Safety Data Sheet

Trade name: SynOil M10.120.08
No.: 9684,9685

Print date: 20.11.2013
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1. Identification of the substance/mixture and of the company/undertaking

1.1 Identification of the substance/mixture

Substance name: **SynOil M10.120.08**
No.: **9684, 9685**
Product name: —
EC No: —
CAS No: 68649-11-6
REACH Registration No: —

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

Relevant identified uses:
Thermofluid.

Uses advised against: —

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

1.4 Emergency telephone number

+49 (0) 551 192 40 for medical advice
+49 (0) 208 762 8322 in case of transport incidents and other emergencies
+49 (0) 61 31 1924 0 (Giftinfo Mainz, 24 h German and English)

2. Hazards identification

2.1 Classification

Xn; R65 Harmful: may cause lung damage if swallowed.
Xn; R20 Harmful by inhalation.

2.2 Hazard symbols

Xn Harmful

2.3 R phrases

20 Harmful by inhalation.
65 Hamful: may cause lung damage if swallowed.

3. Composition / information on constituent elements

3.1 Chemical characterization

1-Decene, dimer hydrogenated

3.2 Substance / product identification

CAS no. 68649-11-6

4. First aid measures

4.1 General information
In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

4.2 After inhalation
Remove affected person from the immediate area. Ensure supply of fresh air. Irregular breathing: artificial respiration. Summon a doctor immediately.

4.3 After skin contact
When in contact with the skin, clean with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

4.4 After eye contact
Separate eyelids; wash the eyes thoroughly with water (15 min.)

4.5 After ingestion
Do not induce vomiting- aspiration hazard. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

5. Firefighting measures

5.1 Suitable extinguishing media
Carbon dioxide; Foam; Dry chemical extinguisher; Water mist.

Extinguishing media that must not be used for safety reasons
Full water jet.

5.2 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
In the event of fire, the following can be released: Carbon monoxide (CO)

5.3 Special protective equipment for fire-fighters
Use self-contained breathing apparatus. Wear protective clothing.

5.4 Other information
Cool endangered containers with water spray jet.

6. Accidental release measures

6.1 Personal precautions
Refer to protective measures listed in sections 7 and 8. Use breathing apparatus if exposed to vapours/dust/aerosol. High risk of slipping due to leakage/ spillage of product.

6.2 Environmental precautions
Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

6.3 Methods for cleaning up/taking up
Take up with absorbent material (e.g. sand, kieselguhr, universal binder). When picked up, treat material as prescribed under heading "Disposal considerations".

7. Handling and storage

7.1 Handling

Advice on safe handling
Provide good ventilation of working area (local exhaust ventilation, if necessary).

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Advice on protection against fire and explosion
Keep away from sources of heat and ingnition.

7.2 Storage

Requirements of storage rooms and vessels
Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Advice on storage assembly
Do not store together with: Oxidizing agents.

Further information on storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place. Do not store in open or unlabelled container.

8. Exposure controls/personal protection

8.1 Exposure limit values

NONE.

8.2 Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in event workplace threshold values are not specified.

Hand protection
In case of intensive contact, wear protective gloves (EN374). Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Eye protection
Safety glasses with side protection shield (EN 166)

Skin protection
Clothing as usual in the chemical industry.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Wash hands before breaks and after work.

9. Physical and chemical properties

9.1 General information

Form	Liquid.
Colour	Colourless.
Odour	Mild.

9.2 Important health, safety and environmental information

Changes in physical state

Type	Pourpoint
Value	-66°C
Type	Boiling point
Value	310°C

Flash point

Value	125°C
Method	ASTM D93

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Vapour pressure

Value	< 0,013 kPa
Reference temperature	20°C

Density

Value	0,80 g/cm3
Reference temperature	15°C

Viscosity

Type	Kinematic
Value	5,2cSt
Reference temperature	40°C
Type	kinematic
Value	1,7cSt
Reference temperature	100°C

Solubility in water

Remarks	Slightly soluble

10. Stability and reactivity

10.1 Materials to avoid

Oxidizing agents.

10.2 Hazardous decomposition products

No hazardous decomposition products known.

10.3 Thermal decomposition

Remarks. No decomposition if used as prescribed.

11. Toxicological information

11.1 Acute toxicity

Acute oral toxicity

LD50	> 2000 mg/kg
Species	rat

Acute dermal toxicity

LD50	> 2000 mg/kg
Species	rabbit

Acute inhalation toxicity

LC50	3800 mg/m^3
Species	rat

Experience in practice

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.
Inhalation of vapours from the heated product can cause irritation of the respiratory tract and the eyes. Eye contact with the product may cause slight irritation.

11.2 Other information (chapter 11.)

The toxicological data given have been assessed by analogy and/or refer to the main ingredient(s) of this product.

12. Ecological information

12.1 Ecotoxicity

Fish toxicity

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LC50	>5006ppm
Species	Minnow
Duration of exposure	96h

12.2 Persistence and degradability

Biodegradability

Value	49,5% (water)
Duration of exposure	28 day(s)
Evaluation	Potentially biologically degradable (Inherently biodegradable)

12.3 Other adverse effects

Do not discharge product unmonitored into the environment. The data given have been assessed by analogy and/or refer to the main ingredient(s) of this product.

13. Disposal considerations

13.1 Product

Allocation of waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

13.2 Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

14. Transport information

14.1 Other information

The product is not defined under national/international road, rail, sea and air transport regulations as a hazardous material.

15. Regulatory information

15.1 Labelling in accordance with EC directives

The product is classified and labelled in accordance with EC Directive 67/548/EC.
1-Decene, dimer, hydrogenated

Hazard symbols
Xn Harmful

Hazardous component(s) to be indicated on label, contains
1-Decene, dimer, hydrogated

R phrases
20 Harmful by inhalation.
65 Harmful: may cause lung damage if swallowed.

S phrases
62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances
Remarks Annex I, part 1+ 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 National regulations

National chemical inventories

EINECS/ELINCS (European Communities)	components listed
TSCA (USA)	components listed
DSL/NDSL (Canada)	components listed
MITI/ENCS (Japan)	components listed
ECL (Corea)	components listed

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AICS (Australia)	components listed
IECSC / NEPA (China)	components listed
PICCS (Philippines)	components listed

16. Other information

16.1 Sources of key data used to compile the data sheet

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.
Regulation (EC) No 1907/2006 (REACH) as amended in each case.
EC Directives 2000/39/EC, 2006/15/EC as amended in each case.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter

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