

**OKS 2351**

Version 2.3

Revision Date 08.09.2021

Print Date 09.09.2021

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

**Product information**

Product name : OKS 2351

Use of the Substance/Mixture : Lubricant spray

Company : OKS Spezienschmierstoffe GmbH  
Ganghoferstr. 47  
D-82216 Maisach-Gernlinden  
Tel.: +49 8142 3051 500  
Fax.: +49 8142 3051 599  
info@oks-germany.com

E-mail address : mcm@oks-germany.com  
Material Compliance Management

National contact :

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

**2. Hazards identification**

**GHS Classification**

: Aerosols, Category 1  
Skin irritation, Category 2  
Reproductive toxicity, Category 2  
Specific target organ toxicity - single exposure, Category 3, Central nervous system  
Aspiration hazard, Category 1  
Short-term (acute) aquatic hazard, Category 3  
Long-term (chronic) aquatic hazard, 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.  
H336: May cause drowsiness or dizziness.  
H361: Suspected of damaging fertility or the unborn child.  
H412: Harmful to aquatic life with long lasting effects.



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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.  
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 agent with propellant and solvent.

**Hazardous components**

Chemical name	CAS-No.	Concentration[%]
Butane	106-97-8	30 - 50
propane	74-98-6	10 - 20
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	10 - 20
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	10 - 20
Naphtha (petroleum), hydrotreated light	64742-49-0	10 - 20
Kaolin, calcined	92704-41-1	1 - 10
Aluminium powder (desensitized)	7429-90-5	1 - 10
Isobutane	75-28-5	1 - 10
n-hexane	110-54-3	0,25 - 1

**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



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- 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 off immediately with plenty of water.
- 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 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 : Aspiration may cause pulmonary oedema and pneumonitis.

Inhalation may provoke the following symptoms:

Unconsciousness

Dizziness

Drowsiness

Headache

Nausea

Tiredness

Skin contact may provoke the following symptoms:

Erythema

- 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.

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**5. Firefighting measures**

- Suitable extinguishing media : ABC powder



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- Unsuitable extinguishing media : High volume water jet
- 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.
- Hazardous combustion products : Carbon oxides  
Nitrogen oxides (NOx)  
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.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Cool containers/tanks with water spray.

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**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 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.



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**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 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



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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
n-hexane	110-54-3	MPC- TWA	300 mg/m3	2018-04-23	RU OEL
n-hexane	110-54-3	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 : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.  
Short term only  
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 : 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.



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## 9. Physical and chemical properties

### Appearance

Physical state : aerosol  
Colour : grey  
Odour : characteristic

### Safety data

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

Ignition temperature : Remarks: No data available

Lower explosion limit : 0,8 %(V)

Upper explosion limit : 10,9 %(V)

Flammability (solid, gas) : Extremely flammable aerosol.

Oxidizing properties : Note: No data available

Auto-ignition temperature : Note: not auto-flammable

pH : Note: Not applicable  
substance/mixture is non-soluble (in water)

Melting point/range : Note: No data available

Boiling point/boiling range : -44,5 °C  
at 1.013,00 hPa

Sublimation point : Note: No data available

Vapour pressure : 4.750,00 hPa  
at 20 °C

Density : 0,70 g/cm<sup>3</sup>  
at 20 °C

Bulk density : Note: No data available

Water solubility : Note: insoluble

Partition coefficient: n-octanol/water : Note: No data available



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Solubility in other solvents : Note: No data available  
Viscosity, dynamic : Note: No data available  
Viscosity, kinematic : < 20,5 mm<sup>2</sup>/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.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

Acute oral toxicity :  
Remarks: Effects due to ingestion may include:  
:  
Symptoms: Central nervous system depression  
Acute inhalation toxicity :  
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  
Distillates (petroleum),  
hydrotreated heavy paraffinic : LD50: > 5.000 mg/kg  
Species: Rabbit  
Method: OECD Test Guideline 402  
Distillates (petroleum),  
solvent-dewaxed heavy  
paraffinic : LD50: > 5.000 mg/kg  
Species: Rabbit  
Method: OECD Test Guideline 402





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Naphtha (petroleum), hydrotreated light : LD50: > 2.000 mg/kg  
Species: Rabbit  
Method: OECD Test Guideline 402

n-hexane : LD50: 3.350 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: 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

**Carcinogenicity**

Distillates (petroleum), solvent-dewaxed heavy paraffinic : Species: Mouse  
Print Date: OECD Test Guideline 451

**Carcinogenicity**

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

**Teratogenicity**

Remarks  
**Teratogenicity**  
Distillates (petroleum), hydrotreated heavy paraffinic : 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.

Kaolin, calcined : Exposure routes: Inhalation  
Remarks: The substance or mixture is classified as specific



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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.

**Aspiration hazard**

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

: May be fatal if swallowed and enters airways.

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

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**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 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



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Distillates (petroleum), solvent-dewaxed heavy paraffinic : NOEC: 10 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

**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**

Short-term (acute) aquatic hazard

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

Aluminium powder (desensitized) : This product has no known ecotoxicological effects.

Long-term (chronic) aquatic hazard

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

Aluminium powder (desensitized) : This product has no known ecotoxicological effects.

Naphtha (petroleum), hydrotreated light :

Aluminium powder (desensitized) :

Naphtha (petroleum), hydrotreated light :

Aluminium powder (desensitized) :

Naphtha (petroleum), hydrotreated light :



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Aluminium powder (desensitized) :  
Results of PBT assessment  
Distillates (petroleum), hydrotreated heavy paraffinic : Non-classified vPvB substance, Non-classified PBT 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.

**14. Transport information**

**ADR**

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

**IATA**

UN number : 1950  
Description of the goods : Aerosols, flammable  
Class : 2.1  
Labels : 2.1



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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 Number : 23

Labels : 2.1

Environmentally hazardous : no

Other information : No special precautions required.



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**15. Regulatory information**

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**16. Other information**

**Further information**

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