

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 - DE



OKS 245

Version 1.0

Revision Date 21.06.2016

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1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : OKS 245

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

Use of the Substance/Mixture : Lubricant
Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

OKS Spezialschmierstoffe GmbH
Ganghoferstr. 47
D-82216 Maisach-Gernlinden
Tel.: +49 8142 3051 500
Fax.: +49 8142 3051 599

E-mail address : mcm@oks-germany.com
Responsible/issuing person

National contact :

1.4 Emergency telephone number

+49 8142 3051 517

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute aquatic toxicity, Category 1 H400: Very toxic to aquatic life.

Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment R50: Very toxic to aquatic organisms.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H400 Very toxic to aquatic life.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.

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Additional Labelling:

EUH208 Contains: Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts May produce an allergic reaction.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil
Mineral oil.
Metal powder

Hazardous components

Chemical Name	CAS-No. EC-No. Index-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
copper	7440-50-8 231-159-6	N; R50	Aquatic Acute 1; H400	>= 10 - < 20
2-(heptadecenyl)-2-oxazoline-4,4-dimethanol	28984-69-2 249-355-5	R52/53	Aquatic Chronic 3; H412	>= 1 - < 2,5
calcium bis(dinonylnaphthalene sulphonate)	57855-77-3 260-991-2	Xi; R36/38	Skin Irrit. 2; H315 Eye Irrit. 2A; H319	>= 1 - < 3
Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts	93820-57-6 298-637-4	Xi; R43	Skin Sens. 1B; H317	>= 0,1 - < 1

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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.
In case of contact, immediately flush skin with plenty of water.
Wash clothing before reuse.

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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 information available.

Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Metal oxides
Nitrogen oxides (NOx)
Oxides of phosphorus
Sulphur 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.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
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.



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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 materials 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.

7. Handling and storage

7.1 Precautions for safe handling

- 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.

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.

- German storage class : 13 Non Combustible Solids

7.3 Specific end use(s)



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- : Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

- Respiratory protection : Not required; except in case of aerosol formation.
Filter type A-P
- Hand protection : Wear protective gloves.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
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.
In case of contact through splashing:

: butyl-rubber
Protective index Class 1
- Eye protection : Tightly fitting safety goggles
Safety glasses with side-shields conforming to EN166
- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

- General advice : Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	: paste
Colour	: red brown
Odour	: characteristic
Odour Threshold	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: > 200 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: < 0,001 hPa, 20 °C
Relative vapour density	: No data available
Density	: 0,94 g/cm ³ , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: No data available

9.2 Other information

Sublimation point	: No data available
Bulk density	: No data available

10. Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability



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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.

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity : This information is not available.

Acute inhalation toxicity : This information is not available.

Acute dermal toxicity : This information is not available.

Skin corrosion/irritation : This information is not available.

Serious eye damage/eye irritation : This information is not available.

Respiratory or skin sensitisation : This information is not available.

Germ cell mutagenicity

Genotoxicity in vitro : No data available

Genotoxicity in vivo : No data available

Carcinogenicity : No data available

Reproductive toxicity : No data available

Teratogenicity : No data available

Repeated dose toxicity : This information is not available.

Aspiration toxicity : This information is not available.

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

Components:

Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :

Acute oral toxicity : LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 401

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Acute dermal toxicity	: LD50: > 2.000 mg/kg, Rabbit
Skin corrosion/irritation	: Result: No skin irritation, Classification: No skin irritation
Serious eye damage/eye irritation	: Result: No eye irritation, Classification: No eye irritation
Respiratory or skin sensitisation	: Result: The product is a skin sensitiser, sub-category 1B., Classification: The product is a skin sensitiser, sub-category 1B.

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish	: Very toxic to aquatic organisms.
Toxicity to daphnia and other aquatic invertebrates	: No data available
Toxicity to algae	: No data available
Toxicity to bacteria	: No data available

Components:

copper :

Toxicity to fish	: LC50: 0,0094 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates	: EC50: 0,044 mg/l, 48 h, Daphnia magna (Water flea)
M-Factor	: 10

Ecotoxicology Assessment

Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: This product has no known ecotoxicological effects.

2-(heptadecenyl)-2-oxazoline-4,4-dimethanol :

Toxicity to fish	: LC50: 2.100 mg/l, 96 h, Leuciscus idus (Golden orfe)
Toxicity to algae	: ErC50: 60 mg/l, 72 h, Scenedesmus capricornutum (fresh water algae), Growth inhibition

Ecotoxicology Assessment

Acute aquatic toxicity	: Harmful to aquatic life.
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.

Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :

Toxicity to fish	: LC50: > 100 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout),
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OECD Test Guideline 203

- Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea), OECD Test Guideline 202
- Toxicity to algae : EC50: > 100 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), OECD Test Guideline 201
- Toxicity to bacteria : EC50: > 10.000 mg/l, 3 h, activated sludge, static test

12.2 Persistence and degradability

Product:

- Biodegradability : No data available
- Physico-chemical removability : No data available

Components:

copper :

- Biodegradability : The methods for determining biodegradability are not applicable to inorganic substances.

2-(heptadecenyl)-2-oxazoline-4,4-dimethanol :

- Biodegradability : Primary biodegradation, 30 %, Result: Not rapidly biodegradable, Exposure time: 28 d, OECD 301 D

Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :

- Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Product:

- Bioaccumulation : 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).

Components:

2-(heptadecenyl)-2-oxazoline-4,4-dimethanol :

- Bioaccumulation : This substance is not considered to be persistent, bioaccumulating and toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :

- Bioaccumulation : Bioconcentration factor (BCF): 70,8

12.4 Mobility in soil

Product:

- Mobility : No data available
- Distribution among environmental compartments : No data available



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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:

Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :

Assessment : Non-classified PBT substance, Non-classified vPvB substance

12.6 Other adverse effects

Product:

Additional ecological information : Very toxic to aquatic life.

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
: Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

14. Transport information

14.1 UN number

ADR : 3077
IMDG : 3077
IATA : 3077

14.2 Proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)
IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)

14.3 Transport hazard class

ADR : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADR
Packaging group : III

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Classification Code : M7
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (E)

IMDG

Packaging group : III
Labels : 9
EmS Number : F-A, S-F

IATA

Packing instruction (cargo aircraft) : 956
Packaging group : III
Labels : 9

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA

Environmentally hazardous : yes

14.6 Special precautions for user

No special precautions required.

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

Remarks : Not applicable for product as supplied.

15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update:
Dangerous for the environment
9a
Quantity 1: 100 t
Quantity 2: 200 t

: 96/82/EC Update:
Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils
13
Quantity 1: 2.500 t
Quantity 2: 25.000 t

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Water contaminating class (Germany)	: WGK 1: slightly water endangering
TA Luft List (Germany)	: Total dust: Portion other substances: 13,64 % Inorganic substances in powdered form: portion Class 3: 11,62 % Inorganic substances in vapour or gaseous form: Not applicable Organic Substances: portion Class 1: < 0,01 % ; Portion other substances: 40,39 % Carcinogenic substances: Not applicable Mutagenic: Not applicable Toxic to reproduction: Not applicable

15.2 Chemical Safety Assessment

This information is not available.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Further information

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