

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Trade name: SilOil M20.195/235.20

No.: 6161, 6162

Print date: 27.12.2016

Valid from: Oktober 2016

Version: 1.2.0 (1.1.0)



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

1.1 Identification of the substance/mixture

Substance name: SilOil M20.195/235.20

No.: 6161, 6162

Chemical characterization: —

EC No: —

CAS No: —

REACH Registration No: —

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:

Surface treatment, assembling aid, release agent, damperfluid, cooling oil

Uses advised against:

No information available.

1.3 Identification of the company / supplier

Supplier:

Peter HUBER Kältemaschinenbau AG

Street:

Werner-von-Siemens-Str. 1

Postal code:

DE-77656 Offenburg

Contact for technical information

Technical Support

Tel.: +49 (0) 781 9603-244

Fax: +49 (0) 781 57211

Email: support@huber-online.com

1.4 Emergency telephone number

+49 2751/524-113

+49 179/6910027 (Mo-Fr 08:00-16:00 / 8.00am-4.00pm)

+49 (0) 61 31 1924 0 (Giftinfo Mainz, 24 h German and English)

+49 (0) 761-19 240 (Vergiftungs-Informationszentrale Freiburg)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

None.

Classification procedure

Calculation method.

2.2 Label elements

None.

2.3 Other hazards

No information available.

3. Composition/information on ingredients

3.1 Mixtures

Hazardous ingredients

None.

Further ingredients

Polydimethylsiloxane.

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4. First aid measures

4.1 Description of first aid measures

General information

Change contaminated, saturated clothing. When in doubt or if symptoms are observed, get medical advice.

Following inhalation

Provide fresh air.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap.

After eye contact

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water.

Self-protection of the first aider

No special measures are necessary.

Information to physician

Treatment

Treat symptomatically.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

None.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), alcohol resistant foam, extinguishing powder, sand.

Unsuitable extinguishing media

Not known.

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for fire-fighters

In case of fire toxic gases may be formed.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

None.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Take the precautions customary when handling chemicals. Use personal protection equipment. Special danger of slipping by leaking/spilling product.

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).

6.3 Methods and material for containment and cleaning up

For cleaning up

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

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6.4 Reference to other sections

None.

6.5 Additional information

No data available.

7. Handling and storage

7.1 Precaution for safe handling

Avoid contact with skin and eyes.

Protective measures

Use only in well-ventilated areas. Do not breathe gas/fumes/vapour/spray.

Measures to prevent fire

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container.

Hints on joint storage

Storage class (TRGS 510): 10

Further information on storage conditions

Protect containers against damage.

7.3 Specific end use(s)

None.

8. Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

Biological limit values

No data available.

DNEL/DMEL and PNEC values

DNEL/DMEL

No data available.

PNEC

Additional information

8.2 Exposure controls

Personal protection equipment

Eye / face protection

Eye glasses with side protection.

Skin protection

Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: Butyl caoutchouc (butyl rubber) NBR (Nitrile rubber)

Breakthrough time (maximum wearing time): 480 minutes. Check leak tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection

Usually no personal respirative protection necessary.

General health and safety measures

Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing. Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs.

8.3 Additional information

No data available.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: Different according to colour.
Odour: Odourless

Safety relevant basis data

Solidifying point	(1 bar / 1 Pa)		not determined		Brookfield
Melting point/melting range			not determined		
Freezing point			not determined		
Initial boiling point and boiling range			not applicable		
Decomposition temperature			not determined		
Flash point		>	200	°C	
Ignition temperature			not determined		
Lower explosion limit			not determined		
Upper explosion limit			not determined		
Vapour pressure	(50 °C)		not determined		
Density	(20 °C)	approx.	0,95	g/cm ³	
Solvent separation test	(20 °C)		not determined		
Fat solubility	(20 °C)		not determined		
Solubility in water			insoluble		
pH	(20 °C)		not applicable		
log P O/W			not determined		
Kinematic viscosity	(25 °C)	approx.	20	mm ² /s	
Solid content			not determined		
Odour threshold			not determined		
Relative vapour density	(20 °C)		not determined		
Evaporation rate			not determined		
Vapourisation rate			not determined		
Flammable solids	not applicable				
Flammable gases	no data available				
Oxidising liquids	no data available				
Explosive properties	not determined				
Corrosive to metals	not determined				

9.2 Other information

No data available.

10. Stability and reactivity

10.1 Reactivity

No dangerous reactions known.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.
If the maximum operating temperatures of the heat transfer fluid is not observed, it leads first to an increase in viscosity.
Above a temperature of about 150 ° C in an open bath it may result in gelling of the heat transfer fluid.
We recommend regular review of the heat transfer fluid and / or replacement of the heat transfer fluid.

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It should be borne in mind that the heat transfer fluid has a finite life and its condition must be checked regularly.

At high temperatures, Silicon Oil can be chemically altered;

- in the presence of oxidising media such as air, an increase in viscosity and possibly even gelling of the fluid owing to crosslinking reactions can be expected
- contact with products having a catalytic effect, such as acids, lyes and various metal compounds usually induces a process of depolymerisation, resulting in a drop in viscosity

The higher the operating temperature the faster these reactions take place and oxidation is particularly accelerated by use of the oil in an open bath.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

10.7 Additional information

No data available.

11. Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter: LD50 (POLYDIMETHYLSILOXANE)
Exposure route: Oral
Species: Rat
Effective dose: > 5000 mg/kg

The product has not been tested.

Acute dermal toxicity

Parameter: LD50 (POLYDIMETHYLSILOXANE)
Exposure route: Dermal
Species: Rat
Effective dose: > 2000 mg/kg

The product has not been tested.

Acute inhalation toxicity

The product has not been tested.

STOT-single exposure

The product has not been tested.

Specific symptoms in animal studies

The product has not been tested.

Irritant and corrosive effects

Primary irritation to the skin

The product has not been tested.

Irritation to eyes

The product has not been tested.

Irritation to respiratory tract

The product has not been tested.

Sensitisation

In case of skin contact

The product has not been tested.

In case of inhalation

The product has not been tested.

Repeated dose toxicity (subacute, subchronic, chronic)

The product has not been tested.

11.2 Toxicokinetics, metabolism and distribution

The product has not been tested.

11.3 Other adverse effects

No data available.

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11.4 Additional information

No data available.

12. Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter: LCO (POLYDIMETHYLSILOXANE)
Species: Leuciscus idus (golden orfe)
Evaluation parameter: Acute (short-term) fish toxicity
Effective dose: 200 mg/l
Exposure time: 96 h
The product has not been tested.

Chronic (long-term) fish toxicity

Parameter:
Species:
Effective dose:
The product has not been tested.

Acute (short-term) daphnia toxicity

Parameter: ECO (Polydimethylsiloxane)
Species: Daphnia magna (Big water flea)
Effective dose: > 0,0001 mg/l
Exposure time: 48 h
The product has not been tested.

Chronic (long-term) daphnia toxicity

The product has not been tested.

Acute (short-term) algae toxicity

Parameter: IC50 (Polydimethylsiloxane)
Species: Skeletonema costatum
Effective dose: > 10000 mg/l
The product has not been tested.

Chronic (long-term) algae toxicity

The product has not been tested.

Bacteria toxicity

Parameter: ECO (POLYDIMETHYLSILOXANE)
Species: Pseudomonas putida
Effective dose: > 10000 mg/l
The product has not been tested.

Terrestrial toxicity

The product has not been tested.

Toxicity to terrestrial plants

The product has not been tested.

Effects in sewage plants

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the Biodegradability of activated sludge.

12.2 Persistence and degradability

Abiotic degradation

The product can be eliminated from water by abiotic processes, e.g. adsorption on activated sludge.

Biodegradability

Not readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

The product has not been tested.

12.4 Mobility in soil

The product has not been tested.

Adsorption/Desorption

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12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

No data available.

12.7 Additional ecotoxicological information

No data available.

13. Disposal considerations

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Consult the appropriate local waste disposal expert about waste disposal.

Product/Packaging disposal

Waste treatment options

Appropriate disposal / Product

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the dusty and process.

Appropriate disposal / Package

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

14. Transport information

14.1 UN number

No dangerous goods in sense of this transport regulation.

14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation.

14.3 Transport hazard class(es)

No dangerous goods in sense of this transport regulation.

14.4 Packing group

No dangerous goods in sense of this transport regulation.

14.5 Environmental hazards

No dangerous goods in sense of this transport regulation.

14.6 Special precautions for user

None.

15. Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

National regulations

Technische Anleitung Luft (TA-Luft)

Sum organic substances class III : 85 - 100 %

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water). Classification according to VwVwS.

Additional information

Substance / product listed in the following inventories

TSCA EINECS/ELINCS

15.2 Chemical safety assessment

No information available.

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16. Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

REACH - Registration, Evaluation, Authorisation of Chemicals
GHS - Globally Harmonised System of Classification and Labeling
CLP - Classification, Labeling and Packaging of Substances and Mixtures
CAS - Chemical Abstract Service
TWA - Time Weighted Average
DNEL/DMEL - Derived No Effect Level
PNEC - Predicted No Effect Concentration
STP - Sewage Treatment Plant
TRGS - Technical Rules for Hazardous Substances (German Regulations)
STEL - Short-term Exposure Limit
TLV - threshold limit value
AGW - Occupational threshold limit value
RCP - Reciprocal Calculation Procedure
ATE - Acute Toxicity Estimate
MAK Threshold limit values Germany
LD50 - Lethal Dose, 50%
LC50 - Lethal concentration, 50%
OECD - Organization for Economic Cooperation and Development
NOAEL - No Observed Adverse Effect Level
EC50 - half maximal effective concentration
NOEC - No Observed Effect Concentration
PBT - Persistent, Bioaccumulative, Toxic
vPvB - very Persistent, very Bioaccumulative
ADR/RID - European Agreement concerning the International Carriage of Dangerous Goods by Road (Accord européen relatif au transport international des marchandises Dangereuses par Route)/Regulations Concerning the International Transport of Dangerous Goods by Rail (Règlement concernant le transport International ferroviaire de marchandises Dangereuses)
IMDG - International Maritime Dangerous Goods Code
ICAO - International Civil Aviation Association
IATA - International Air Transport Association
VwVws - German administrative regulation on the classification of substances hazardous to water into water hazard classes

16.3 Key literature references and sources for data

None.

16.4 Classification for mixtures and used evaluation method according to regulation (EC)

No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

None.

16.6 Training advice

None.

16.7 Additional information

None.

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.