



OKS 571

Version 1.5

Revision Date 2018-07-24

Print Date 2018-07-24

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

Product information

Product name : OKS 571

Use of the Substance/Mixture : Lubricant spray

Company : OKS Spezialschmierstoffe GmbH
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National contact :

Emergency telephone number : +86 512 8090 3042 (NCEC, 24 hrs)
+86 532 8388 9090 (NRCC)

2. Hazards identification

GHS Classification

: Aerosols, Category 1
Skin irritation, Category 2
Eye irritation, Category 2A
Reproductive toxicity, Category 2
Specific target organ toxicity - single exposure, Category 3, Central nervous system
Specific target organ toxicity - repeated exposure, Category 2, Oral, Liver, Kidney
Specific target organ toxicity - repeated exposure, Category 2, Inhalation, Central nervous system
Aspiration hazard, Category 1
Acute aquatic toxicity, Category 3
Chronic aquatic toxicity, Category 3

GHS-Labeling

Symbol(s) :   

Signal word : Danger

Hazard statements : H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.



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H336: May cause drowsiness or dizziness.
 H361: Suspected of damaging fertility or the unborn child.
 H373: May cause damage to organs (Liver, Kidney) through prolonged or repeated exposure if swallowed.
 H373: May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.
 H412: Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P260 Do not breathe mist.
 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.
Storage:
 P405 Store locked up.
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

3. Composition/information on ingredients

Chemical nature : Active substance with propellant
 Solvent
 PTFE
 Silicone resin

Hazardous components

Chemical name	CAS-No.	Concentration[%]
Dimethyl ether	115-10-6	50 - 70
Naphtha (petroleum), hydrotreated light	64742-49-0	10 - 20
butanone	78-93-3	1 - 10
Acetone	67-64-1	1 - 10
Ethyl acetate	141-78-6	1 - 10
xylene	1330-20-7	1 - 2.5
n-hexane	110-54-3	0.25 - 1



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4. First aid measures

- If inhaled : Call a physician or poison control centre immediately.
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 while removing all contaminated clothes and shoes.
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.
If easy to do, remove contact lens, if worn.
Seek medical advice.

- If swallowed : Move the victim to fresh air.
If accidentally swallowed obtain immediate medical attention.
Keep respiratory tract clear.
Do NOT induce vomiting.
Rinse mouth with water.
Aspiration hazard if swallowed - can enter lungs and cause damage.

Notes to physician

- Symptoms : Inhalation may provoke the following symptoms:
Unconsciousness
Dizziness
Drowsiness
Headache
Nausea
Tiredness
Skin contact may provoke the following symptoms:
Erythema

Aspiration may cause pulmonary oedema and pneumonitis.



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- Risks : Central nervous system depression
Risk of product entering the lungs on vomiting after ingestion.
Health injuries may be delayed.
Causes skin irritation.
- Treatment : Treat symptomatically.

5. Firefighting measures

- Suitable extinguishing media : ABC powder
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Halogenated compounds
- : Fire Hazard
Do not let product enter drains.
Contains gas under pressure; may explode if heated.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- 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.
Cool containers/tanks with water spray.

6. Accidental release measures

- Personal precautions : Evacuate personnel to safe areas.
Ensure adequate ventilation.
Remove all sources of ignition.
Do not breathe vapours or spray mist.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform



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respective authorities.

- Methods for 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).
Keep in suitable, closed containers for disposal.
Non-sparking tools should be used.
- Additional advice : Only qualified personnel equipped with suitable protective equipment may intervene.

7. Handling and storage

Handling

- 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 equipment.
Avoid exposure - obtain special instructions before use.
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.
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 use sparking tools.
These safety instructions also apply to empty packaging which may still contain product residues.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Storage

- Requirements for storage areas and containers : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
Store in accordance with the particular national regulations.



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8. Exposure controls/personal protection

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
butanone	78-93-3	PC-TWA	300 mg/m3	2007-04-27	GBZ 2.1-2007
butanone	78-93-3	PC-STEL	600 mg/m3	2007-04-27	GBZ 2.1-2007
Acetone	67-64-1	PC-TWA	300 mg/m3	2002-04-08	GBZ 2.1-2007
Acetone	67-64-1	PC-STEL	450 mg/m3	2002-04-08	GBZ 2.1-2007
Ethyl acetate	141-78-6	PC-TWA	200 mg/m3	2002-04-08	GBZ 2.1-2007
Ethyl acetate	141-78-6	PC-STEL	300 mg/m3	2002-04-08	GBZ 2.1-2007
xylene	1330-20-7	PC-TWA	50 mg/m3	2007-04-27	GBZ 2.1-2007
xylene	1330-20-7	PC-STEL	100 mg/m3	2007-04-27	GBZ 2.1-2007
n-hexane	110-54-3	PC-TWA	100 mg/m3	2007-04-27	GBZ 2.1-2007
n-hexane	110-54-3	PC-STEL	180 mg/m3	2007-04-27	GBZ 2.1-2007

Engineering measures

Use only in an area equipped with explosion proof exhaust ventilation.
 Handle only in a place equipped with local exhaust (or other appropriate exhaust).

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.
 Recommended Filter type:



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- : Organic gas and low boiling vapour type

- Hand protection : butyl-rubber
Manufacturer, importer, supplier: Class 1
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.

- Eye protection : 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.

9. Physical and chemical properties

Appearance

- Physical state : aerosol
- Colour : white

- Odour : solvent-like

Safety data

- Flash point : < -20 °C
Method: Abel-Pensky

- Ignition temperature : Remarks: No data available

- Lower explosion limit : 1.4 %(V)

- Upper explosion limit : 26.2 %(V)



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Flammability (solid, gas)	: Extremely flammable aerosol.
Oxidizing properties	: Note: No data available
Auto-ignition temperature	: Note: not auto-flammable
pH	: Note: Not applicable
Melting point/range	: Note: No data available
Boiling point/boiling range	: < -20 °C at 1,013.00 hPa
Sublimation point	: Note: No data available
Vapour pressure	: 4,400.00 hPa at 20 °C
Density	: 0.74 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	: < 20.5 mm ² /s at 40 °C
Relative vapour density	: Note: No data available
Evaporation rate	: Note: No data available

10. Stability and reactivity

Conditions to avoid	: Heat, flames and sparks.
Materials to avoid	: Oxidizing agents
Hazardous decomposition products	: No decomposition if stored and applied as directed.
Thermal decomposition	: Note: No data available



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11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method
:
Remarks: Effects due to ingestion may include:
:
Symptoms: Central nervous system depression

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Method: Calculation method
:
Remarks: Respiration of solvent vapour may cause dizziness.
:
Symptoms: Inhalation may provoke the following symptoms:,
Respiratory disorder, Dizziness, Drowsiness, Vomiting,
Fatigue, Vertigo, Central nervous system depression

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method
:
Symptoms: Redness, Local irritation

Skin corrosion/irritation

Skin irritation : Remarks: Irritating to skin.

Serious eye damage/eye irritation

Eye irritation : Remarks: Irritating 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



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Remarks

butanone : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

xylene : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Dimethyl ether : Species: Rat
Exposure time: 2
Print Date: OECD Test Guideline 453

Carcinogenicity

Remarks
butanone : Not classifiable as a human carcinogen.

xylene : Not classifiable as a human carcinogen.

Teratogenicity

Remarks

Teratogenicity

Teratogenicity

Teratogenicity

Dimethyl ether : Animal testing did not show any effects on fertility.

butanone : No effects on or via lactation
No toxicity to reproduction

xylene : No toxicity to reproduction
No toxicity to reproduction

n-hexane : Suspected human reproductive toxicant

Target Organ Systemic Toxicant - Single exposure

Naphtha (petroleum), hydrotreated light : Exposure routes: Inhalation
Target Organs: Central nervous system
Remarks: May cause drowsiness or dizziness.

butanone : Exposure routes: Inhalation
Target Organs: Respiratory system
Remarks: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects., May cause drowsiness or dizziness.



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- Acetone : Exposure routes: Inhalation
Remarks: May cause drowsiness or dizziness.
- Ethyl acetate : Exposure routes: Inhalation
Remarks: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
- xylene : Exposure routes: Inhalation
Target Organs: Respiratory system
Remarks: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
- n-hexane : Exposure routes: Inhalation
Target Organs: Central nervous system
Remarks: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Target Organ Systemic Toxicant - Repeated exposure

: This information is not available.

Target Organ Systemic Toxicant - Repeated exposure

- butanone : Remarks: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
- xylene : Exposure routes: Inhalation
Target Organs: Central nervous system
Remarks: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Exposure routes: Ingestion
Target Organs: Liver, Kidney
Remarks: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
- n-hexane : Exposure routes: Inhalation
Target Organs: Central nervous system
Remarks: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Aspiration hazard

- Aspiration toxicity : May be fatal if swallowed and enters airways.
: May be fatal if swallowed and enters airways.



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Further information : Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

12. Ecological information

Ecotoxicity effects

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 : Remarks:
No data available

Toxicity to bacteria : Remarks:
No data available

Toxicity to fish (Chronic toxicity) xylene : NOEC: > 1.3 mg/l
Exposure time: 56 d
Species: Oncorhynchus mykiss (rainbow trout)
flow-through test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) xylene : EC50: 2.90 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
static test
Method: OECD Test Guideline 211

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



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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 Naphtha (petroleum), hydrotreated light : Toxic to aquatic life.

Chronic aquatic toxicity Naphtha (petroleum), hydrotreated light : Toxic to aquatic life with long lasting effects.
Naphtha (petroleum), hydrotreated light :
Naphtha (petroleum), hydrotreated light :
Naphtha (petroleum), hydrotreated light :

Results of PBT assessment Dimethyl ether : Non-classified vPvB substance, Non-classified PBT substance

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

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

Additional ecological information : Harmful to aquatic life with long lasting effects.

13. Disposal considerations

Product : 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. Offer empty spray cans to an established disposal company. Pressurized container: Do not pierce or burn, even after use.



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14. Transport information

IATA

UN number : 1950

Description of the goods : Aerosols, flammable

Class : 2.1

Labels : 2.1

Packing instruction (cargo aircraft) : 203

Packing instruction (passenger aircraft) : 203

Packing instruction (passenger aircraft) : Y203

Environmentally hazardous : no

IMDG

UN number : 1950

Description of the goods : AEROSOLS

Class : 2.1

Labels : 2.1

EmS Number : F-D, S-U

Marine pollutant : no

Other information : No special precautions required.

15. Regulatory information



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Other regulations : Law on the Prevention and Control of Occupational Diseases

16. Other information

Further information

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