

OKS 471

Version 2.1

Revision Date 12.05.2021

Print Date 12.05.2021

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

Product information

Product name : OKS 471

Use of the Substance/Mixture : Lubricant spray

Company : OKS Spezialschmierstoffe GmbH
Ganghoferstr. 47
D-82216 Maisach-Gernlinden
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Fax.: +49 8142 3051 599
info@oks-germany.com

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Material Compliance Management

National contact :

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

2. Hazards identification

GHS Classification

: Aerosols, Category 1
Aspiration hazard, Category 1

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.

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.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.



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Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

3. Composition/information on ingredients

Chemical nature : Active agent with propellant and solvent.
Mineral oil.

Hazardous components

Chemical name	CAS-No.	Concentration[%]
Alkanes, C9-12-iso-	64742-49-0	30 - 50
Butane	106-97-8	20 - 30
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	10 - 20
propane	74-98-6	1 - 10
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	1 - 10
lithium 12-hydroxystearate	7620-77-1	1 - 10
Isobutane	75-28-5	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.
Get medical attention immediately if irritation develops and persists.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
Wash skin thoroughly with soap and water or use recognized skin cleanser.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
Seek medical advice.



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If swallowed : Move the victim to fresh air.
Keep respiratory tract clear.
Do NOT induce vomiting.
Obtain medical attention.
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.

Risks : Can be absorbed through skin.
Risk of product entering the lungs on vomiting after ingestion.
Health injuries may be delayed.

Treatment : Treat symptomatically.

5. Firefighting measures

Suitable extinguishing media : ABC powder

Unsuitable extinguishing media : High volume water jet

Hazardous combustion products : Carbon oxides
Metal oxides

Specific hazards during firefighting : 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.
Exposure to decomposition products may be a hazard to health.



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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.
Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

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 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



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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.

8. Exposure controls/personal protection

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Butane	106-97-8	MPC-TWA	300 mg/m3	2018-04-23	RU OEL
Butane	106-97-8	MPC-STEL	900 mg/m3	2018-04-23	RU OEL
propane	74-98-6	MPC-TWA	300 mg/m3	2018-04-23	RU OEL
propane	74-98-6	MPC-STEL	900 mg/m3	2018-04-23	RU OEL
Isobutane	75-28-5	MPC-TWA	300 mg/m3	2018-04-23	RU OEL
Isobutane	75-28-5	MPC-STEL	900 mg/m3	2018-04-23	RU OEL

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 : Respirator with combination filter for vapour/particulate (EN 141)
 Short term only
 ABEK-P3-filter



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- : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

- Hand protection : Nitrile 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 : Safety glasses with side-shields

- 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 : hydrocarbon-like

Safety data

- Flash point : -97,00 °C
Method: Abel-Pensky

- Ignition temperature : Remarks: No data available

- Lower explosion limit : 1,5 %(V)

- Upper explosion limit : 8,5 %(V)

- Flammability (solid, gas) : Extremely flammable aerosol.



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Oxidizing properties	: Note: No data available
Auto-ignition temperature	: Note: not auto-flammable
pH	: Note: substance/mixture is non-soluble (in water)
Melting point/range	: Note: No data available
Boiling point/boiling range	: -44 °C at 1.013,00 hPa
Sublimation point	: Note: No data available
Vapour pressure	: 3.500,00 hPa at 20 °C
Density	: 0,72 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
Hazardous reactions	: No dangerous reaction known under conditions of normal use.



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11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

Acute inhalation toxicity
Butane : LC50: 658 mg/l
Exposure time: 4 h
Species: Rat

Distillates (petroleum),
hydrotreated heavy paraffinic : LC50: > 5,53 mg/l
Exposure time: 4 h
Species: Rat
Method: OECD Test Guideline 403

Distillates (petroleum),
hydrotreated heavy
naphthenic : LC50: > 5,53 mg/l
Exposure time: 4 h
Species: Rat
Method: OECD Test Guideline 403

Isobutane : LC50: 658 mg/l
Exposure time: 4 h
Species: Rat

Acute dermal toxicity :
Remarks: Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.

:
Symptoms: Skin disorders

Skin corrosion/irritation

Skin irritation : Remarks: This information is not available.

Serious eye damage/eye irritation

Eye irritation : Remarks: Contact with eyes may cause irritation.

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



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Germ cell mutagenicity

Remarks

Distillates (petroleum), hydrotreated heavy naphthenic : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Remarks

Distillates (petroleum), hydrotreated heavy paraffinic : Not classifiable as a human carcinogen.

Distillates (petroleum), hydrotreated heavy naphthenic : Not classifiable as a human carcinogen.

Teratogenicity

Teratogenicity

Remarks

Distillates (petroleum), hydrotreated heavy paraffinic : No toxicity to reproduction

Distillates (petroleum), hydrotreated heavy naphthenic : No toxicity to reproduction

Distillates (petroleum), hydrotreated heavy naphthenic : No toxicity to reproduction

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Distillates (petroleum), hydrotreated heavy naphthenic : No toxicity to reproduction

Target Organ Systemic Toxicant - Single exposure

Distillates (petroleum), hydrotreated heavy naphthenic : Remarks: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Target Organ Systemic Toxicant - Repeated exposure

: This information is not available.

Target Organ Systemic Toxicant - Repeated exposure

Distillates (petroleum), hydrotreated heavy naphthenic : Remarks: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

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

: May be fatal if swallowed and enters airways.

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

12. Ecological information

Ecotoxicity effects



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- 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:
No data available
- Toxicity to fish (Chronic toxicity)
Distillates (petroleum), hydrotreated heavy naphthenic : NOELR: >= 1.000 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
Remarks:
The value is calculated
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
Distillates (petroleum), hydrotreated heavy paraffinic : NOEC: 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
semi-static test
Method: OECD Test Guideline 211
- Distillates (petroleum), hydrotreated heavy naphthenic : NOELR: 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Reproduction 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
- Distribution among environmental compartments : Remarks:
No data available



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Biodegradability : Remarks:
No data available

Physico-chemical removability : Remarks:
No data available

Further information on ecology

Results of PBT assessment
Distillates (petroleum), hydrotreated heavy paraffinic : Non-classified vPvB substance, Non-classified PBT substance
Distillates (petroleum), hydrotreated heavy naphthenic : Non-classified PBT substance, Non-classified vPvB substance
Additional ecological information : No information on ecology is available.

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.

14. Transport information

ADR

UN number : 1950
Description of the goods : AEROSOLS
Class : 2
Classification Code : 5F
Labels : 2.1
Environmentally hazardous : no



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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

RID

UN number : 1950
Description of the goods : AEROSOLS
Class : 2
Classification Code : 5F
Hazard Identification : 23



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Number

Labels : 2.1

Environmentally hazardous : no

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.

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