# CCS Classification Information

Notice for Implementation of IBC Code 2007 Amendment (Resolution MSC. 219(82) and MEPC. 166(56))

To whom it may concern

IBC Code 2007 amendment (MSC. 219 (82) and MEPC166 (56)) was effected from Jan. 1,2009. The content of Ch. 11, 17, 18 and 19 of IBC Code has been amended. In this Amendment, mainly, cargoes which were not included in the cargo list of the last major revision (2004 Amendment) are included, and names and application requirements of some of the cargoes which were already registered are also modified as shown in Attachment 3. Following is the new requirements of this Amendment and CCS implementation procedure .

#### 1. New requirements in Ch. 11 of IBC Code

New regulation 11.1.4 has been introduced as following:

"11. 1. 4 In lieu of the provisions of SOLAS regulation II-2/1.6.7, the requirements of regulations II-2/4.5.10.1.1 and II-2/4.5.10.1.4 shall apply and a system for continuous monitoring of the concentration of flammable vapors shall be fitted on ships of 500 gross tonnage and over which were constructed before 1 January 2009 by the date of the first scheduled dry-docking after 1 January 2009, but not later than 1 January 2012. Sampling points or detector heads should be located in suitable

#### **CCS Classification Information**

positions in order that potentially dangerous leakages are readily detected. When the flammable vapor concentration reaches a pre-set level which shall not be higher than 10% of the lower flammable limit, a continuous audible and visual alarm signal shall be automatically effected in the pump-room and cargo control room to alert personnel to the potential hazard. However, existing monitoring systems already fitted having a pre-set level not greater than 30% of the lower flammable limit may be accepted. Notwithstanding the above provisions, the Administration may exempt ships not engaged on international voyages from those requirements."

A new memorandum concerning above-mentioned requirements would be given to the ship by Head Office of this Society.

## 2. Revision of Certificate for carriage of dangerous chemicals in bulk and Cargo List

In order to comply with the requirements of this Amendment, Certificate for carriage of dangerous chemicals in bulk and Cargo List of the ship need to be revised. Now, this Society is reviewing the cargo list of ship. For the ship of which such reviewing has been completed, this Society will inform of the results to the Shipping Company (Management Company) in the format of Attachment 1 with revised cargo list attached. The company is kindly requested to submit the application form in Attachment 2 within 5 working days. Then, we will re-issue the revised

modified

Certificate for carriage of dangerous chemicals in bulk and Cargo List. If the company has any question to the revised cargo list, please contact with CCS Plan Approval Center For your reference, the list of cargoes, the names and requirements of which are modified, is attached as Attachment 3. The details of CCS Plan Approval Center: Address: 1234 Pu Dong Da Dao, Shanghai 200135, China. 0086 21 58851774 Te1: 0086 21 61089281 Fax: Email: scqiao@ccs.org.cn PIC: Mr. Qiao Shoucheng For the issurance of certificate, please contact following: Classed Ship in Service Dept. CCS Address: Rm. 903, CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China 0086 10 58112041 Fax: 0086 10 58112807 Tel: Email: zjli@ccs.org.cn PIC: Mr. Li Zhijun Classed Ship in Service Dept. China Classification Society Attachment 1. Notice Form 2. Application Form 3. List of cargoes, the names and requirements of which are

Attachment 1 CCCS CHINA CLASSIFICATION SOCIETY 中国船级社	FACSIMILE M址 Add: 北京市东直门南大街9号船检大厦 CCS Mansion, 9 Dongzhiman Nan Da Jie, Beijing 100007, China 电话 Tel: (010)58112288 传真 Fax: (010) 58112811,58112807 E-mail 地址: cd@ccs.org.cn 邮编 Postcode: 100007	
TO:	FAX NO:	
ATTN:	YOUR REF:	
DATE:	OUR REF:	
C.C.	PAGES:	
<b>Reply Category:</b>		
<b>Routine</b>	Accelerated     Urgent     Top Urgent	
In case of missing or il	egible please call +86-10-58112041	
SUBJECT: IBC 200	7 Amendment MSC.219 (82) / MEPC166 (56)	

In order to comply with the requirements of MSC.219 (82) and MEPC166 (56), the Cargo List of following ships has been reviewed. Revised cargo list was attached for your reference.

Please kindly send your application within 5 working days to CCS Head Office Classed Ship in Service Department for issuance of revised Certificate for carriage of dangerous chemicals in bulk and Cargo List

Application form is available in CCS Classification Information No.129.

No.	Ship Name	Class No	IMO No	Flag

# Attachment 2



中国船级社

#### CHINA CLASSIFICATION SOCIETY

## **Application for Issuance of Certificate**

## for carriage of dangerous chemicals in bulk

(For complying with MEPC.166(56) and MSC.219(82))

APPLICANT

Application Date:

Company Name:					
Address			Signature Stamp	and	Official
Post Code:	Tel:	Fax:			
Name of Contact Person:		Position of Company:			

To: China Classification Society

Application is hereby submitted for issuance of:

□ International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk (for IBC Code Ships), o

Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk (for BCH Code Ships)

relating to the revised IBC/BCH Code as IMO Resolution MEPC.166(56) and MSC.219(82) for following ship.

We will bear all survey fee and expenses involved.

Applicable Ships

No.	Ship Name	Class No.	IMO No.	Flag

To be continued\* / See attached sheet\*

#### Summary of Revised Minimum Requirements in Chapter 17

Summary of Revised Minimum Requirements								i						
a	С	d	е	f	g	h	i'	i"	l'''	j	k	I	n	0
Acrylic acid										R			No	15.13,15.19.6,16.2.9.16.6.1
										$\downarrow$			$\downarrow$	$\downarrow$
										С			Yes	15.11.2, 15.11,3, 15.11.4, 15.11.6, 15.11.7, 15.11.8,
														15.12.3, 15.12.4, 15.13, 15.17, 15.19, 16.6.1, 16.2.9
Alcohol (C12-C16) poly(20+)ethoxylates														16.2.9
														$\downarrow$
														16.2.9,15.19.6
Alcohols (C8-C11), primary, linear and essentially														Nil
linear														$\downarrow$
														15.12.3, 15.12.4, 15.19.6, 16.2.6, 16.2.9
Iso- and cyclo-alkanes (C10-C11)	Ζ													Nil
	↓													↓
	Y													15.19.6
Iso- and cyclo-alkanes (C12+)	Z													
	↓ Y													
n-Alkanes (C10+)	Z											AB		
II-Alkanes (CT0+)														
	↓ Y											↓		
Alkylated (C4-C9) hindered phenols	Ť		2									A		
Alkyl(C9+)benzenes	7		2											
Aikyi(C9+)benzenes	Z													
	↓ V													
Alle Idithisthisdissels (CC C24)	Y													Nil
Alkyldithiothiadiazole (C6-C24)	Z											AB		NI
	↓ V											↓ ^		↓
	Y											A		15.19.6, 16.2.6
Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less) polyglucoside solution(55% or less)														Nil
														10.0.0 10.0.0
														16.2.6, 16.2.9
Ammonia aqueous (28% or less)														Nil
														↓ 15.19.6
														10.10.0

								i						
a	С	d	е	f	g	h	i'	i"	<b>I</b> ""	j	k	I	n	0
Benzyl acetate														Nil
														$\downarrow$
														15.19.6
Benzyl alcohol														Nil
														Ļ
														15.19.6
Calcium long-chain alkyl(C5-C10) phenate														Nil
														$\downarrow$
														15.19.6
Calcium long-chain alkyl(C11-C40) phenate	Z		3											Nil
	1		↓											
	Ŷ		* 2											, 15.19.6, 16.2.6
Calcium long-chain alkyl phenate sulphide (C8-		Р										AB		15.9.6, 16.2.6, 16.2.9
C40)		$\downarrow$										↓		ļ
		S/P										ABC		15.19.6, 16.2.6,
Castor oil (containing less than 2% free fatty		Р										ABC		15.19.6,16.2.6
acids)												D		
$\downarrow$		$\downarrow$										$\downarrow$		$\downarrow$
Castor oil		S/P										ABC		15.9.6, 16.2.6, 16.2.9
4-Chloro-2-methylphenoxyacetic acid,														16.2.9
dimethylamine salt solution														$\downarrow$
														15.19.6, 16.2.9
Coconut oil (containing less than 5% free fatty		Ρ										ABC D		
acids)		$\downarrow$												
↓ Coconut oil		↓ S/P										ABC		
Corn Oil (containing less than 10% free fatty		P										ABC		15.19.6,16.2.6
acids)												D		
$\downarrow$		$\downarrow$										$\downarrow$		$\downarrow$
Corn Oil		S/P										ABC		15.19.6, 16.2.6, 16.2.9
Cotton seed oil (containing less t han 12% free		Р										ABC		
fatty acids)												D		
		↓ C/D												
Cotton seed oil		S/P										ABC		

								i						
a	С	d	е	f	g	h	i'	i"	l'''	j	k	Ι	n	0
Cyclohexanone, Cyclohexanol mixture														Nil
														Ļ
														↓ 15.19.6
Diethylenetriamine														Nil
Dictryicricularinic														Ļ
														↓ 15.19.6
Diethyl phthalate														Nil
Dictify philadac														Ļ
														↓ 15.19.6
Dimethyl glutarate														Nil
														Ļ
														↓ 15.19.6
Dimethyl octanoic acid														16.2.6,16.2.9
														10.2.0, 10.2.3
														↓ 15.19.6, 16.2.6, 16.2.9
Dimethyl phthalate														16.2.9
Dimetry phalalate														↓
														15.19.6, 16.2.9
Dodecyl/Octadecyl methacrylate (mixture)	Z									R		AD		15.13,16.6.1,16.6.2
	↓									↓		, te ↓		↓
	Ŷ									↓ O		↓ A		↓ 15.13, 16.6.1, 16.6.2, 15.19.6, 16.2.6
Ethoxylated long chain (C16+) alkyloxyalkylamine		Р	3							•				
		↓												
	Ŷ	s/P	2											
Ethylene cyanohydrin														Nil
														Ļ
														15.19.6
Ethylene glycol diacetate														Nil
														Ļ
														15 40 0
														15.19.6

		1		£		1-		i		i	k		n	0
a	С	d	е	f	g	h	i'	i"	l'"	J	ĸ			0
Fish oil (containing less than 4% free fatty		Р										ABC D		
acids)		↓										1		
↓ Fish oil		↓ S/P										·		
Furfuryl alcohol		P												Nil
														1
														15.19.6
Glycerol monooleate	Z	Nil	Nil	Nil	Nil	Nil			Nil	Nil	Nil	Nil	Nil	Nil
	↓	↓	↓	↓	↓	$\downarrow$			↓	↓	$\downarrow$	$\downarrow$	↓	$\downarrow$
	Y	Р	2		Open				Yes		No	А	No	15.19.6, 16.2.6, 16.2.9
Groundnut oil (containing less than 4% free fatty												ABC D		
acids)														
↓ Groundnut oil												ABC		
Heptane (all isomers)	Nil													
	↓													
	x													
1,6-Hexanediol, distillation overheads		S/P			Cont					R	Т	ABC		
												D		
		↓ P			↓ Onon					↓ O	↓ No	↓ A		
Isobutyl formate		۲ Nil			Open					0	INU	A		
Isobutyr formate														
		↓ P												
Isobutyl methacrylate		S/P					-	IIA		С	FT	BD	Yes	15.12, 15.13, 15.17,15.19, 16.6.1, 16.6.2
		↓						↓		Ļ	↓	$\downarrow$	Ļ	$\downarrow$
		P						-		R	F	A	No	15.12, 15.13, 15.17, 16.6.1, 16.6.2
Isophorone														Nil
														Ļ
														15.19.6
Lactonitrile solution (80% or less)														15.1,15.12, 15.13,15.17, 15.18, 15.19, 16.6.1, 16.2.2, 16.6.3
														15.12, 15.13, 15.17, 15.18, 15.19, 16.6.1, 16.2.2, 16.6.3

a	с	d	е	f	g	h	i'	i i"	""	j	k	I	n	0
Lard		Р										ABC		
												D		
		$\downarrow$										$\downarrow$		
		S/P										ABC		
Linseed oil		Р										ABC D		15.19.6, 16.2.6
		↓												
		s/P										* ABC		, 15.19.6, 16.2.6, 16.2.9
Long-chain alkaryl polyether (C11-C20)		_										_		15.19.6, 16.2.6, 16.2.6, 16.2.9
														Ļ
														15.19.6, 16.2.6, 16.2.9
Methyl diethanolamine														16.2.6
														$\downarrow$
														15.19.6, 16.2.6
2-Methyl-6-ethyl aniline														Nil
														$\downarrow$
														15.19.6
3-(methylthio)propionaldehyde									Yes		Т			
									Ļ		↓			
									No		F-T			API
Neodecanoic acid														Nil
														↓ 15.19.6
Noxious liquid, F, (2) n.o.s. (trade name,											Nil			Nil
contains) ST1, Cat. X														Ni
											↓ F			↓ 15.19, 16.2.6
Noxious liquid, F, (4) n.o.s. (trade name,											' Nil			10.10, 10.2.0
contains) ST2, Cat. X											Ļ			
											F			
Noxious liquid, F, (6) n.o.s. (trade name,											Nil			
contains) ST2, Cat. Y											↓			
											F			

a	с	d	е	f	a	h		i		i	k	I	n	0
	C	u	e	T	g	11	i'	i"	l'"	J				0
Noxious liquid, F, (8) n.o.s. (trade name, contains) ST3, Cat. Y											Nil			
											↓ F			
Noxious liquid, F, (10) n.o.s. (trade name,											' Nil			
contains) ST3, Cat. Z											1 1 11			
, .											$\downarrow$			
											F			
Octanoic acid (all isomers)	Z											AB		Nil
	$\downarrow$											Ļ		$\downarrow$
	Y		-									А		15.19.6
Octyl aldehydes			2											
			↓ 3											
Olive oil (containing less than 3.3% free fatty		Р	-									ABC		
acids )		-										D		
$\downarrow$		$\downarrow$										$\downarrow$		
Olive oil		S/P										ABC		
Palm kernel acid oil		Nil												
		$\downarrow$												
		S/P												
Palm kernel oil (containing less than 5% free		Р					Т3	IIB				ABC		
fatty acids)												D		
$\downarrow$		$\downarrow$					$\downarrow$	Ļ				$\downarrow$		
Palm kernel oil		S/P					-	-				AB		
Palm oil (containing less than 5% free fatty		Ρ										ABC D		
acids)		↓										J ↓		
↓ Palm oil		↓ S/P										ABC		
Palm olein (containing less than 5% free fatty		0,1										ABC		
acids )												D		
↓ ↓												$\downarrow$		
Palm olein												ABC		
Palmstearin olein (containing less than 5% free												ABC		
fatty acids)												D		
$\downarrow$												$\downarrow$		
Palm stearin												ABC		

1,3-Pentadiene       S/P       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I	a	С	d	е	f	g	h	i'	i i"	<b>–</b> ""	j	k	I	n	0
Petrolatum         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I <thi< th="">         I         <thi< th=""> <thi< <="" td=""><td>1.3-Pentadiene</td><td></td><td>S/P</td><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thi<></thi<></thi<>	1.3-Pentadiene		S/P					•							
PetrolatumZAAAAAAAPolyalkyl (C18-C22) acrylate in xyleneIIIIIIIIIPolyalkyl (C18-C22) acrylate in xyleneIIIIIIIIIIIPolyalkyl (C18-C22) acrylate in xyleneIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII<															
$\begin{array}{c c c c c c c c c c c c c c c c c c c $															
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Petrolatum	Z		3									AB		16.2.6, 16.2.9
YZIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII <th< td=""><td></td><td>.L</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>		.L													
Polyalkyl (C18-C22) acrylate in xylene       3       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1		Ý													15.19.6, 16.2.6, 16.2.9
Polyferric sulphate solution       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1 <td< td=""><td>Polyalkyl (C18-C22) acrylate in xylene</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Polyalkyl (C18-C22) acrylate in xylene														
Polyferric sulphate solution       2       2       2       2       1       1       1       Nil         Polyferric sulphate solution       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I<															
Polyferric sulphate solution       NI       NI         Polyferric sulphate solution       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I<															
Polyisobutenamine in aliphatic (C10-C14) solvent       Image: solution of the solution				2											A PI
Polyisobutenamine in aliphatic (C10-C14) solvent       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I	Polyterric sulphate solution														
Polyisobutenamine in aliphatic (C10-C14) solvent       Image: Calibratic solution of the soluticant of the solution of the solution of the solution of															
Polysobutenyl anhydride adductZIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII															
Polysisobutenyl anhydride adductZIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII <t< td=""><td>Polyisobutenamine in aliphatic (C10-C14) solvent</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Nil</td></t<>	Polyisobutenamine in aliphatic (C10-C14) solvent														Nil
Polysisobutenyl anhydride adductZIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
Polyisobutenyl anhydride adduct         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z <thz< th="">         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         <thz< th="">         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z         <thz< th="">         Z         <thz< th=""> <thz< <="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>·</td></thz<></thz<></thz<></thz<></thz<>															·
Polyolefinamine (C28-C250)Image: Constraint of the series of															15.19.6
$ \begin{array}{ c c c c c c } \hline Polyolefin phosphorosulphide, barium derivative (C28-C250) \\ \hline Polyolefin phosphorosulphide, barium derivative (C28-C250) \\ \hline Polyolefin phosphorosulphide (S0% or less) \\ \hline Polyone glycol \\ \hline Polyone $		Z													
Image: style styl	Polyolefinamine (C28-C250)														
Polyolefin phosphorosulphide, barium derivative (C28-C250)Image: C28-C250 modelImage: C															
$ \begin{array}{ c c c c c c c } (C28-C250) & & & & & & & & & & & & & & & & & & &$															
Polypropylene glycolPOpenAANil $\downarrow$ S/P $\downarrow$ Cont $\downarrow$ ContA $\downarrow$ ABC $\downarrow$ T5.19.6, 16.2.9Potassium thiosulphate (50% or less) $\downarrow$ L $\downarrow$ L $\downarrow$ L $\downarrow$ L $\downarrow$ L $\downarrow$ L $\downarrow$ L $\downarrow$ Lbeta-PropiolactoneIIIIIII															
Polypropylene glycolPOpenOpenAANil $\downarrow$ S/PContContABC15.19.616.2.9 $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ Potassium thiosulphate (50% or less)IIIIIIIIIIIIbeta-PropiolactoneIIIIIIIIIIIIIII	(020-0200)														*
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $						-									
S/P     Cont     ABC     15.19.6       Potassium thiosulphate (50% or less)     Image: Cont image:	Polypropylene glycol		Р			Open							A		Nil
S/P     Cont     ABC     15.19.6       Potassium thiosulphate (50% or less)     Image: Cont image:			1			I							,		,
Potassium thiosulphate (50% or less)       Image: Constraint of the second secon						↓ Cont							↓ ABC		*
beta-Propiolactone         Image: Constraint of the system         Image: Constraint of the s	Potaccium thiosulphato (50% or loss)		0/1			Cont									
beta-Propiolactone         Image: Constraint of the second se															
beta-Propiolactone Nil															•
	beta-Propiolactone														
															Ţ
15.19.6															15.19.6

		d		f	CT.	h		i		i	k		n	0
a	С	d	е	Ţ	g	h	i'	i"	l'"	J	<sup>N</sup>	1		
Propionic anhydride														Nil
														$\downarrow$
														15.19.6
Pyridine		S	2											
		$\downarrow$	$\downarrow$											
		S/P	3											
Rapeseed oil (containing less than 4% free fatty		Р										ABC		
acid)												D		
		↓ S/P										↓ ABC		
Sodium hydroxide solution		0/1										ADC		16.2.6, 16.2.9
														10.2.0, 10.2.0
														↓ 15.19.6, 16.2.6, 16.2.9
Sodium hypochlorite solution (15% or less)								_	Nil					10.10.0, 10.2.0, 10.2.0
									↓					
									NF					
Sodium silicate solution														16.2.9
														15.19.6, 16.2.9
Soyabean (containing less than 0.5% free fatty acids)		Р										ABC D		15.19.6, 16.2.6
acids		$\downarrow$												
↓ Soyabean oil		↓ S/P										↓ ABC		, 15.19.6, 16.2.6, 16.2.9
Sunflower seed oil (containing less than 7% free		0/1										ABC		15.19.6, 16.2.6
fatty acids)												D		
↓												$\downarrow$		$\downarrow$
Sunflower seed oil												ABC		15.19.6, 16.2.6, 16.2.9
Tallow (containing less than 15% free fatty acids						1						ABC		
)												D		
↓ 												↓		
Tallow												ABC		
Tetraethylene pentamine														Nil
														$\downarrow$
														15.19.6

							i						
С	d	е	f	g	h	i'	i"	l'''	j	k	Ι	n	0
													Nil
													$\downarrow$
													15.19.6
													16.2.9
													$\downarrow$
													15.19.6, 16.2.9
													Nil
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Z											AB		Nil
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	S/P										ABC		
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	Z	Z Y P ↓ S/P	Z	Image: Second secon	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $							

		1		C		1		i		i	k	1	n	0	
a	С	d	е	f	g	h	i'	i"	l'"	J	k	1	n	0	
Vinyl ethyl ether														15.4, 15.13, 15.14, 16.6.1, 16.6.2, 15.19	
														$\downarrow$	
														15.4, 15.13, 15.14, 16.6.1, 16.6.2, 15.19.6	
Waxes	Z		3											16.2.6, 16.2.9	
	$\downarrow$		$\downarrow$											$\downarrow$	
	Y		2											15.19.6, 16.2.6, 16.2.9	
Xylenol			3												
			$\downarrow$												
			2												
Zinc alkaryl dithiophosphate (C7-C16)														16.2.6, 16.2.9	
														$\downarrow$	
														15.19.6, 16.2.6, 16.2.9	

#### CHAPTER 17-SUMMARY OF MINIMUM REQUIREMENTS EXPLANATORY NOTES

Product name ( column a ) Pollution Category ( column c )	The product name shall be used in the shipping document for any cargo offered for bulk shipments. Any additional name may be included in brackets after the product name. In some cases, the product names are not identical with the names given in previous issues of the Code. The letter X,Y,Z means the pollution Category assigned to each product under MARPOL Annex II.	Electrical equipment ( column i )	Temperature classes (i)       T1 to T6         -       indicates no requirements         blank       no information         Apparatus group (i")       IIA,IIB or IIC:         -       indicates no requirements         blank       no information         Flash point (i")       Yes:         flashpoint exceeding 60C (10.1.6)         No:       flashpoint not exceeding 60C (10.1.6)         NF:       nonflammable product (10.1.6)
Hazards ( column d )	"S" means that the product is included in the Code because of its safety hazards; "P" means that the product is included in the Code because of its pollution hazards; and "S/P" means that the product is included in the Code because of both its safety and pollution hazards.	Gauging ( column j )	O: open gauging (13.1.1.1) R: restricted gauging (13.1.1.2) C: closed gauging (13.1.1.3)
Ship type ( column e )	1:       ship type 1 (2.1.2.1)         2:       ship type 2 (2.1.2.2)         3:       ship type 3 (2.1.2.3)	Vapor detection (column k)	F: flammable vapours     T: toxic vapours     No: indicates no special requirements under this Code
Tank type ( column f )	1:independent tank (4.1.1)2:integral tank (4.1.2)G:gravity tank (4.1.3)P:pressure tank (4.1.4)	Fire protection ( column I )	A: alcohol-resistant foam or multi-purpose foam     B: regular foam; encompasses all foams that are not of an alcohol-resistant     type, including fluoro-protein and aqueous-film-forming foam (AFFF)     C: water-spray     D: dry chemical     No: no special requirements under this Code
Tank vents ( column g )	Cont: controlled venting Open: open venting		
Tank environmental control ( column h )	Inert:       inerting(9.1.2.1)         Pad:       liquid or gas padding(9.1.2.2)         Dry:       drying(9.1.2.3)         Vent:       natural or forced ventilation(9.1.2.4)         No:       no special requirements under this Code	Note by the Secretarist	References to columns (a) though (m) in other chapters of the Code will be amended according to the column designations shown here.