.2.2	
Noxious liquid, N.F, (9) n.o.s. (trade name, contains ...) S.T.3, Cat.A*	A	P	3	2G	Open	No	St	O	No	A	4.14.1	
Noxious liquid, F, (10) n.o.s. (trade name, contains ...) S.T.3, Cat.A*	A	P	3	2G	Cont.	No	SP	R	F	A	4.14.1	
Noxious liquid, N.F, (11) n.o.s. (trade name, contains ...) S.T.3, Cat.B*	B	P	3	2G	Open	No	St	O	No	A	4.14.1, [5.2.5, 5.2.8]**	
Noxious liquid, N.F, (12) n.o.s. (trade name, contains ...) S.T.3, Cat.B*, mp 15°C+	B	P	3	2G	Open	No	St	O	No	A	4.14.1, [5.2.5]**, 5.2.8, 5A.2.2	
Noxious liquid, F, (13) n.o.s. (trade name, contains ...) S.T.3, Cat.B*	B	P	3	2G	Cont.	No	SP	R	F	A	4.14.1, [5.2.5, 5.2.8]**	

* In case of a specific n.o.s. cargo assessed as falling within this n.o.s. group that is carried on a ship, this entry, including the cargo's trade name and one or two principle components, should be provided in the shipping document. Abbreviations used mean:

N.F: Flashpoint exceeding 60°C (closed cup test)
 F: Flashpoint not exceeding 60°C (closed cup test)
 n.o.s.: Not otherwise specified
 S.T: Ship type
 Cat.: Pollution category
 m.p.: Melting point

** For high viscosity or high melting point cargoes.

a	b	c	d	e	f	g	h	i	j	k	l	m
Noxious liquid, F, (14) n.o.s. (trade name ... , contains ...) S.T.3, Cat.B*, mp 15°C+	B	P	3	2G	Cont.	No	SP	R F	A	4.14.1, [5.2.5]**, 5.2.8, SA.2.2		
Noxious liquid, N.F, (15) n.o.s. (trade name ..., contains ...) S.T.3, Cat.C*	C	P	3	2G	Open	No	St	O No	A	[5.2.6 to 5.2.8]**		
Noxious liquid, F, (16) n.o.s. (trade name ..., contains ...) S.T.3, Cat.C*	C	P	3	2G	Cont.	No	SP	R F	A	[5.2.6 to 5.2.8]**		
Octane (all isomers)	1262	(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Octanol (all isomers)		C	P	3	2G	Open	No	St	O No	A		
Octene (all isomers)		B	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Octyl aldehydes	1191	(B)	P	3	2G	Cont.	No	SP	R F	A	4.14.1, 5.2.8	
Octyl nitrates (all isomers)		A	S/P	2	2G	Open	No	St	O No	B	4.14.1, 4.18, 4.22	
Olefin mixtures (C5-C7)		C	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Olefin mixtures (C5-Cl5)		B	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
alpha-Olefins (C6-C18) mixtures		B	P	3	2G	Cont.	No	SP	R F	A	4.14.1, 5.2.5, 5.2.8	
Oleum	1631	C	S/P	2	2G	Cont.	No	St	C T	No	4.8.2 to 4.8.8, 4.9.1, 4.13.1, 4.14, 4.15.2, 4.17, 5.2.6, 5.2.7	
Palm nut oil fatty acid		(C)	P	3	2G	Open	No	St	O No	B	5.2.6 to 5.2.8	
Paraldehyde	1264	C	S/P	3	2G	Cont.	No	SP	R F	A	5.2.8	
Pentachloroethane	1669	B	S/P	2	2G	Cont.	No	St	R T	No	4.9, 4.13.1, 4.14.1	
1,3-Pentadiene		C	S/P	3	2G	Cont.	No	SP	R F-T	B	4.10, 4.18	
Pentane (all isomers)	1265	(C)	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Pentene (all isomers)		C	P	3	2G	Cont.	No	SP	R F	A	4.14.1	
Perchloroethylene	1897	B	S/P	3	2G	Cont.	No	St	R T	No	4.9.1, 4.9.2, 4.14.1	
Phenol	2312	B	S/P	2	2G	Cont.	No	St	C T	A	4.9, 4.14, 5.2.5, 5.2.8, SA.2.2	

* See footnote on page 19.

** For high viscosity or high melting point cargoes.

	a	b	c	d	e	f	g	h	i	j	k	l	m	
1-Phenyl-1-xylyl ethane		C	P	3	2G	Open	No	St	O	No	B			
Phosphoric acid	1805	D	S	3	2G	Open	No	St	O	No	No	4.8.1 to 4.8.4,	4.8.6 to 4.8.8	
Phosphorus, yellow or white	1381,	A	S/P	1	1G	Cont.	Pad+(vent or Inert)	St	C	No	C	4.5,	4.14,	4.17
Phthalic anhydride (molten)	2447	C	S/P	3	2G	Cont.	No	St	R	No	D	5.2.6 to 5.2.8		
Pinene	2214	C	S/P	3	2G	Cont.	No	SP	R	F	A	4.14.1		
Polyethylene polyamines	2368	B	P	3	2G	Cont.	No	St	O	No	A	4.12.2,	5.2.8	.
Polyferric sulphate solution	2734 (i)	(C)	S/P	3	2G	Open	No	St	O	No	A			
Polyethylene polyphenyl isocyanate	2735	{C}	S/P	3	2G	Open	No	St	O	No	A			
Potassium hydroxide solution	2206 (i)	D	S	2	2G	Cont.	Dry	St	C	T(b)	C(C),D	4.9,	4.12.5,	4.14.1,
n-Propanolamine	2207							(b)				4.15.2		
beta-Propiolactone	1814	C	S/P	3	2G	Open	No	St	O	No	No	4.12.1(aa),	5.2.8	
propionaldehyde		C	S/P	3	2G	Open	No	St	O	No	A,D	4.12.2,	5.2.8	
propionic acid	1275	D	S	3	2G	Cont.	No	SP	R	E-T	A	4.13.1,	4.15.1,	4.17
Propionic anhydride	1848	D	S	3	2G	Cont.	No	SP	R	F	A	4.8.2 to 4.8.4,	4.8.6 to 4.8.8,	4.17
Propionitrile	2496	C	S/P	3	2G	Cont.	No	St	R	T	A	4.12.6		
n-Propylamine	2404	C	S/P	2	1G	Cont.	No	SP	C	F-T	A,D	4.9,	4.13,	4.14,
n-Propylbenzene	1277	C	S/P	2	2G	Cont.	Inert	SP	C	F-T	C,D	4.9,	4.12.2,	4.14,
Propylene dimer		(C)	P	3	2G	Cont.	No	St	R	F	A	4.14.1		
Propylene oxide		(C)	P	3	2G	Cont.	No	SP	R	F	A	4.14.1		
Propylene tetramer	1280	D	S	2	2G	Cont.	Inert	SP	C	F-T	A,C	4.7,	4.9.1,	4.11,
Propylene trimer	2850	B	P	3	2G	Cont.	No	SP	R	F	A	4.14.1		
	2057	B	P	3	2G	Cont.	No	SP	R	F	A	4.14.1		

a	b	c	d	e	f	g	h	i	j	k	l	m
Tall oil (crude and distilled)	B	P	3	2G	Open	No	St	O	No	A	4.14.1, 5.2.5, 5.2.8, 5R.2.2	
Tall oil fatty acid (resin acids less than 20%)	(C)	P	3	2G	Open	No	St	O	No	A	5.2.6 to 5.2.8	
Tall oil soap (disproportionated) solution	B	P	3	2G	Open	No	St	O	No	A	4.14.1, 5.2.5, 5.2.8	
Tetrachloroethane	1702	B	S/P	3	2G	Cont.	No	St	R	T	No	4.9, 4.13.1, 4.14.1,
Tetraethylene pentamine	2320	D	S	3	2G	Open	No	St	O	No	A	4.12.1
Tetrahydrofuran	2056	D	S	3	2G	Cont.	No	SP	R	F-T	A,D	
Tetrahydronaphthalene	(C)	P	3	2G	Open	No	St	O	No	A		
1,2,3,5-Tetramethylbenzene	1294	C	P	3	2G	Open	No	St	O	No	A	
Toluene	1709	C	S/P	2	2G	Cont.	No	St	C	T	B,C,D	4.9, 4.12.1, 4.13.1,
Toluenediamine	2078	C	S/P	2	2G	Cont.	Dry	St	C	F-T	C(c),D	4.9, 4.12.4, 4.13.1, 4.14, 4.17, 5.2.6, 5.2.8
Toluene diisocyanate												4.14, 4.15.2, 4.17, 5.2.8
o-Toluidine	1708	C	S/P	2	2G	Cont.	No	St	C	T	A,C	4.9, 4.13.1, 4.14
Tributyl Phosphate		B	P	3	2G	Open	No	St	O	No	A	4.14.1
1,2,4-Trichlorobenzene	2321	B	S/P	2	2G	Cont.	No	St	R	T	C	4.14.1, 5.2.8, 5A.2.2
1,1,1-Trichloroethane	2831	B	P	3	2G	Open	No	St	O	No	A	4.14.1
1,1,2-Trichloroethane		B	S/P	3	2G	Cont.	No	St	R	T	No	4.9.1, 4.14.1
Trichloroethylene	1710	B	S/P	3	2G	Cont.	No	St	R	T	No	4.9, 4.13.1, 4.14.1,
												4.15.1
1,2,3-Trichloropropane	B	S/P	2	2G	Cont.	No	St	C	T	B,C,D	4.9, 4.13.1, 4.14	
1,1,2-Trichloro-1,2,2-Trifluoroethane	C	P	3	2G	Open	No	St	O	No	No		
Tricresyl phosphate (containing less than 1% ortho-isomer)	A	P	2	2G	Open	No	St	O	No	A	4.14.1	

a	b	c	d	e	f	g	h	i	j	k	l	m
Tricresyl phosphate (containing 1% or more ortho-isomer)	2574(j) A	S/P 1	2G	Cont.	No			St	C No	B	4.9.3, 4.14	
Triethanolamine	1296	D	S 3	2G	Open	No		St	O No	A	4.12.1	
Triethylamine		C	S/P 2	2G	Cont.	No		SP	R F-T	B	4.9, 4.12.2, 4.17	
Triethylbenzene		A	P 2	2G	Open	No		St	O No	A	4.14.1	
Triethylenetetramine	2259	D	S 3	2G	Open	No		St	O No	A	4.12.1	
Triethyl phosphite	2323	D	S 3	2G	Open	No		SP	R F-T	A,D	4.9.1	
Triethyl phosphaite		D	S 3	2G	Cont.	No		St	R No	A,C	4.8.2 to 4.8.8, 4.12.6	
Trimethylacetic acid		B	P 3	2G	Cont.	No		SP	R F	A	4.14.1	
Trimethyl benzenes (all isomers)	2327	D	S 3	2G	Open	No		St	O No	A,C	4.12.1, 4.14.1	
Trimethylhexanediamine {2,2,4- and 2,4,4-isomers})	2328	B	S/P 2	2G	Cont.	Dry		St	C T	A,C(c)	4.9, 4.13.1, 4.14.1, 4.15.2	
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-isomers)	2329	C	P 3	2G	Open	No		St	O No	A		
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate		S 3	2G	Cont.	No			SP	R F-T	A,D	4.9.1, 4.14.1, 4.15.2	
Trimethyl phosphite		A	P 1	2G	Open	No		St	O No	A	4.14	
Trixyllyl phosphate	1299	B	P 3	2G	Cont.	No		SP	R F	A	4.14.1	
Turpentine		(C)	P 3	2G	Open	No		St	O No	A	5.2.6 to 5.2.8	
Undecanoic acid		B	P 3	2G	Open	No		St	O No	A	4.14.1	
1-Undecene		B	P 3	2G	Open	No		St	O No	A	4.14.1, 5.2.8, 5A.2.2(r)	
Undecyl alcohol		C	S/P 3	2G	Cont.	No		SP	R T	A	4.12.4, 4.12.9	
Urea/ammonium nitrate solution (containing aqua ammonia)												
n-Valeraldehyde	2058	D	S 3	2G	Cont.	Inert		SP	R F-T	A	4.2.7, 4.15.1	
Vinyl acetate	1301	C	S/P 3	2G	Cont.	No		SP	O F	A	4.10, 4.18.1, 4.18.2	
Vinyl ethyl ether	1302	C	S/P 2	1G	Cont.	Inert		SP	C F-T	A	4.2, 4.10, 4.11, 4.12.8, 4.14, 4.17, 4.18.1, 4.18.2	

a	b	c	d	e	f	g	h	i	j	k	l	m
Vinylidene chloride	1303	B	S/P 2	2G	Cont.	Inert	SP	R F-T	B	4.10, 4.11, 4.12, 5, 4.14.1, 4.17, 4.18.1, 4.18.2		
Vinyl neodecanoate		B	S/P 3	2G	Open	No	St	O No	B	4.10, 4.14.1, 4.15.1, 4.18.1, 4.18.2		
Vinyltoluene	2618	A	S/P 3	2G	Cont.	No	SP	R F	D	4.10, 4.12.1, 4.14.1, 4.18.1, 4.18.2		
White spirit, low (15-20%) aromatic	1300	{B}	P	2	2G	Cont.	No	SP	R F	A	4.14.1	
Xylenes	1307	C	P	3	2G	Cont.	No	SP	R F	A	4.14.1, 5.2.8(u)	
Xylenol	2261	B	S/P 3	2G	Open	No	St	O No	B	4.14.1, 5.2.8, 5a.2.2		

7 Footnotes for the BCH Code:

a Provision 4.17 applies to Ammonia aqueous, 28% or less but not below 10%.

Ammonia aqueous (28% or less)

b If the product to be carried contains flammable solvents such that the flashpoint does not exceed 60°C c.c., then special electrical systems and a flammable vapour detector should be provided.

Diphenylmethane diisocyanate
Polymethylene polyphenyl isocyanate

c Although water is suitable for extinguishing open-air fires involving chemicals to which this footnote applies, water should not be allowed to contaminate closed tanks containing these chemicals because of the risk of hazardous gas generation.

Diphenylmethane diisocyanate
Isophorone diisocyanate
Polymethylene polyphenyl isocyanate
Toluene diisocyanate
Trimethylhexamethylene diisocyanate (2,2,4- & 2,4,4-isomers)

d UN No.1198 only applies if flashpoint is below 60°C c.c.

Formaldehyde solution (45% or less)

e Provision 4.17 applies to Formaldehyde solutions 45% or less, but not below 5%.

Formaldehyde solutions (45% or less)

f Provision 4.17 applies to Hydrochloric acid not below 10%.

Aluminum chloride (30% or less)/Hydrochloric acid (20% or less) solution
Hydrochloric acid

g Dry chemical cannot be used because of the possibility of an explosion.

Maleic anhydride

h UN No.2032 assigned to Red fuming nitric acid.

Nitric acid (70% and over)

- i UN number depends on boiling point of substance.
 - Polyethylene polyamines
 - Polymethylene polyphenyl isocyanate
- j UN number assigned to this substance containing more than 3% of ortho-isomer.
 - Tricresyl phosphate (containing 1% or more ortho-isomer)
- k UN number only applies to 2-Chloropropionic acid.
 - 2- or 3-Chloropropionic acid
- l Dinitrotoluene should not be carried in deck tanks.
 - Dinitrotoluene (molten)
- m Temperature sensors should be used to monitor the cargo pump temperature to detect overheating due to pump failures.
 - Dinitrotoluene (molten)
- n Dry chemical should not be used as a fire-fighting medium.
 - Nitropropane (60%)/Nitroethane (40%) mixture
- o UN No.2672 refers to 10-35% Ammonium solution.
 - Ammonia aqueous (28% or less)
- p Applies to n-Decyl alcohol only.
 - Decyl alcohol (all isomers)
- q Requirements are based on those isomers having a flashpoint of 60°C c.c., and therefore the requirements based on flammability would not apply to such isomers.
 - Heptanol (all isomers)
- r Provision 5A.2.2 applies to 1-Undecyl alcohol only.
 - Undecyl alcohol
- s UN No.1114 applies to Benzene.
 - Benzene and mixtures having 10% benzene or more
- t Confined space should be tested for both Formic acid vapours and Carbon monoxide gas, a decomposition product.
 - Formic acid

u Applies to p-Xylene only.

Xylenes

v Applies to p-isomer and mixtures containing p-isomer viscosity of which is 25 mPa.S at 20°C.

Dichlorobenzenes (all isomers)

w Applies to p-isomer and mixtures containing p-isomer melting point of which is 0°C and above.

Dichlorobenzenes (all isomers)

x Applies to p-isomer and mixtures containing p-isomer melting point of which is 15°C and above.

Dichlorobenzenes (all isomers)

y Applies only to products with melting point of 15°C and above.

Nonyl phenol poly(4-12)ethoxylates

z Aluminium not permitted.

Chloroacetic acid (80% or less)
2,2-Dichloropropionic acid

aa Copper, Brass and Bronze may be used.

Potassium hydroxide solution
Sodium hydroxide solution

8 Chapter VII of the BCH Code should be replaced by the following:

"CHAPTER VII - LIST OF CHEMICALS TO WHICH THE CODE DOES NOT APPLY

1 The following are products which are not considered to come within the scope of the Code. This list may be used as a guide in considering bulk carriage of products whose hazards have not yet been evaluated.

2 Although the products listed in this chapter fall outside the scope of the Code, the attention of Administrations is drawn to the fact that some safety precautions may be needed for their safe transportation. Accordingly, Administrations should prescribe appropriate safety requirements.

EXPLANATORY NOTES

Product name (column a)	In some cases, the product names may not be identical with the names given in previous issues of the BCH Code or the IBC Code (for explanation see index of chemicals).
UN number (column b)	The number relating to each product shown in the recommendations proposed by the United Nations Committee of Experts on the Transport of Dangerous Goods. UN numbers, where available, are given for information only.
Pollution category (column c)	The letter D means the pollution category assigned to each product under Annex II of MARPOL 73/78. "III" means the product was evaluated and found to fall outside the categories A, B, C or D. Pollution category in brackets indicates that the product is provisionally categorized and that further data are necessary to complete the evaluation of their pollution hazards. Until the hazard evaluation is completed, the pollution category assigned is used.

a	b	c
Product name	UN number	Pollution Category for operational discharge (regulation 3 of Annex II)
Acetone	1090	III
Alcohols (C_{13} and above)	-	III
Alcoholic beverages, n.o.s.	3065	III
Alkyl (C_9-C_{17}) benzenes	-	(D)
Aluminium sulphate solution	-	D
Aminoethyldiethanolamine/ Aminoethylmethanolamine solution	-	III
2-Amino-2-hydroxymethyl- 1,3-propanediol solution (40% or less)	-	III
Ammonium sulphate solution	-	D
n-Amyl alcohol	1105	D
sec-Amyl alcohol	1105	D

a	b	c
tert-Amyl alcohol	1105	III
Amyl alcohol, primary	1105	D
Animal and fish oils, n.o.s. including:	-	D
Cod liver oil		
Sperm oil		
Apple juice	-	III
Behenyl alcohol		III
Benzene tricarboxylic acid, triethyl ester	-	III
Brake fluid base mix: (Poly (2-8) alkylene (C ₂ -C ₃) glycols/ Polyalkylene (C ₂ -C ₁₀) glycols monoalkyl (C ₁ -C ₄) ethers and their borate esters) ^{1/}	-	D
sec-Butyl acetate	1123	D
n-Butyl alcohol	1120	III
sec-Butyl alcohol	1120	III
tert-Butyl alcohol	1120	III
Butylene glycol	-	D
Butyl stearate	-	III

^{1/} Use "Brake fluid base mix" as a proper name on the shipping document.

a	b	c
gamma-Butyrolactone	-	D
Calcium carbonate slurry	-	III
Calcium hydroxide slurry	-	D
Calcium nitrate/Magnesium nitrate/ Potassium chloride solution		III
epsilon-Caprolactam (molten or aqueous solutions)	-	D
Cetyl/Stearyl alcohol		III
Chlorinated paraffins (C ₁₄ -C ₁₇) (with 52% chlorine)		III
Choline chloride solutions	-	D
Clay slurry		III
Coal slurry		III
Coconut oil fatty acid methyl ester		D
Decahydronaphthalene	1147	(D)
Decylbenzene	-	D
Dextrose solution	-	III

a	b	c
Diacetone alcohol	1148	D
Dialkyl(C ₇ -C ₁₃) phthalates	-	D
Diethylene glycol	-	III
Diethylene glycol butyl ether	-	III
Diethylene glycol butyl ether acetate	-	(D)
Diethylene glycol dibutyl ether	-	D
Diethylene glycol diethyl ether	-	III
Diethylene glycol ethyl ether	-	III
Diethylene glycol ethyl ether acetate	-	(D)
Diethylene glycol methyl ether acetate	-	(D)
Diethylenetriamine pentaacetic acid, pentasodium salt solution	-	III
Di-(2-ethylhexyl) adipate	-	D
Diheptyl phthalate	-	III

	a	b	c
Dihexyl phthalate	-		III
1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution	-		D
Diisobutyl ketone	1157		D
Diisodecyl phthalate	-		D
Diisononyl adipate	-		D
Diisooctyl phthalate	-		III
Diisopropyl naphthalene	-		D
2,2-Dimethylpropane-1,3-diol	-		(D)
Dinonyl phthalate	-		D
Diocetyl phthalate	-		III
Dipropylene glycol	-		III
Dipropylene glycol methyl ether	-		(D)
Ditridecyl phthalate	-		D
Diundecyl phthalate	-		D
Dodecane (all isomers)	-		III

a	b	c
Dodecenyl succinic acid, dipotassium salt solution	-	(D)
Dodecyl benzene	-	III
Drilling brines:	-	III
Calcium bromide solution		
Calcium chloride solution		
Sodium chloride solution		
2-Ethoxyethanol	1171	D
Ethyl acetate	1173	D
Ethyl acetoacetate	-	(D)
Ethyl alcohol	1170	III
Ethylene carbonate	-	III
Ethylenediamine tetraacetic acid, tetrasodium salt solution	-	D
Ethylene glycol	-	D
Ethylene glycol acetate	-	(D)
Ethylene glycol butyl ether	2369	III
Ethylene glycol tert-butyl ether	-	III
Ethylene glycol isopropyl ether	-	D
Ethylene glycol methyl butyl ether	-	D

a	b	c
Ethylene glycol methyl ether	1188	D
Ethylene glycol methyl ether acetate	1189	D
Ethylene glycol phenyl ether	-	D
Ethylene glycol phenyl ether/ Diethylene glycol phenyl ether mixture	-	D
Ethylene-vinyl acetate copolymer (emulsion)	-	III
2-Ethylhexanoic acid	-	D
Ethyl propionate	1195	D
Fatty acid (saturated C ₁₃ and above)	-	III
Ferric hydroxyethylethylene diamine triacetic acid, trisodium salt solution	-	D
Formamide	-	D
Glucose solution	-	III
Glycerine	-	III
Glycerol polyalkoxylate	-	III

a	b	c
Glyceryl triacetate	-	(III)
Glycine, sodium salt solution	-	III
Glyoxal solution (40% or less)	-	D
n-Heptanoic acid	-	D
Hexamethylenediamine adipate (50% in water)	-	D
Hexamethylene glycol	-	III
Hexamethylenetetramine solutions	-	D
Hexanoic acid	-	D
Hexanol	2282	D
Hexylene glycol	-	III
N-(Hydroxyethyl) ethylenediamine triacetic acid, trisodium salt solution	-	D
Isoamyl alcohol	1105	D
Isobutyl alcohol	1212	III
Isobutyl formate	2393	D
Isophorone	-	D

a	b	c
Isopropyl acetate	1220	III
Isopropyl alcohol	1219	III
Kaolin slurry	-	III
Lactic acid	-	D
Lard	-	III
Latex:		
Carboxylated styrene-butadiene copolymer		
Styrene-Butadiene rubber	-	III
Lignin sulphonic acid, sodium salt solution	-	III
Magnesium chloride solution	-	III
Magnesium hydroxide slurry	-	III
3-Methoxy-1-butanol	-	III
3-Methoxybutyl acetate	-	D
Methyl acetate	1231	III
Methyl acetoacetate	-	D
Methyl alcohol	1230	III

a	b	c
Methyl butenol	-	(D)
Methyl tert-butyl ether	2398	D
Methyl butyl ketone	-	D
Methyl butynol	-	D
Methyl ethyl ketone	1193	III
Methyl isobutyl ketone	1245	D
3-Methyl-3-methoxy butanol	-	III
3-Methyl-3-methoxy butyl acetate	-	III
Molasses	-	III
Naphthalene sulphonic acid/ Formaldehyde copolymer, sodium salt solution	-	D
Nitrilotriacetic acid, trisodium salt solution	-	D
Nonanoic acid (all isomers)	-	D
Nonyl methacrylate monomer	-	(D)

a	b	c
Noxious liquid, n.o.s. (17) (trade name ..., contains ...) Cat. D <u>1</u> /	-	D
Non-noxious liquid, n.o.s. (18) (trade name ..., contains ...) Appendix III <u>1</u> /	-	III
Octanoic acid (all isomers)	-	D
n-Octyl acetate	1262	D
Octyl decyl adipate	-	III
Olefins (C ₁₃ and above, all isomers)	-	III
alpha-Olefins (C ₁₃ -C ₁₈)	-	III
Oleic acid	-	D
Palm oil fatty acid methyl ester	-	D
Palm stearin	-	D
n-Paraffins (C ₁₀ -C ₂₀)	-	III

1/ In case of a specific n.o.s. (not otherwise specified) cargo assessed as falling within this n.o.s. group that is carried on a ship, this entry, including the cargo's trade name and one or two principle components, should be provided in the shipping document.

a	b	c
Paraffin wax	-	III
Pentaethylenehexamine	-	D
Pentanoic acid	-	D
Petrolatum	-	(III)
Polyaluminium chloride solution	-	III
Polybutene	-	III
Polyethylene glycol	-	III
Polyethylene glycol dimethyl ether	-	III
Polypropylene glycol	-	D
Polypropylene glycol methyl ether	-	III
Polysiloxane	-	III
n-Propyl acetate	1276	D
n-Propyl alcohol	1274	III
Propylene/Butylene copolymer	-	III
Propylene glycol	-	III
Propylene glycol ethyl ether	-	(D)

a	b	c
Propylene glycol methyl ether	-	(D)
Propylene glycol monoalkyl ether	-	(D)
Sodium aluminosilicate slurry	-	III
Sodium carbonate solution	-	D
Sodium silicate solution	-	D
Sorbitol solution	-	III
Sulpholane	-	D
Tallow	-	D
Tallow fatty acid	-	(D)
Tetraethylene glycol	-	III
Tridecane	-	III
Tridecanoic acid	-	(III)
Triethylene glycol	-	III
Triethylene glycol butyl ether	-	III
Triethylene glycol ethyl ether	-	(D)
Triethylene glycol methyl ether	-	(D)

a	b	c
Triisopropanolamine	-	III
Trimethylol propane polyethoxylate	-	D
Tripropylene glycol	-	III
Tripropylene glycol methyl ether	-	(D)
Urea/Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution	-	(D)
Urea/Ammonium nitrate solution	-	D
Urea/Ammonium phosphate solution	-	D
Urea formaldehyde resin solution	-	III
Urea solution	-	III
Vegetable oil, n.o.s. including: Castor oil, Coconut oil, Corn oil, Cotton seed oil, Groundnut oil, Linseed oil, Olive oil, Palm nut oil, Palm oil, Rape seed oil, Rice bran oil, Safflower oil, Sesame oil, Soya bean oil, Sunflower oil, Tung oil	-	D
Vegetable protein solution (hydrolysed)	-	III
Water	-	III
		"