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### **OKS 670**

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

Product name : OKS 670

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

Emergency telephone

: +7 495 628 1687 +49 8142 3051 517

number +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)

Flammable liquids : Category 4

Skin irritation : Category 3

Aspiration hazard : Category 1

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

Hazard pictograms :

Signal word : Danger

Hazard statements : H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H316 Causes mild skin irritation.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames

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and other ignition sources. No smoking.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P331 Do NOT induce vomiting.

P370 + P378 In case of fire: Use alcohol-resistant foam, carbon

dioxide or water mist to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

#### Other hazards which do not result in classification

None known.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical nature : Mineral oil.

solid lubricant

### Components

Chemical name	Concentration (% w/w)	Occupational Exposure Limits		CAS-No.	EC-No.
		MAC value mg/m3 / TSEL value	Hazard Class		
Hydrocarbons, C10- C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	>= 50 - < 70	No data available			918-481-9
Sulfonic acids, petroleum, calcium salts	>= 1 - < 10	No data available		61789-86-4	263-093-9

## 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 unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial

respiration.



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In case of skin contact : Take off all contaminated clothing immediately.

Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

Wash skin thoroughly with soap and water or use recognized

skin cleanser.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 10 minutes. Seek medical advice.

If swallowed : Move the victim to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear. Do NOT induce vomiting. Obtain medical attention. Rinse mouth with water.

Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed - can enter lungs and cause

damage.

Most important symptoms and effects, both acute and

delayed

Can be absorbed through skin.

Risk of product entering the lungs on vomiting after ingestion.

Health injuries may be delayed.

Skin contact may provoke the following symptoms:

Erythema

Aspiration may cause pulmonary oedema and pneumonitis.

Notes to physician : Treat symptomatically.

### **5. FIREFIGHTING MEASURES**

Flammable properties

Flash point : 64 °C

Method: DIN 51758, Pensky-Martens closed cup

Ignition temperature : No data available

Upper explosion limit / Upper :

flammability limit

7,0 %(V)

Lower explosion limit / Lower :

flammability limit

0,6 %(V)

Flammability (solid, gas)

Not applicable



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Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Unsuitable extinguishing

media

High volume water jet

Hazardous combustion

products

Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides Metal oxides

Further information : Standard procedure for chemical fires.

Cool containers/tanks with water spray.

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Exposure to decomposition products may be a hazard to

health.

#### **6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures Evacuate personnel to safe areas. Use personal protective equipment.

Ensure adequate ventilation. Remove all sources of ignition.

Do not breathe vapours or spray mist.

Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Try to prevent the material from entering drains or water

courses.

Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

Non-sparking tools should be used.

#### 7. HANDLING AND STORAGE

Advice on protection against :

fire and explosion

Keep away from heat and sources of ignition.

Advice on safe handling : Do not use in areas without adequate ventilation.

Do not breathe vapours or spray mist.

In case of insufficient ventilation, wear suitable respiratory

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equipment.

Avoid contact with skin and eyes. For personal protection see section 8.

Keep away from fire, sparks and heated surfaces. Smoking, eating and drinking should be prohibited in the

application area.

Take precautionary measures against static discharges. Wash hands and face before breaks and immediately after

handling the product.

Ensure all equipment is electrically grounded before beginning

transfer operations.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest.

Do not enter areas where used or stored until adequately

ventilated.
Do not repack.

Do not re-use empty containers.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use.

Conditions for safe storage

Store in original container.

Keep container closed when not in use. Keep in a dry, cool and well-ventilated place.

Do not store together with oxidizing and self-igniting products. Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Store in accordance with the particular national regulations.

Keep in properly labelled containers.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : Effective exhaust ventilation system

#### Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Filter type A-P

Hand protection

Material : butyl-rubber
Break through time : > 10 min
Protective index : Class 1



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Remarks : Wear 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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : beige

Odour : hydrocarbon-like

Odour Threshold : No data available

pH : Not applicable

substance/mixture is non-polar/aprotic

Melting point/range : No data available

Boiling point/boiling range : 200 °C

(1.013 hPa)

Flash point : 64 °C

Method: DIN 51758, Pensky-Martens closed cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

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Self-ignition : No data available

Upper explosion limit / Upper

flammability limit

7,0 %(V)

Lower explosion limit / Lower

flammability limit

0,6 %(V)

Vapour pressure : < 1.100 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0,8223 (20 °C)

Reference substance: Water The value is calculated

Density : 0,82 g/cm3 (20 °C)

Bulk density : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 18 mm2/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

Metal corrosion rate : Not corrosive to metals

### 10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

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Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: No dangerous reaction known under conditions of normal use.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

No decomposition if stored and applied as directed.

### 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

**Product:** 

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: Prolonged or repeated skin contact with liquid may

cause defatting resulting in drying, redness and possible

blistering.

Symptoms: Skin disorders

## **Components:**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Method: OECD Test Guideline 402

#### Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.

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### **Components:**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : Mild skin irritation

Result : Repeated exposure may cause skin dryness or cracking.

#### Serious eye damage/eye irritation

**Product:** 

Remarks : This information is not available.

#### **Components:**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Species : Rabbit

Result : No eye irritation
Assessment : No eye irritation

Method : OECD Test Guideline 405

### Respiratory or skin sensitisation

**Product:** 

Remarks : This information is not available.

#### Components:

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

## Sulfonic acids, petroleum, calcium salts:

Assessment : The product is a skin sensitiser, sub-category 1B.

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Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

**Components:** 

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Germ cell mutagenicity -Tests on bacterial or mammalian cell cultures did not show

Assessment mutagenic effects.

Carcinogenicity

**Product:** 

Remarks : No data available

**Components:** 

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Carcinogenicity -: Not classifiable as a human carcinogen.

Assessment

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal Remarks: No data available

development

**Components:** 

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Reproductive toxicity -: - Fertility -

Assessment No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

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STOT - single exposure

**Product:** 

Remarks : No data available

**Components:** 

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT - repeated exposure

**Product:** 

Remarks : No data available

**Components:** 

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

Repeated dose toxicity

**Product:** 

Remarks : This information is not available.

**Aspiration toxicity** 

**Product:** 

May be fatal if swallowed and enters airways.

**Components:** 

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

May be fatal if swallowed and enters airways.

**Further information** 

**Product:** 

Remarks : Information given is based on data on the components and

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the toxicology of similar products.

#### 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

**Product:** 

Toxicity to fish

Remarks: No data available

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data available

Toxicity to algae/aquatic

plants

Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

## **Components:**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

## Persistence and degradability

**Product:** 

Biodegradability : Remarks: No data available

Physico-chemical

removability

Remarks: No data available



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## **Bioaccumulative potential**

**Product:** 

Bioaccumulation : Remarks: This mixture contains no substance considered to

be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very

persistent and very bioaccumulating (vPvB).

Mobility in soil

**Product:** 

Mobility : Remarks: No data available

Distribution among

environmental compartments

Remarks: No data available

Other adverse effects

**Product:** 

Additional ecological

information

: No information on ecology is available.

### **Components:**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Results of PBT and vPvB

assessment

: Non-classified PBT substance Non-classified vPvB substance

### Hygienic standards:

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

Components	Air	Water	Soil	Data Source
Hydrocarbons, C10- C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	TSEL value: 0,05 mg/m3	Maximum Permissible Concentration: 0,05 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 3	No data available	List 2 List 5

For explanation of abbreviations see section 16.

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### 13. DISPOSAL CONSIDERATIONS

**Disposal methods** 

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Do not dispose of with domestic refuse.

Dispose of as hazardous waste in compliance with local and

national regulations.

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 : unused product

13 02 05\*\*, mineral-based non-chlorinated engine, gear and

lubricating oils

uncleaned packagings

15 01 10\*, packaging containing residues of or contaminated

by hazardous substances

#### 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.

### Special precautions for user

Not applicable



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#### 15. REGULATORY INFORMATION

#### **National regulatory information**

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 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 04.05.1999 No. 96-FZ "On the protection of atmospheric air" (as amended on December 8, 2020).

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).

Federal Law of 10.01.2002 No. 7-FZ (amended on 02.07.2021) "On environmental protection". Federal Law of 22.07.2008 No. 123-FZ "Technical Regulations on Fire Safety Requirements" TECHNICAL REGULATIONS OF THE CUSTOMS UNION TR CU 030/2012 On requirements for lubricants, oils and special fluids (amended on 03.03.2017).

#### International Regulations

Montreal Protocol : Not applicable

Rotterdam Convention (Prior Informed Consent) : Not applicable

Stockholm Convention (Persistent Organic Pollutants) : Not applicable

#### 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 12.1.004-91 System of labor safety standards (SSBT). Fire safety. General requirements.

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

GOST 12.1.044-89 SSBT. Fire and explosion hazard of substances and materials. Nomenclature of indicators and methods for their determination.

GOST 12.4.021 System of labor safety standards (SSBT). Ventilation systems. General requirements.

GOST 12.4.137-2001 Special footwear with leather uppers for protection against oil, oil products, acids. alkalis. non-toxic and explosive dust. Technical conditions.

GOST 12.4.252-2013 System of labor safety standards (SSBT). Means of individual protection of hands. Gloves. General technical requirements. Test methods.

GOST 14192-96. Interstate standard. Cargo marking. Minsk, 1998.

GOST 19433-88 Dangerous goods. Classification and labeling.



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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 53264-2019 Fire fighting equipment. Special protective clothing for firefighters. General technical requirements. Test methods.

GOST R 53265-2019 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 53269-2019 Fire fighting equipment. Firefighters helmets. General technical requirements. Test methods.

SanPiN 1.2.2353-08 "Carcinogenic factors and basic requirements for the prevention of carcinogenic hazard".

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".

SanPiN 2.2.0.555-96. 2.2. Labor hygiene. Hygienic requirements for working conditions for women. Sanitary rules and regulations.

Carriage of dangerous goods, International maritime dangerous goods (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.

Agreement on International Goods Transport by Rail (SMGS).

UN Recommendations on the Transport of Dangerous Goods. Typical rules. Twenty-second revised edition. United Nations, New York and Geneva, 2021.

Montreal Protocol (Ozone Depleting Substances)

Stockholm Convention (Persistent Organic Pollutants)

## Full text of other abbreviations

Asp. Tox. : Aspiration hazard Flam. Liq. : Flammable liquids Skin Irrit. : Skin irritation Skin Sens. : Skin sensitisation

List 2 : SanPiN 1.2.3685-21 Table 1.2, Table 1.12 & Table 1.13

Tentative Safe Exposure Levels (TSEL) in the air of urban and

rural settlements

List 5 : Order of the Russian Federal Fisheries Agency "Standards of

maximum permissible concentrations of harmful substances in

fishery water bodies"



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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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