

OKS 220

Version 1.5

Revision Date 28.06.2021

Print Date 28.06.2021

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

Product information

Product name : OKS 220

Use of the Substance/Mixture : Lubricant

Company : OKS Spezialschmierstoffe GmbH
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Material Compliance Management

National contact :

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2. Hazards identification

GHS Classification

: Skin irritation, Category 2
Serious eye damage, Category 1
Specific target organ toxicity - single exposure, Category 3,
Respiratory system

GHS-Labeling

Symbol(s) :



Signal word :

Danger

Hazard statements :

H315: Causes skin irritation.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

Precautionary statements :

Prevention:
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.



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P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

3. Composition/information on ingredients

Chemical nature : Synthetic hydrocarbon oil
Molybdenum disulfide
solid lubricant

Hazardous components

Chemical name	CAS-No.	Concentration[%]
molybdenum disulphide	1317-33-5	20 - 30
calcium dihydroxide	1305-62-0	20 - 30
Natural graphite	7782-42-5	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 : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.
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.
Get medical attention immediately.

If swallowed : Move the victim to fresh air.
If unconscious, place in recovery position and seek medical advice.



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Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

Notes to physician

- Symptoms : Skin contact may provoke the following symptoms:
Erythema
- Risks : Causes skin irritation.
- Treatment : Treat symptomatically.

5. Firefighting measures

- 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
Sulphur oxides
Metal oxides
- 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.

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).
Do not breathe vapours, aerosols.
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 for cleaning up : Clean up promptly by sweeping or vacuum.



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Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling

Advice on safe handling : Do not use in areas without adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. 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 get in eyes or mouth or on skin. Do not get on skin or clothing. 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
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	2018-04-23	RU OEL
molybdenum	1317-33-5	MPC-	6 mg/m3	2018-04-23	RU OEL



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disulphide		STEL			
calcium dihydroxide	1305-62-0	MPC- STEL	2 mg/m3	2018-04-23	RU OEL

Engineering measures

Effective exhaust ventilation system

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
Break through time: > 10 min
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 : 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 : black

- Odour : characteristic

Safety data

- Flash point : Note: Not applicable



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Ignition temperature	: Remarks: No data available
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: substance/mixture is non-soluble (in water)
Melting point/range	: Note: No data available
Boiling point/boiling range	: Note: No data available
Sublimation point	: Note: No data available
Vapour pressure	: < 0,001 hPa at 20 °C
Density	: 1,40 g/cm ³ at 20 °C
Bulk density	: Note: No data available
Water solubility	: Note: insoluble
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.



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Thermal decomposition : Note: No data available
Hazardous reactions : No dangerous reaction known under conditions of normal use.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity : Remarks: This information is not available.
Acute inhalation toxicity : Remarks: Irritating to respiratory system.
: Symptoms: Inhalation may provoke the following symptoms:,
Local irritation, Respiratory disorders

Acute dermal toxicity
molybdenum disulphide : LD50: > 16.000 mg/kg
Species: Rat
calcium dihydroxide : LD50: > 2.500 mg/kg
Species: Rabbit
Method: OECD Test Guideline 402

Skin corrosion/irritation

Skin irritation : Remarks: Irritating to skin.

Serious eye damage/eye irritation

Eye irritation : Remarks: Risk of serious damage to eyes.

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

Germ cell mutagenicity

Remarks
molybdenum disulphide : Animal testing did not show any mutagenic effects.

Carcinogenicity

Remarks
molybdenum disulphide : No evidence of carcinogenicity in animal studies.



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calcium dihydroxide : No evidence of carcinogenicity in animal studies.

Teratogenicity

Remarks

calcium dihydroxide : No effects on or via lactation
No toxicity to reproduction

Target Organ Systemic Toxicant - Single exposure

molybdenum disulphide : Remarks: The substance or mixture is not classified as specific target organ toxicant, single exposure.

calcium dihydroxide : Remarks: May cause respiratory irritation.

Target Organ Systemic Toxicant - Repeated exposure

: This information is not available.

Target Organ Systemic Toxicant - Repeated exposure

molybdenum disulphide : 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 : Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

12. Ecological information

Ecotoxicity effects

Toxicity to fish :
Remarks:
No data available

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

Toxicity to algae : Remarks:
No data available

Toxicity to bacteria : Remarks:



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No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
calcium dihydroxide : NOEC: 32 mg/l
Exposure time: 14 d
Species: Crangon crangon (shrimp)
semi-static test

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

Distribution among environmental compartments : Remarks:
No data available

Biodegradability : Remarks:
No data available

Physico-chemical removability : Remarks:
No data available

Further information on ecology

Additional ecological information : No information on ecology is available.

13. Disposal considerations

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.

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.



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14. Transport information

ADR

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID

Not dangerous goods

Other information : No special precautions required.

15. Regulatory information

16. Other information

Further information

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