

KAESER-Schraubenkompressor-Kühl-Öl SIGMA FLUID MOL

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

KAESER-Schraubenkompressor-Kühl-Öl SIGMA FLUID MOL

Further trade namesKAESER-Schraubenkompressor-Kühl-Öl SIGMA FLUID MOL , 9.0920.10020, 9.0920.10030,
9.0920.10040, 9.0923.1, 9.5411.1**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

cooling lubricant for rotary screw compressor

Uses advised against

not known

1.3. Details of the supplier of the safety data sheet**Supplier**

Company name: KAESER Kompressoren SE
Street: Carl- Kaeser- Strasse 26
Place: D-96450 Coburg
Telephone: +49(0)9561/640-0
Responsible Department: sdb.de@kaeser.com

1.4. Emergency telephone number:

Giftinformationszentrum Nord Goettingen + 49 (0) 551 19240 (Poison Information Centre Goettingen)

Further Information**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]:**

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

2.2. Label elements**Additional advice on labelling**

Labelling (EU-GHS): none

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Mineral oil + Additive

Further Information

Note L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 . This note applies only to certain complex oil-derived substances in Appendix I.

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of skin irritation, consult a physician.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact : Causes mild skin irritation.

ingestion. : Symptoms: few or no symptoms expected. If any, nausea and diarrhoea might occur.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

In case of fire:

Carbon dioxide (CO₂)

Dry extinguishing powder

In case of major fire and large quantities:

Water spray jet

Foam

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon dioxide (CO₂), Carbon monoxide. Nitrogen oxides (NO_x).

Sulfur oxides.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. (DIN-/EN-Norms: EN469) In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders: Avoid contact with skin, eyes and clothes. Wear personal protection equipment (refer to section 8).

For non-emergency personnel: Avoid contact with skin, eyes and clothes. Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Cover drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

Wear personal protection equipment (refer to section 8).

Special danger of slipping by leaking/spilling product.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

Advices on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed and in a well-ventilated place.

Keep only in original container.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Suitable material for Container: Stainless steel. Polyethylene (HDPE)

Unsuitable materials for Container: PVC (Polyvinyl chloride).

Advice on storage compatibility

Do not store together with: Gas. Explosive hazardous substances. Oxidising substances (solid) Oxidising substances (liquid). Radioactive substances. Infectious substances.

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Protect against: UV-radiation/sunlight, Heat

7.3. Specific end use(s)

refer to section 1.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

Air limit values:

Possibility of exposure to: Aerosol

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Limit value = 5 mg/m³ - Source: ACGIHRecommended monitoring procedures:
DIN-/EN-Norms: EN 689, EN 14042, EN 482**8.2. Exposure controls****Appropriate engineering controls**

Vapours / aerosols should be extracted by suction directly at point of origin.

Protective and hygiene measures

Always close containers tightly after the removal of product. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Take off contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

Eye/face protectionWear safety glasses; chemical goggles (if splashing is possible).
DIN-/EN-Norms: EN 166**Hand protection**In case of prolonged or frequently repeated skin contact: Wear suitable gloves. DIN EN 374
Suitable material: NBR (Nitrile rubber).
Thickness of glove material: 0,35 mm
Breakthrough time > 480 min.
Check leak tightness/impermeability prior to use. Breakthrough times and swelling properties of the material must be taken into consideration.**Skin protection**Protective clothing.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.**Respiratory protection**With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
Generation/formation of aerosols
Recommended respiratory protection articles: Combination filtering device (EN 14387) Type: AP-2/3
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).**Environmental exposure controls**

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**Physical state: liquid
Colour: light brown
Odour: characteristic**Test result Test method**

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pH-Value:	not determined	DIN 19261
Changes in the physical state		
Melting point:	not determined	not applicable
Initial boiling point and boiling range:	>280 °C	not known
Pour point:	-30 °C	ASTM D 97-66
Flash point:	230 °C	ASTM D 92
Sustaining combustion:	No data available	not applicable
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Explosive properties		
none		
Lower explosion limits:	1 vol. %	not known
Upper explosion limits:	10 vol. %	not known
Ignition temperature:	not determined	not applicable
Decomposition temperature:	not determined	not applicable
Oxidizing properties		
none		
Vapour pressure: (at 20 °C)	<0,005 hPa	not known
Vapour pressure:		
Density (at 15 °C):	0,868 g/cm ³	ASTM D 1298
Bulk density:	The product has not been tested.	not applicable
Water solubility:	not miscible	not applicable
Solubility in other solvents		
not determined		
Partition coefficient:	The product has not been tested.	
Viscosity / dynamic:	not determined	not applicable
Viscosity / kinematic: (at 40 °C)	46 mm ² /s	ASTM D 445
Flow time:	not determined	not applicable
Vapour density:	>1[Air=1]	not known
Evaporation rate:	not determined	not applicable
Solvent separation test:	not determined	
Solvent content:	not determined	

9.2. Other information

Solid content: not determined

Auto-ignition temperature: 320°C

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

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The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reacts with : Oxidizing agents, strong.

10.4. Conditions to avoid

UV-radiation/sunlight,Heat

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.

Acute oral toxicity LD 50 > 5000 mg/kg (Rat)

Acute toxicity, dermal LD 50 > 5000 mg/kg (Rabbit)

The statement is derived from the properties of the components.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Carcinogenicity: negative.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information**12.1. Toxicity**

Acute fish toxicity: LL/EL/IL50 >100 mg/l

Chronic (long-term) fish toxicity: not determined

Acute Daphnia toxicity: LL/EL/IL50 >100 mg/l

Chronic daphnia toxicity: not determined

Algae toxicity: LL/EL/IL50 >100 mg/l

Chronic algae toxicity: not determined

The statement is derived from the properties of the components.

12.2. Persistence and degradability

Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants.

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Product is partially biodegradable.
Some of the components are poorly biodegradable.

12.3. Bioaccumulative potential

There are no data available on the preparation/mixture itself.

12.4. Mobility in soil

Immobilisation

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Waste codes/waste designations according to EWC/AVV

Waste disposal number of waste from residues/unused products

130205 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils
Classified as hazardous waste.

Waste disposal number of used product

130205 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances
Classified as hazardous waste.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

<u>14.1. UN number:</u>	No dangerous good in sense of these transport regulations.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of these transport regulations.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of these transport regulations.
<u>14.4. Packing group:</u>	No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

<u>14.1. UN number:</u>	No dangerous good in sense of these transport regulations.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of these transport regulations.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of these transport regulations.

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- 14.4. Packing group:** No dangerous good in sense of these transport regulations.
- Marine transport (IMDG)**
- 14.1. UN number:** No dangerous good in sense of these transport regulations.
- 14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.
- 14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.
- 14.4. Packing group:** -
- Air transport (ICAO)**
- 14.1. UN number:** No dangerous good in sense of these transport regulations.
- 14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.
- 14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.
- 14.4. Packing group:** -
- 14.5. Environmental hazards**
- ENVIRONMENTALLY HAZARDOUS: no
- 14.6. Special precautions for user**
See section 8.
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

- 2010/75/EU (VOC): not determined
- 2004/42/EC (VOC): not determined

Additional information

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].
Not subject to regulation 96/82/EC. (SEVESO II) , 2012/18/CE (SEVESO III)
REACH 1907/2006 appendix XVII: not relevant

National regulatory information

- Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

Rev. 1.00; 01.17.02..2015, Initial release

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
ACGIH: The American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
(International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

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GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
LL50: Lethal Load, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Concerning the International Transport of Dangerous Goods by Rail)
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)