



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

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

Product information

Product name : OKS 240

Use of the Substance/Mixture : Lubricants and lubricant additives

Company : 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

National contact :

Emergency telephone number : +7 495 628 1687
+49 8142 3051 517

2. Hazards identification

GHS Classification

: Acute aquatic toxicity, Category 1

GHS-Labeling

Symbol(s) :



Signal word : Warning

Hazard statements : H400: Very toxic to aquatic life.

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

3. Composition/information on ingredients

Chemical nature : Synthetic hydrocarbon oil
Metal powder
solid lubricant



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

Hazardous components

Chemical name	CAS-No.	Concentration[%]
copper	7440-50-8	10 - 20
Hydroxylapatite (Ca ₅ (OH)(PO ₄) ₃)	1306-06-5	1 - 10
Tin	7440-31-5	1 - 10
molybdenum disulphide	1317-33-5	1 - 10

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.
- 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.
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.

Notes to physician

- Symptoms : No information available.
- Risks : None known.
- Treatment : No information available.



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

5. Firefighting measures

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Metal oxides
Nitrogen oxides (NOx)
Oxides of phosphorus
Sulphur oxides
- 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.

6. Accidental release measures

- 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.
- Environmental precautions : Do not allow contact with soil, surface or ground water. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

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.

Storage

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.

8. Exposure controls/personal protection

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
copper	7440-50-8	MPC-TWA	0,5 mg/m3	2011-07-12	RU OEL
copper	7440-50-8	MPC-STEL	1 mg/m3	2011-07-12	RU OEL
molybdenum disulphide	1317-33-5	MPC-TWA	1 mg/m3	2011-07-12	RU OEL
molybdenum disulphide	1317-33-5	MPC-STEL	6 mg/m3	2011-07-12	RU OEL
molybdenum disulphide	1317-33-5	MPC-TWA	1 mg/m3	2013-09-16	RU OEL
molybdenum disulphide	1317-33-5	MPC-STEL	6 mg/m3	2013-09-16	RU OEL



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

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 : butyl-rubber
Manufacturer, importer, supplier: Class 1
For prolonged or repeated contact use 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.
- Eye protection : Tightly fitting safety goggles
- 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.

9. Physical and chemical properties

Appearance

- Form : paste
Colour : red brown
Odour : characteristic

Safety data

- Flash point : Note: Not applicable
Ignition temperature : Remarks: No data available



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

Lower explosion limit	: Note: No data available
Upper explosion limit	: Note: No data available
Flammability (solid, gas)	: Combustible Solids
Oxidizing properties	: Note: No data available
Auto-ignition temperature	: Note: No data available
pH	: Note: Not applicable
Melting point/range	: Note: Not applicable
Boiling point/boiling range	: Note: No data available
Sublimation point	: Note: No data available
Vapour pressure	: < 0,001 hPa at 20 °C
Density	: 1,35 g/cm ³ at 20 °C
Bulk density	: Note: No data available
Water solubility	: Note: immiscible
Partition coefficient: n-octanol/water	: Note: No data available
Solubility in other solvents	: Note: No data available
Viscosity, dynamic	: Note: No data available
Viscosity, kinematic	: Note: Not applicable
Relative vapour density	: Note: No data available
Evaporation rate	: Note: No data available

10. Stability and reactivity

Conditions to avoid	: No conditions to be specially mentioned.
Materials to avoid	: No materials to be especially mentioned.
Hazardous decomposition products	: No decomposition if stored and applied as directed.



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

Thermal decomposition : Note: No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

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

Acute dermal toxicity

Hydroxylapatite : LD50: > 2.000 mg/kg
(Ca₅(OH)(PO₄)₃) Species: Rabbit

Tin : LD50: > 2.000 mg/kg
Species: Rat
Method: OECD Test Guideline 402

Skin corrosion/irritation

Skin irritation : Remarks: This information is not available.

Serious eye damage/eye irritation

Eye irritation : Remarks: This information is not available.

Respiratory or skin sensitisation

Sensitisation : Remarks: This information is not available.

Germ cell mutagenicity

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Teratogenicity

Remarks
Hydroxylapatite : No toxicity to reproduction
(Ca₅(OH)(PO₄)₃)

Target Organ Systemic Toxicant - Single exposure

Hydroxylapatite : Remarks: The substance or mixture is not classified as
(Ca₅(OH)(PO₄)₃) specific target organ toxicant, single exposure.

Target Organ Systemic Toxicant - Repeated exposure

: This information is not available.



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

Target Organ Systemic Toxicant - Repeated exposure

Hydroxylapatite (Ca₅(OH)(PO₄)₃) : Remarks: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Aspiration toxicity : This information is not available.

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

12. Ecological information

Ecotoxicity effects

Toxicity to fish :
Remarks:
Very toxic to aquatic organisms.

Toxicity to daphnia and other aquatic invertebrates : Remarks:
No data available

Toxicity to algae : Remarks:
No data available

M-Factor copper : 10

Toxicity to bacteria : Remarks:
No data available

Elimination information (persistence and degradability)

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 : Remarks:
No data available



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

Distribution among environmental compartments : Remarks:
No data available

Biodegradability : Remarks:
No data available

Physico-chemical removability : Remarks:
No data available

Further information on ecology

Acute aquatic toxicity copper : Very toxic to aquatic life.

Chronic aquatic toxicity copper : This product has no known ecotoxicological effects.

copper :

copper :

copper :

Results of PBT assessment
Hydroxylapatite (Ca₅(OH)(PO₄)₃) : Non-classified PBT substance, Non-classified vPvB substance
Tin :

Additional ecological information : Very toxic to aquatic life.

13. Disposal considerations

Product : The product should not be allowed to enter drains, water courses or the soil.

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

14. Transport information



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

ADR

UN number : 3077

Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S.
()

Class : 9

Packing group : III

Classification Code : M7

Hazard Identification : 90
Number

Labels : 9

Environmentally hazardous : yes

IATA

UN number : 3077

Description of the goods : Environmentally hazardous substance, solid, n.o.s.
(copper)

Class : 9

Packing group : III

Labels : 9

Packing instruction (cargo aircraft) : 956

Packing instruction (passenger aircraft) : 956

Packing instruction : Y956



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

(passenger aircraft)

Environmentally hazardous : yes

IMDG

UN number : 3077

Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S.
(copper)

Class : 9

Packing group : III

Labels : 9

EmS Number : F-A, S-F

Marine pollutant : yes

Other information : No special precautions required.

15. Regulatory information

16. Other information

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This safety datasheet applies only to products originally packaged and labelled by OKS Spezialschmierstoffe. The information contained therein is protected by copyright and must not be reproduced or amended without the express written approval of OKS Spezialschmierstoffe. This document may be passed on only to the extent required by law. Any dissemination of our safety datasheets (e.g. as a document for download from the



OKS 240

Version 1.4

Revision Date 28.11.2017

Print Date 28.11.2017

Internet) beyond this legally required extent is not permitted without express written consent. OKS Spezialschmierstoffe provides its customers with amended safety datasheets as prescribed by law. The customer is responsible for passing on safety datasheets and any amendments contained therein to its own customers, employees and other users of the product. OKS Spezialschmierstoffe provides no guarantee that safety datasheets received by users from third parties are up-to-date. All information and instructions in this safety datasheets were compiled to the best of our knowledge and are based on the information available to us. The data provided are intended to describe the product in relation to the required safety measures; they are neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and do not justify any contractual legal relationships.
