according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : OKS 480

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the : Lubricant

Substance/Mixture

Recommended restrictions

on use

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : OKS Spezialschmierstoffe GmbH

Ganghoferstr. 47

82216 Maisach-Gernlinden

Deutschland

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

National contact

1.4 Emergency telephone number

Emergency telephone

number

: +34 91 562 04 20

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Long-term (chronic) aquatic hazard, H412: Harmful to aquatic life with long lasting

Category 3 effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements : H412 Harmful to aquatic life with long lasting

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

VersionRevision Date:Date of last issue: 19.04.2022Print Date:3.222.05.2025Date of first issue: 24.11.201622.05.2025

effects.

Precautionary statements : Prevention:

P273 Avoid release to the environment.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil

Calcium soap Additive Zinc oxide

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity	Concentration (% w/w)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6 271-529-4	Eye Irrit.2; H319	estimate	>= 1 - < 10
zinc oxide	1314-13-2 215-222-5 030-013-00-7 01-2119463881-32-	Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 1/1	>= 1 - < 2,5



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

XXXX

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of 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.

In case of skin contact : Remove contaminated clothing. If irritation develops, get

medical attention.

Wash off with soap and water. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

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.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

Do not induce vomiting without medical advice.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

carbon dioxide.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

VersionRevision Date:Date of last issue: 19.04.2022Print Date:3.222.05.2025Date of first issue: 24.11.201622.05.2025

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion

products

Carbon oxides Sulphur oxides Metal oxides

5.3 Advice for firefighters

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.

Further information : Standard procedure for chemical fires.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : 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.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

Advice on safe handling : Avoid contact with skin and eyes.

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Wash hands and face before breaks and immediately after

handling the product.

Do not ingest. Do not repack.

These safety instructions also apply to empty packaging which

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

Hygiene measures : Wash face, hands and any exposed skin thoroughly after

handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

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

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
zinc oxide	1314-13-2	VLA-ED (respirable fraction)	2 mg/m3	ES VLA (2016-01-01)
		VLA-EC (respirable fraction)	10 mg/m3	ES VLA (2016-01-01)

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment Value	
zinc oxide	Fresh water	0,0179 mg/l
	Marine water	0,009 mg/l
	Sewage treatment plant	0,1245 mg/l
	Fresh water sediment	182,8 mg/kg
	Marine sediment	201,9 mg/kg



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

Soil 103,4 mg/kg

8.2 Exposure controls

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 equipment

Eye/face protection : Safety glasses with side-shields

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : 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.

The selected protective gloves have to satisfy the

specifications of Regulation (EU) 2016/425 and the standard

EN 374 derived from it.

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.

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type P

Environmental exposure controls

Air :

Should not be released into the environment.

Soil :

Do not allow contact with soil, surface or ground water. The product should not be allowed to enter drains, water

courses or the soil.

Water :

Do not allow contact with soil, surface or ground water. The product should not be allowed to enter drains, water

courses or the soil.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

VersionRevision Date:Date of last issue: 19.04.2022Print Date:3.222.05.2025Date of first issue: 24.11.201622.05.2025

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : solid

Colour : beige

Odour : hydrocarbon-like

Odour Threshold : No data available

Melting point/ range : No data available

Boiling point/boiling range : > 280 °C

Flammability (solid, gas) : Combustible Solids

Upper explosion limit / Upper

flammability limit

7 %(V)

Lower explosion limit / Lower

flammability limit

0,9 %(V)

Flash point : > 180 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not applicable

substance/mixture is non-soluble (in water)

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : ca. 100 mm2/s

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

VersionRevision Date:Date of last issue: 19.04.2022Print Date:3.222.05.2025Date of first issue: 24.11.201622.05.2025

Vapour pressure : No data available

Relative density : 0,985 (20 °C)

Reference substance: Water The value is calculated

Density : 0,99 g/cm3

(20 °C)

Bulk density : No data available

Relative vapour density : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Miscibility with water : immiscible

Sublimation point : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

VersionRevision Date:Date of last issue: 19.04.2022Print Date:3.222.05.2025Date of first issue: 24.11.201622.05.2025

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Product:

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

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

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

Components:

zinc oxide:

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

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5,7 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute

inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Remarks : This information is not available.

Components:

zinc oxide:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

VersionRevision Date:Date of last issue: 19.04.2022Print Date:3.222.05.2025Date of first issue: 24.11.201622.05.2025

Result : No skin irritation

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product:

Remarks : This information is not available.

Components:

Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts:

Result : Irritating to eyes.

zinc oxide:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

Respiratory or skin sensitisation

Skin sensitisation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Product:

Remarks : This information is not available.

Components:

zinc oxide:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Product:

Genotoxicity in vitro : Remarks: No data available



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Date of last issue: 19.04.2022 **Revision Date:** Print Date: 22.05.2025 Date of first issue: 24.11.2016 22.05.2025 3.2

Remarks: No data available Genotoxicity in vivo

Components:

zinc oxide:

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Carcinogenicity

Based on available data, the classification criteria are not met.

Product:

Remarks No data available

Components:

zinc oxide:

Carcinogenicity -Assessment

: Not classifiable as a human carcinogen.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development

Remarks: No data available

Components:

zinc oxide:

Reproductive toxicity -

: - Fertility -

Assessment

No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

STOT - single exposure

Based on available data, the classification criteria are not met.

Product:

No data available Remarks

Components:

zinc oxide:



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

VersionRevision Date:Date of last issue: 19.04.2022Print Date:3.222.05.2025Date of first issue: 24.11.201622.05.2025

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

organ toxicant, single exposure.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Product:

Remarks : No data available

Components:

zinc oxide:

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

organ toxicant, repeated exposure.

Repeated dose toxicity

Product:

Remarks : This information is not available.

Aspiration toxicity

Based on available data, the classification criteria are not met.

Product:

This information is not available.

Components:

zinc oxide:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Further information

Product:

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

the toxicology of similar products.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

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:

zinc oxide:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 1,55 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 0,136

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

M-Factor (Acute aquatic

toxicity)

1

Toxicity to microorganisms : EC50 (activated sludge): > 1.000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

GLP: yes

0,04 mg/l

Toxicity to daphnia and other :

aquatic invertebrates

Exposure time: 21 d

(Chronic toxicity) Species: Daphnia magna (Water flea)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Date of last issue: 19.04.2022 Print Date: **Revision Date:** 22.05.2025 Date of first issue: 24.11.2016 22.05.2025 3.2

Test Type: semi-static test

Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

: 1

12.2 Persistence and degradability

Product:

Biodegradability Remarks: No data available

Physico-chemical

removability

Remarks: No data available

Components:

zinc oxide:

Biodegradability Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

12.3 Bioaccumulative potential

Product:

Remarks: No data available Bioaccumulation

12.4 Mobility in soil

Product:

Remarks: No data available Mobility

Distribution among Remarks: No data available

environmental compartments

12.5 Results of PBT and vPvB assessment

Product:

Assessment This substance/mixture contains no components considered

> to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

Components:

zinc oxide:

Assessment Remarks: Not applicable

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological

information

Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : 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.

Waste codes should be assigned by the user based on the

application for which the product was used.

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

SECTION 14: Transport information

14.1 UN number or ID number



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on : Not applicable



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Date of last issue: 19.04.2022 Version **Revision Date:** Print Date: 22.05.2025 22.05.2025 3.2 Date of first issue: 24.11.2016

the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

(EU SVHC)

This product does not contain substances of very high concern

(Regulation (EC) No

1907/2006 (REACH), Article 57).

Regulation (EU) No 2024/590 on substances that

deplete the ozone layer

(EC 2024/590)

Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (recast)

(EU POP)

: Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and

import of dangerous chemicals

(EU PIC)

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH-Annex XIV)

: Not applicable

Regulation (EU) 2019/1148 on the marketing and use of : Not applicable

explosives precursors

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous

substances.

Not applicable

Directive 2010/75/EU of 24 November 2010 on industrial and Volatile organic compounds

livestock rearing emissions (integrated pollution prevention

and control) Not applicable

15.2 Chemical safety assessment

This information is not available.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

SECTION 16: Other information

Full text of H-Statements

H319 : Causes serious eye irritation. H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

ES VLA : Spain. Environmental Limits for exposure to Chemical agents

- Table 1: Occupational Exposure Values

ES VLA / VLA-ED : Environmental Daily Limit Value ES VLA / VLA-EC : Environmental Short Term Value

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; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory: TRGS - Technical Rule for Hazardous Substances: TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - ES



OKS 480

Version Revision Date: Date of last issue: 19.04.2022 Print Date: 3.2 22.05.2025 Date of first issue: 24.11.2016 22.05.2025

Classification of the mixture:

Classification procedure:

Aquatic Chronic 3 H412 Calculation method

|| Relevant changes compared to the last edition are highlighted at the left margin. This version replaces all previous editions.

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.

