

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SiOil, M40.165/220.10

Revision date: 25.09.2020

Product code:

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

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Substance name: Polydimethylsiloxane

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

 Silicone polymer:
 surface treatment product, Installation aids, Release agent Refrigerant oil

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Peter Huber Kältemaschinenbau AG	
Street:	Werner-von-Siemens-Strasse 1	
Place:	D-77656 Offenburg	
Telephone:	+49 (0) 781 9603-0	Telefax: +49 (0) 781 57211
e-mail:	info@huber-online.com	
Internet:	www.huber-online.com	
Responsible Department:	info@huber-online.com	

1.4. Emergency telephone number: Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Regulation (EC) No. 1272/2008

This substance is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements
Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none

2.3. Other hazards

 The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
 This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: dodecamethylcyclohexasiloxane

SECTION 3: Composition/information on ingredients
3.1. Substances
Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
540-97-6	dodecamethylcyclohexasiloxane			0.5 - < 1 %
	208-762-8		01-2119517435-42-XXXX	

Full text of H and EUH statements: see section 16.

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Further Information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: dodecamethylcyclohexasiloxane

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. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. Remove contaminated clothing immediately. In case of skin irritation consult a doctor.

After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Dry extinguishing powder. alcohol resistant foam. Atomized water. Sand.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Silicon dioxide (SiO₂).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear chemical resistant suit.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2. Environmental precautions

Discharge into the environment must be avoided. Prevent spread over a wide area (e.g. by containment or oil barriers).

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).

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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

Wear suitable protective clothing. See section 8.

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Usual measures for fire prevention.

Further information on handling

General protection and hygiene measures: See section 8. Vapours / aerosols must be extracted by suction immediately at point of origin.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Store only in original container.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.
Recommended storage temperature: 20°C
Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.
Provide adequate ventilation.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Avoid contact with skin, eyes and clothes. Take off immediately all contaminated clothing.

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Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection

In case of prolonged or frequently repeated skin contact:

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Breathing apparatus in the event of aerosol or mist formation. half-mask with filter (DIN EN 149).

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	various, depending on coloration.
Odour:	odourless

Test method

pH-Value: not applicable

Changes in the physical state

Melting point: not determined

Initial boiling point and boiling range: not applicable

Sublimation point: not determined

Softening point: not determined

Pour point: not determined

Flash point: > 170 °C ISO 2592

Sustaining combustion: Not sustaining combustion

Explosive properties

none

Lower explosion limits: not determined

Upper explosion limits: not determined

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Ignition temperature:	not determined
Auto-ignition temperature	
Gas:	not determined
Decomposition temperature:	not determined
Oxidizing properties	
none	
Vapour pressure: (at 20 °C)	not determined
Density:	1 g/cm ³
Water solubility:	Immiscible
Solubility in other solvents	
not determined	
Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic: (at 25 °C)	ca. 10 mm ² /s
Flow time:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
<u>9.2. Other information</u>	
Solid content:	not determined

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

No hazardous 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

Refer to chapter 10.5.

10.4. Conditions to avoid

UV-radiation/sunlight. heat. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition productsCan be released in case of fire: Carbon monoxide (CO), Carbon dioxide (CO₂), Silicon dioxide (SiO₂)
Measurements have shown that at temperatures above approx. 150 °C a small amount of formaldehyde is split off by oxidative decomposition.**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No data available.

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Acute toxicity

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

Acute oral toxicity

Parameters : LD50

Route of exposure : dermal

Species : Rat

Effective dose: > 5000 mg/kg

By analogy.

Acute dermal toxicity

Parameters : LD50

Route of exposure : oral

Species : Rat

Effective dose: > 2000 mg/kg

By analogy.

Acute inhalation toxicity

The product has not been tested.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
540-97-6	dodecamethylcyclohexasiloxane				
	oral	LD50 2000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 2000 mg/kg	Rat	ECHA Dossier	

Irritation and corrosivity

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

parameter : Skin corrosion/irritation

Species : Rabbit

Expositionsdauer : 24 h

Result : non-irritant

By analogy.

parameter : Serious eye damage/eye irritation:

Species : Rabbit

Result : non-irritant

By analogy.

Irritation to respiratory tract

The product has not been tested.

Sensitising effects

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

parameter : Skin sensitisation

Species : Guinea pig

Result : no danger of sensitization.

Method : OECD 406

By analogy.

Carcinogenic/mutagenic/toxic effects for reproduction

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

The product has not been tested.

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STOT-single exposure

Based on available data, the classification criteria are not met.
The product has not been tested.

STOT-repeated exposure

Based on available data, the classification criteria are not met.
The product has not been tested.

Aspiration hazard

Based on available data, the classification criteria are not met.
The product has not been tested.

Specific effects in experiment on an animal

The product has not been tested.

SECTION 12: Ecological information
12.1. Toxicity

Acute (short-term) fish toxicity
Parameters : LC0
Species : Leuciscus idus (golden orfe)
Effective dose: 200 mg/L
Exposure time: 96 h
By analogy.

Chronic (long-term) fish toxicity
Parameters : NOEC
Species : Oncorhynchus mykiss (Rainbow trout)
Effective dose: > 10000 mg/L
Exposure time: 28 d
By analogy.

Acute (short-term) toxicity to crustacea
Parameters : EC0
Species : Daphnia magna (Big water flea)
Effective dose: > 0,0001 mg/L
Exposure time: 48 h
By analogy.

Acute (short-term) toxicity to aquatic algae and cyanobacteria
Parameters : IC50
Species : Skeletonema costatum
Effective dose: > 100000 mg/L
Exposure time: 72 h
By analogy.

Effects in sewage plants
When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
540-97-6	dodecamethylcyclohexasiloxane					
	Acute algae toxicity	ErC50 > 2 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier	

12.2. Persistence and degradability

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

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Not easily bio-degradable (according to OECD-criteria).

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
540-97-6	dodecamethylcyclohexasiloxane			
	OECD 310	4,47	28	ECHA Dossier
	Not easily bio-degradable (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.

12.5. Results of PBT and vPvB assessment

Dodecamethylcyclohexasiloxane (D6) meets the current criteria of Annex XIII of the EU REACH Regulation for vPvB and has been placed on the candidate list of substances of very high concern (SVHCs). However, D6 does not behave in the same way as the known PBT/vPvB substances. According to the interpretation of the available data by the silicone industry, the scientific evidence from field trials does not essentially indicate that D6 has a non-biomagnifying effect in aquatic and terrestrial food chains. D6 in air decomposes by processes naturally occurring in the atmosphere. It is not expected that airborne D6 residues that do not decompose in this way will be deposited in water, soil or living organisms.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

070217 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; waste containing silicones other than those mentioned in 07 02 16

List of Wastes Code - used product

070217 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; waste containing silicones other than those mentioned in 07 02 16

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

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

SECTION 14: Transport information
Land transport (ADR/RID)
14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

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<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)	
<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)	
<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.
<u>14.5. Environmental hazards</u>	
ENVIRONMENTALLY HAZARDOUS:	No
<u>14.6. Special precautions for user</u>	
Refer to section 6-8	
<u>14.7. Transport in bulk according to Annex II of Marpol and the IBC Code</u>	
not relevant	

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

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
dodecamethylcyclohexasiloxane

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional informationSafety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)
The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII: not relevant**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information**Changes**

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Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

ECHA: European Chemicals Agency

EWC: European Waste Catalogue

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

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)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

h: hour

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect concentration

NLP: No-Longer Polymers

N/A: not applicable

OECD: Organisation for Economic Co-operation and Development

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)

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern

TRGS: Technische Regeln für Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

Further Information

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

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

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.