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

Trade name: SilOil M60.115/200.05 No.: 6165, 6166

Print date: 27.02.2014 Valid from: November 2013 high precision thermoregulation

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

1.1 Identification of the substance/mixture

Product name: SilOil M60.115/200.05 No.: 6165, 6166 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:

Thermofluid.

Uses advised against:

No information available.

1.3 Identification of the company/supplier

Supplier: Peter HUBER Kältemaschinenbau GmbH Street: Werner-von-Siemens-Str. 1 Postal code: DE-77656 Offenburg

Contact for technical information Technical Service

Tel.: +49 (0) 781 9603-244 Fax: +49 (0) 781 57211 Email: info@huber-online.com

1.4 Emergency telephone number

+49 (0) 179/6910027 +49 (0) 2751/524-113 (Mo-Fr 08:00-16:00 / 8.00am-4.00pm) +49 (0) 61 31 1924 0 (Giftinfo Mainz, 24 h German and Englisch) +49 (0) 761-19 240 (Vergiftungs-Informationszentrale Freiburg)

2. Hazards identification

2.1 Classification of the substance or mixture Classification according to Directive 67/548/EEC or 1999/45/EC None.

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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First aid measures **Description of first aid measures** 4.1

General information

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

After 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**

Extinguishing media 5.1

Suitable extinguishing media

Carbon dioxide (CO2). Alcohol resistant foam. Water spray jet Extinguishing powder. Sand.

Unsuitable extinguishing media None.

5.2 Special hazards arising from the substance or mixture No information available.

5.3 Advice for firefighters

No special measures are necessary.

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.

Peter Huber Kältemaschinenbau GmbH · Werner-von-Siemens-Str. 1 · 77656 Offenburg · Tel. +49 781-9603-0 · www.huber-online.com · info@huber-online.com

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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).

- 6.4 Reference to other sections None.
- 6.5 Additional information

No data available.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

Protective measures

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

Fire prevent measures

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

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 None.

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 No data available.

8.2 Exposure controls

Personal protection equipment

Eye / face protection Eye glasses with side protection

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Skin protection Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. **Suitable material:** Butyl caoutchouc (butyl rubber). NBR (Nitrile rubber).

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.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Boiling temperature / boiling range:	ca. 240 °C
Decomposition temperature:	No data available.
Flash point:	ca. 120 °C
Ignition temperature:	> 400 °C
Lower explosion limit:	None.
Upper explosion limit:	None.
Vapour pressure:	(20 °C) ca. 0 hPa
Density:	(20 °C) ca. 0,92 g/cm ³
Solubility in water:	Insoluble.
pH value:	(20 °C) not applicable.
log P O/W:	No data available.
Viscosity:	(20 °C) ca. 5 mPa.s
Odour threshold:	No data available.
Relative vapour density:	(20 °C) > 1 (air = 1)
Vapourisation rate	No data available.
Flammable solids:	No data available.
Flammable gases:	No data available.
Oxidising liquids:	No data available.
Explosive properties:	No data available.

9.2 Other information

No data available.

10. Stability and reactivity

10.1 Reactivity

No dangerous reactions known.

10.2 Chemical stability

When using the recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Keep away from sources of ignition. - No smoking.

10.5 Incompatible materials

No information available.

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10.6 Hazardous decomposition products

Measurements at temperatures above 150 °C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

10.7 Additional information

No data available.

11. Toxicological information

11.1 Information on toxicological effects

According to current knowledge, polydimethylsiloxanes are not physiologically a problem; but contact with eyes can cause short time, harmless, reversible blurred vision, due to the formation of an oil film on the eye.

Acute effects

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

Acute dermal toxicity

LD50 (POLYDIMETHYLSILOXANE)
Dermal
Rabbit
> 10000 mg/kg

Acute inhalation toxicity

Parameter:	LC50 (POLYDIMETHYLSILOXANE)
Exposure route:	Inhalation
Species:	Rat
Effective dose:	> 535 mg/kg
Exposure time:	1 h

Specific symptoms in animal studies No data available.

Irritant and corrosive effects

Primary irritation to the skin Not an irritant.

Irritation to eyes Not an irritant.

Irritation to respiratory tract Not an irritant.

Sensitisation

In case of skin contact Not sensitising.

After inhalation Not sensitising.

Repeated dose toxicity (subacute, subchronic, chronic) No data available.

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CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Carcinogenicity

No data available.

Germ cell mutagenicity/Genotoxicity No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity (single exposure) No data available.

Specific target organ toxicity (repeated exposure) No data available.

Aspiration hazard

No data available.

11.2 Toxicokinetics, metabolism and distribution No data available.

11.3 Other adverse effects No data available.

11.4 Additional information No data available.

12. Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter: Species: Evaluation parameter: Effective dose. Exposure time: LCO (POLYDIMETHYLSILOXANE) Leuciscus idus (golden orfe) Acute (short-term) fish toxicity 200 mg/l 96 h

Acute (short-term) daphnia toxicity No data available.

Acute (short-term) algae toxicity No data available.

Bacteria toxicity

Parameter: Species: Effective dose:

Plant toxicity No data available.

Terrestrial toxicity No data available. ECO (POLYDIMETHYLSILOXANE) Pseudomonas putida > 10000 mg/l

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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.

Biodegradation

Not readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No data available.

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 Further ecological information

No data available.

13. Disposal considerations

13.1 Waste treatment methods

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

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.

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15. Regulatory information

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

National regulations

Water hazard class (WGK) Class : 1 (Slightly hazardous to water) Classification according to VwVwS

Additional information

Substance/product listed in the following inventories TSCA AICS DSL/NDSL ENCS (Class 1 and 2) KECL PICCS IECSC EINECS/ELINCS

15.2 Chemical safety assessment

No information available.

16. Other information

- **16.1 Indication of changes** None.
- **16.2 Abbreviations and acronyms** None.
- **16.3 Key literature references and sources for data** None.
- 16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008 [CLP] None.

16.5 Relevant R-, 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.