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## **OKS 404**

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#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : OKS 404

Manufacturer or supplier's details							
Company name of supplier	:	OKS Spezialschmierstoffe GmbH Ganghoferstr. 47 D-82216 Maisach-Gernlinden Tel.: +49 8142 3051 500 Fax.: +49 8142 3051 599 info@oks-germany.com					
E-mail address of person responsible for the SDS	:	mcm@oks-germany.com Material Compliance Management					
Emergency telephone number	:	+7 495 628 1687 +49 8142 3051 517					
Recommended use of the chemical and restrictions on use							
Recommended use	:	Lubricant					
Restrictions on use	:	Restricted to professional users.					

#### 2. HAZARDS IDENTIFICATION

**GHS Classification (According to GOST 32423, GOST 32424 and GOST 32425)** Not a hazardous substance or mixture.

#### GHS-Labelling (According to GOST 31340)

Not a hazardous substance or mixture.

# Other hazards which do not result in classification

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture	:	Mixture
Chemical nature	:	Mineral oil. Synthetic hydrocarbon oil Thickening agent Additive

#### Components





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Chemical name	Concentration (% w/w)	Occupational Exposure Limits		CAS-No.	EC-No.
		MAC value mg/m3 / TSEL value	Hazard Class		
Poly(1,2-dihydro-2,2,4- trimethylquinoline)	>= 2,5 - < 10	No data available		26780-96-1	500-051-3
zinc bis[O,O-bis(2- ethylhexyl)] bis(dithiophosphate)	>= 1 - < 2,5	No data available		4259-15-8	224-235-5
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	>= 0,1 - < 1	No data available			939-603-7

### 4. FIRST AID MEASURES

If inhaled	:	Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
In case of skin contact	:	Remove contaminated clothing. If irritation develops, get medical attention. Wash off with soap and water.
In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.
If swallowed	:	Move the victim to fresh air. Do not induce vomiting without medical advice.
Most important symptoms and effects, both acute and delayed	:	No information available. None known.
Notes to physician	:	No information available.

### 5. FIREFIGHTING MEASURES

Flammable properties		
Flash point	:	Not applicable
Ignition temperature	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available



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		explosion limit / Lower ability limit	:	No data available	
	Flamm	ability (solid, gas)	:	Combustible Solids	
	Suitabl	e extinguishing media	:	Use water spray, alcohol-resistant foam, o carbon dioxide.	lry chemical or
	Unsuita media	able extinguishing	:	High volume water jet	
	Hazard produc	lous combustion ts	:	Carbon oxides Nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus Metal oxides	
	Further	information	:	Standard procedure for chemical fires.	
	Special for firef	l protective equipment ighters	:	In the event of fire, wear self-contained br Use personal protective equipment. Exposure to decomposition products may health.	

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Evacuate personnel to safe areas. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

Advice on safe handling	<ul> <li>For personal protection see section 8.</li> <li>Smoking, eating and drinking should be prohibited in the application area.</li> <li>Wash hands and face before breaks and immediately after handling the product.</li> </ul>
	nanding the product.





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Cond	itions for safe storage	: Store in original container. Keep container closed when not ir Keep in a dry, cool and well-ventile Containers which are opened must kept upright to prevent leakage. Store in accordance with the partic Keep in properly labelled containe	ated place. st be carefully resealed and cular national regulations.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	:	It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.			
Personal protective equipme	ent				
Respiratory protection	:	Not required; except in case of aerosol formation.			
Filter type	:	Filter type P			
Hand protection Material Break through time Protective index	:	Nitrile rubber > 10 min Class 1			
Remarks	:	For prolonged or repeated contact use protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.			
Eye protection	:	Safety glasses with side-shields			
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.			
Protective measures	:	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.			
Hygiene measures	:	Wash face, hands and any exposed skin thoroughly after handling.			



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Appea	Appearance		solid	
Colou	Colour		brown	
Odou	r	:	characteristic	
Odou	r Threshold	:	No data available	
рН		:	Not applicable substance/mixture is non-soluble (in wa	ater)
Meltin	g point/range	:	> 260 °C (1.013 hPa)	
Boiling	Boiling point/boiling range		No data available	
Flash	point	:	Not applicable	
Evapo	Evaporation rate		No data available	
Flamn	Flammability (solid, gas)		Combustible Solids	
Self-iç	gnition	:	No data available	
	Upper explosion limit / Upper flammability limit		No data available	
	Lower explosion limit / Lower flammability limit		No data available	
Vapou	ur pressure	:	< 0,001 hPa (20 °C)	
Relati	ve vapour density	:	No data available	
Relati	ve density	:	0,93 (20 °C) Reference substance: Water The value is calculated	
Densi	ty	:	0,93 g/cm3 (20 °C)	
Bulk c	lensity	:	No data available	
	ility(ies) ater solubility	:	insoluble	
So	lubility in other solvents	S :	No data available	



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	tion coefficient: n- nol/water	: No data available	
Auto	-ignition temperature	: No data available	
Deco	omposition temperature	: No data available	
Visco V	osity iscosity, dynamic	: No data available	
V	iscosity, kinematic	: No data available	
Expl	osive properties	: Not explosive	
	izing properties imation point	<ul><li>No data available</li><li>No data available</li></ul>	

### **10. STABILITY AND REACTIVITY**

Reactivity	:	No hazards to be specially mentioned.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	No conditions to be specially mentioned.
Incompatible materials	:	No materials to be especially mentioned.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

## **11. TOXICOLOGICAL INFORMATION**

Acute toxicity

Product: Acute oral toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Remarks: This information is not available.



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# Components:

zinc bis[0,0-bis(2-ethylhexy	1)1	his(dithionhosphate):			
Acute oral toxicity	:	LD50 (Rat, male): 3.100 mg/kg Method: OECD Test Guideline 401 GLP: no			
Acute dermal toxicity	:	LD50 (Rabbit, male): > 5.000 mg/kg Method: OECD Test Guideline 402 GLP: no			
Dennonulferie soid di C4	• •	A allout device a calairum caltar			
Acute oral toxicity	0-14 :	4-alkyl derivs., calcium salts: LD50 (Rat): > 5.000 mg/kg			
route of a textory	•	2000 (Ray). > 0.000 mg/rg			
Acute inhalation toxicity	:	LC50 (Rat): > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist			
Acute dermal toxicity	:	LD50 (Rabbit): > 5.000 mg/kg			
Skin corrosion/irritation					
Product:					
Remarks	:	This information is not available.			
Components:					
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate):					
Species	:	Rabbit			
Assessment	:	No skin irritation			
Method	:	OECD Test Guideline 404			

Assessment	: No skin irritati	on
Method	: OECD Test G	uideline
Result	: No skin irritati	on
GLP	: yes	

### Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:

Assessment	:	No skin irritation
Result	:	No skin irritation



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#### Serious eye damage/eye irritation

Product:

Result	:	No eye irritation
Assessment	:	No eye irritation

### **Components:**

#### zinc bis[0,0-bis(2-ethylhexyl)] bis(dithiophosphate):

Species	:	Rabbit
Result	:	Risk of serious damage to eyes.
Assessment	:	Risk of serious damage to eyes.
Method	:	OECD Test Guideline 405
GLP	:	yes

#### Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:

Result	:	No eye irritation
Assessment	:	No eye irritation

#### Respiratory or skin sensitisation

#### Product:

Remarks

: This information is not available.

#### **Components:**

#### zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate):

Test Type :	Maximisation Test
Species :	Guinea pig
Assessment :	Did not cause sensitisation on laboratory animals.
Method :	OECD Test Guideline 406
Result :	Did not cause sensitisation on laboratory animals.
GLP :	yes

#### Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:

Species	:	Guinea pig
Assessment	:	The product is a skin sensitiser, sub-category 1B.
Result	:	The product is a skin sensitiser, sub-category 1B.

#### Germ cell mutagenicity

#### Product:

Genotoxicity in vitro

: Remarks: No data available



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OK	S 404				
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	Genote	oxicity in vivo	:	Remarks: No data available	
	Carcin	ogenicity			
	<u>Produ</u>	<u>ct:</u>			
	Remar	ks	:	No data available	
	<b>D</b>	log disc de siste			
	-	ductive toxicity			
	Produ	<u>ct:</u> s on fertility	:	Remarks: No data available	
	Ellects	on lennity	•	Remarks. No data available	
		s on foetal	:	Remarks: No data available	
	develo	pment			
	Repea	ted dose toxicity			
	<u>Produ</u>				
	Remar	ks	:	This information is not available.	
	Aonira	tion toxicity			
	-	ation toxicity			
	Produ	<u>ct:</u> formation is not avail	lablo		
	1115 11	ionnation is not avai	able.		
	Comp	onents:			
			ayvi)]	bis(dithiophosphate):	
		piration toxicity classi			
	Furthe	er information			
	<u>Produ</u>	<u>ct:</u>			

Remarks

: Information given is based on data on the components and the toxicology of similar products.



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ersion .1	Revision Date: 19.08.2022		e of last issue: 12.11.2020 e of first issue: 28.05.2014	Print Date: 19.08.2022
2. ECOL	OGICAL INFORMATIC	N		
Ecot	oxicity			
<u>Prod</u> Toxic	<u>uct:</u> ity to fish	:	Remarks: No data available	
	ity to daphnia and othe tic invertebrates	r:	Remarks: No data available	
Toxic plants	ity to algae/aquatic s	:	Remarks: No data available	
Toxic	ity to microorganisms	:	Remarks: No data available	
<u>Com</u>	ponents:			
Poly	(1,2-dihydro-2,2,4-trim	ethy	/lquinoline):	
	oxicology Assessmer e aquatic toxicity		Harmful to aquatic life.	
Chro	nic aquatic toxicity	:	Harmful to aquatic life with long las	sting effects.
zinc	bis[O.O-bis(2-ethvlhe	xvl)1	bis(dithiophosphate):	
	tity to fish	:	LC50 (Oncorhynchus mykiss (rain Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes	
	ity to daphnia and othe tic invertebrates	r :	EC50 (Daphnia magna (Water flea Exposure time: 48 h Test Type: Immobilization Method: OECD Test Guideline 202 GLP: yes	
Toxic plants	tity to algae/aquatic s	:	ErC50 (Desmodesmus subspicatu Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201 GLP: yes	



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5 404	•			
sion	Revision Date: 19.08.2022		e of last issue: 12.11.2020 e of first issue: 28.05.2014	Print Date: 19.08.2022
aquati	ty to daphnia and other c invertebrates nic toxicity)	· :	NOEC (Daphnia magna (Water fle Exposure time: 21 d Method: OECD Test Guideline 21 GLP: yes Remarks: Information given is bas similar substances.	1
Toxici	ty to microorganisms	:	EC50 (Pseudomonas putida): 380 Exposure time: 16 h Test Type: static test GLP: yes	) mg/l
Benze	enesulfonic acid, di-C	10-1	4-alkyl derivs., calcium salts:	
Toxici	ty to fish	:	EC50 (Oncorhynchus mykiss (rain Exposure time: 96 h Method: OECD Test Guideline 20	
	ty to daphnia and other c invertebrates	• :	EC50 (Daphnia magna (Water fle Exposure time: 48 h Method: OECD Test Guideline 20	
Toxici plants	ty to algae/aquatic	:	EC50 (Pseudokirchneriella subca mg/l Exposure time: 72 h	pitata (green algae)): > 100
Persis	stence and degradabi	lity		
Produ	ict:			
	gradability	:	Remarks: No data available	
Physic remov	co-chemical /ability	:	Remarks: No data available	
Comp	onents:			
	<b>iis[O,O-bis(2-ethylhex</b> gradability	( <b>yl)]</b> :	bis(dithiophosphate): Result: Not rapidly biodegradable Biodegradation: < 5 % Exposure time: 27 d Method: OECD Test Guideline 30 GLP: no	



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ersion 1	Revision Date: 19.08.2022		e of last issue: 12.11.2020 e of first issue: 28.05.2014	Print Date: 19.08.2022
Benz	enesulfonic acid, di-C	10-1	4-alkyl derivs., calcium salts:	
Biode	egradability	:	aerobic Inoculum: activated sludge Result: Not rapidly biodegradable Biodegradation: 8 % Exposure time: 28 d Method: OECD Test Guideline 301	D
Bioad	ccumulative potential			
Prod	uct:			
Bioac	cumulation	:	Remarks: This mixture contains no be persistent, bioaccumulating and This mixture contains no substance persistent and very bioaccumulatin	toxic (PBT). e considered to be very
<u>Com</u>	ponents:			
zinc l	bis[O,O-bis(2-ethylhex	yl)]	bis(dithiophosphate):	
	ion coefficient: n- ol/water	:	log Pow: 3,59 (22 °C) pH: 5 Method: OECD Test Guideline 107 GLP: yes	
Mobi	lity in soil			
Prod	uct:			
Mobil	ity	:	Remarks: No data available	
	bution among onmental compartments	:	Remarks: No data available	
Othe	r adverse effects			
	<u>uct:</u> ional ecological nation	:	No information on ecology is availa	ble.
Com	ponents:			
zinc l	bis[O,O-bis(2-ethylhex	(yl)	bis(dithiophosphate):	
Resu	Its of PBT and vPvB ssment	:	Non-classified PBT substance Non	-classified vPvB substand

### Hygienic standards:

(Allowable concentration in air, water, including fishery waters, soil)



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Components	Air	Water	Soil	Data Source
Poly(1,2-dihydro-2,2,4- trimethylquinoline)		TSEL value: 0,001 mg/l Limiting health hazard indicator: sanitary- toxicological Hazard class: Class 2 - highly dangerous TSEL value: 0,001 mg/l Limiting health hazard indicator: sanitary- toxicological Hazard class: Class 2 - highly dangerous		List 3
zinc bis[O,O-bis(2- ethylhexyl)] bis(dithiophosphate)	TSEL value: 0,05 mg/m3			

List 3: GN 2.1.5.2307-07 Tentative safe exposure level (TSEL) of Chemical Substances Contained in Water of Water Bodies for Economic-Potable and Social-Domestic Water Use

### 13. DISPOSAL CONSIDERATIONS

Disposa	al methods
Dispose	in moundas

Biopodal modifiedo		
Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil.
Contaminated packaging	:	Packaging that is not properly emptied must be disposed of as the unused product. Dispose of waste product or used containers according to local regulations.
		The following Waste Codes are only suggestions:
Waste Code	:	used product, unused product 12 01 12*, spent waxes and fats
		uncleaned packagings 15 01 10, packaging containing residues of or contaminated by hazardous substances



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#### **14. TRANSPORT INFORMATION**

#### ADR

Not regulated as a dangerous good

#### UNRTDG

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### 15. REGULATORY INFORMATION

#### National regulatory information

Federal Law of 10.01.2002 No. 184-FZ "On Technical Regulation". Federal Law of 10.01.2002 No. 7-FZ "On Environmental Protection". Federal Law of 21.07.1997 No. 116-FZ (amended on 11.06.2021) "On industrial safety of hazardous production facilities". Federal Law of 24.06.1998 No. 89-FZ (amended on 02.07.2021) "On production and consumption waste". Federal Law of 10.01.2002 No. 7-FZ (amended on 02.07.2021) "On environmental protection". Federal Law of 04.05.1999 No. 96-FZ "On the protection of atmospheric air" (as amended on December 8, 2020). Federal Law of 30.03.1999 No. 52-FZ (amended on 02.07.2021) "On the Sanitary and Epidemiological Well-Being of the Population" (amended and supplemented, entered into force on 31.10.2021). Federal Law of 27.12.2002 No. 184-FZ (amended on 02.07.2021) "On Technical Regulation" (amended and supplemented, entered into force on 01.09.2021). TECHNICAL REGULATIONS OF THE CUSTOMS UNION TR CU 030/2012 On requirements for lubricants, oils and special fluids (amended on 03.03.2017).

Montreal Protocol	:	Not applicable
Rotterdam Convention (Prior Informed Consent)	:	Not applicable
Stockholm Convention (Persistent Organic Pollutants)	:	Not applicable



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#### **16. OTHER INFORMATION**

List of data sources used in the preparation of the Safety Data Sheet

GOST 30333-2007. Interstate standard. Safety data sheet for chemical products. Primary requirements.

GOST 12.1.007-76 Occupational safety standards system. Noxious substances. Classification and general safety requirements

GOST 12.1.044-89 Occupational safety standards system. Fire and explosion hazard of substances and materials. Nomenclature of indices and methods of their determination GOST 14192-96. Interstate standard. Cargo marking. Minsk, 1998.

GOST 31340-2013. Interstate standard. Precautionary labeling of chemical products. General requirements.

GOST 32419-2013 Classification of the hazard of chemical products. General requirements. GOST 32421-2013 Classification of chemical products, the hazard of which is due to physical and chemical properties. Test methods for explosive chemical products.

GOST 32423-2013 Hazard classification of mixed chemical products by their effects on the body. GOST 32424-2013 Classification of the hazard of chemical products by their impact on the environment. Basic provisions.

GOST 32425-2013 Hazard classification of mixed chemical products in terms of environmental impact.

GOST R 53264-2009 Fire fighting equipment. Special protective clothing for firefighters. General technical requirements. Test methods.

GOST R 53265-2009 Fire fighting equipment. Personal protective equipment for the feet of the firefighter. General technical requirements. Test methods.

GOST R 53268-2009 Fire fighting equipment. Fire rescue belts. General technical requirements. Test methods.

GOST R 53269-2009 Fire fighting equipment. Firefighters helmets. General technical requirements. Test methods.

SanPiN 1.2.3685-21 "Hygienic standards and requirements for ensuring the safety and (or) harmlessness to humans of environmental factors" dated 28.01.2021.

SanPiN 2.1.3684-21 "Sanitary and epidemiological requirements for the maintenance of the territories of urban and rural settlements, for water bodies, drinking water and drinking water supply, atmospheric air, soils, living quarters, the operation of industrial, public premises, the organization and implementation of sanitary and anti-epidemic (preventive) measures".

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). United Nations. New York and Geneva, 20.

International Maritime Dangerous Goods Code (IMDG-Code).

Water quality standards for fishery water bodies, including standards for maximum permissible concentrations of harmful substances in the waters of fishery water bodies (approved by order of the Ministry of Agriculture of Russia dated December 13, 2016 No. 552).

Regulations for the carriage of dangerous goods (Appendix 1 and 2) to the Agreement on International Goods Transport by Rail (SMGS), 2009.

UN Recommendations on the Transport of Dangerous Goods. Typical rules. Twenty-first revised edition. United Nations, New York and Geneva, 2019.

#### Full text of other abbreviations

Acute Tox. :	:	Acute toxicity
Aquatic Acute :	:	Short-term (acute) aquatic hazard
Aquatic Chronic :		Long-term (chronic) aquatic hazard
Eye Dam. :	:	Serious eye damage
Skin Sens. :	:	Skin sensitisation



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ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System: GLP - Good Laboratory Practice: IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration: NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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