

Thermal H10

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Thermal H10

Article No.

5L: 8940115 10L: 8940114

REACH registration number

the substance is exempt from the obligation to register

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

Relevant identified uses

Tempering fluid

Working temperature range: -40°C.....+180°C

Not suitable for use in

No data available.

1.3. Details of the supplier of the safety data sheet

Supplier

JULABO GmbH

Address

Gerhard-Juchheim-Straße 1

77960 Seelbach

Germany

Telephone

+49(0)782351-180

Email

service.de@julabo.com

Web site

www.julabo.com

Contact person

Verkauf und technische Beratung

Email

service.de@julabo.com

1.4. Emergency telephone number

+49(0)89-19240 (24h)

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Available outside office hours

No

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Description

The product is not classified.

2.2. Label elements

More information

No information required.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
-	63148-62-9 613-156-5 - -	-	-	- - -	-

SECTION 4: First aid measures

4.1. Description of first aid measures

Immediately change drenched clothing. Contact physician if discomfort continues. Remove the casualty from the danger zone. Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Move the exposed person to fresh air at once. Obtain medical attention and bring these instructions. Get medical advice/attention if you feel unwell.

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Skin contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF ON SKIN: Wash with plenty of soap and water. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact

If eye irritation persists: Get medical advice/attention. Immediately rinse carefully and thoroughly with eye wash or water.

Ingestion

Rinse mouth with water. Do NOT induce vomiting.

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

No symptoms and effects are known to date.

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

None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Alcohol resistant foam. Water spray. BC powder Sand Spray water

Unsuitable extinguishing media

Water full jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide (CO). Carbon dioxide (CO₂). Formaldehyde.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

In case of fire, toxic gases may be formed. Avoid breathing fire vapours. Self-contained breathing apparatus. Do not allow to enter drains, sewers or watercourses. Fight fire with normal precautions from a reasonable distance. Dike and collect extinguishing water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of spills, beware of slippery floors and surfaces. Remove affected person from source of contamination. Use personal protective equipment as required. Bring people to safety. A respirator must be worn when exposed to vapors, dusts, aerosols and gases.

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6.2. Environmental precautions

Prevent the product from entering the sewage system or surface and ground water. Prevent the area from spreading (e.g. by containing the oil booms). Retain and dispose of contaminated wash water.

6.3. Methods and material for containment and cleaning up

Absorb spillage with suitable absorbent material. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ventilate well. Pick up mechanically, cover the sewers Use of adsorbent materials. In case of spills, beware of slippery floors and surfaces. Dispose of in suitable containers.

6.4. Reference to other sections

Hazardous combustion products: See section 5. For personal protection, see section 8. Incompatible materials: See section 10.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Do not breathe dust/fume/gas/mist/vapours/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take action to prevent static discharges. Use only in well ventilated areas Vapors/aerosols must be safely extracted directly at the point of origin.

General hygiene

Avoid contact with skin and eyes. Wash hands after handling. Keep away from food, drink and animal feeding stuffs. Do not use containers for chemicals that are normally intended for holding food.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a well-ventilated place. Store in a cool and well-ventilated place. Take action to prevent static discharges. D07.261188620 Keep away from sources of ignition - No smoking.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

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8.2. Exposure controls

Appropriate engineering controls

Technical measures and the use of appropriate work procedures take precedence over the use of personal protective equipment. Personal protective equipment shall be used if the risks cannot be avoided or sufficiently limited by collective technical means of protection or by work organisation measures, methods or procedures. Open windows and doors to provide sufficient ventilation. If this is not possible, increase air exchange by using ventilation.

Personal Protective Equipment Symbols



Eye / face protection

Use safety goggles with side protection.

Hand protection

Butyl rubber. Wear suitable protective gloves. A chemical protective glove tested in accordance with EN 374 is suitable. Check for leaks/impermeability before use. If you intend to reuse the gloves, clean them before taking them off and air them thoroughly afterwards. It is recommended to clarify the chemical resistance of the mentioned protective gloves for special applications with the glove manufacturer.

Other skin protection

Other: Wash hands thoroughly after handling. Isobutene-isoprene rubber NBR: Acrylonitrile butadiene rubber Include recovery phases to regenerate the skin. Preventive skin protection (protective creams/ointments) is recommended.

Respiratory protection

Normally no personal respiratory protection necessary Respiratory protection is required for: Aerosol or mist formation, full/half/quarter mask (EN 136/140), type: A-P2 (combination filter for particles and organic gases and vapors, identification color: brown/white)

Environmental exposure controls

Keep run-off water out of sewers and water sources. Dike for water control. Prevent the product from entering the sewage system or surface and ground water. Use suitable containers to avoid contamination of the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless.

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Odour

odorless

Melting point / freezing point

No data available

Boiling point or initial boiling point and boiling range

Not determined.

Flammability

this material is flammable but not easily ignited

Lower and upper explosion limit

No data available

Flash point

> 165 °C

Method

(ISO 2592)

Auto-ignition temperature

No data available

Decomposition temperature

No data available

pH

No data available

Kinematic viscosity

approx. 10mm²/s (25°C)

Solubility

No data available

Water solubility

insoluble

Partition coefficient n-octanol/water

Not determined.

Vapour pressure

Not determined.

Density and/or relative density

approx. 0.93 g/cm³ (25°C)

Relative vapour density

No information required.

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Particle characteristics

Not relevant.

9.2. Other information

No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

10.4. Conditions to avoid 10.5. Incompatible materials

10.2. Chemical stability

The material is stable under normal ambient conditions and under the temperature and pressure conditions to be expected during storage and handling.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

No specific restrictions of use are noted for this product.

10.5. Incompatible materials

Oxidizing agent

10.6. Hazardous decomposition products

Measurements have shown that at temperatures above approx. 150°C a small amount of formaldehyde is split off by oxidative degradation.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product / Substance name CAS / EC no.	Value / Dose	Exposure route	Method / Guideline	Remarks
Polydimethylsiloxan 63148-62-9 / 613-156-5	>5.000 mg/kg	Oral	Acute toxicity estimate	Classification according to Regulation (EC) No. 1272/2008: Based on available data, the classification criteria are not met.

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Product / Substance name CAS / EC no.	Value / Dose	Exposure route	Method / Guideline	Remarks
Polydimethylsiloxan 63148-62-9 / 613-156-5	>2.000 mg/kg	Dermal	Acute toxicity estimate	Classification according to Regulation (EC) No. 1272/2008: Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product / Substance name CAS / EC no.	Result
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Product / Substance name CAS / EC no.	Result
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product / Substance name CAS / EC no.	Result
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Product / Substance name CAS / EC no.	Result
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

Carcinogenicity

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Product / Substance name CAS / EC no.	Other
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

Reproductive toxicity

Product / Substance name CAS / EC no.	Other
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

STOT-single exposure

Product / Substance name CAS / EC no.	Other
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

STOT-repeated exposure

Product / Substance name CAS / EC no.	Other
Polydimethylsiloxan 63148-62-9 / 613-156-5	Based on available data, the classification criteria are not met.

Aspiration hazard

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

11.2. Information on other hazards

No data available

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SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Based on available data, up to the maximum solubility of the product, no classification-relevant effects on aquatic organisms are expected.

on aquatic organisms are to be expected. According to current experience, no adverse effects in sewage treatment plants are expected.

The material is not harmful to aquatic organisms (LC50/EC50/IC50/LL50/EL50 > 100 mg/L for the most sensitive species).

species).

Conclusion by analogy.

12.2. Persistence and degradability

Persistence and degradability

Product / Substance name CAS / EC no.	Remark
Polydimethylsiloxan 63148-62-9 / 613-156-5	There are no data available.

12.3. Bioaccumulative potential

Bioaccumulative potential

Product / Substance name CAS / EC no.	Remark
Polydimethylsiloxan 63148-62-9 / 613-156-5	There are no data available.

12.4. Mobility in soil

Mobility

Product / Substance name CAS / EC no.	Remark
Polydimethylsiloxan 63148-62-9 / 613-156-5	There are no data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

no ingredient is listed ≥ 0.1 %

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12.6. Endocrine disrupting properties

no ingredient is listed $\geq 0.1\%$

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

The assignment of the waste code number/waste designation is to be carried out in accordance with the EWC on a sector- and process-specific basis.

Do not discharge into drains, water courses or onto the ground. Avoid releasing to the environment.

Completely emptied packaging can be recycled. Contaminated packaging shall be treated in the same way as the substance.

Disposal in accordance with Directive 2008/98/EC on waste and hazardous waste.

Contact the responsible authorized waste disposal company for waste disposal.

Obtain special instructions/consult safety data sheet.

Please observe the relevant national or regional regulations. Waste must be separated in such a way that it can be kept separately by the municipal or national waste disposal facilities.

SECTION 14: Transport information

14.1. UN number

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/AND/RID).

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

Not relevant.

14.3. Transport hazard class(es)

Label

None.

14.4. Packing group

Not relevant.

14.5. Environmental hazards

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/AND/RID).

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14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Other

Additional information ADR-RID

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/AND/RID).

Additional information IMDG

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/AND/RID).

Additional information IATA (ICAO)

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/AND/RID).

SECTION 15: Regulatory information

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

EU regulations

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

no ingredient is listed $\geq 0.1\%$

SEVESO-category: Not classified.

Regulation EC 850/2004 on persistent organic pollutants. Not listed.

National regulations

D15.261183950

D07.261188620

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Changes to previous revision

Revision of all sections and change of layout

Abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

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ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSR - Chemical Safety Report
DMEL - Derived Minimum Effect Level
DNEL - Derived No Effect Level
EC50 - Half Maximal Effective Concentration
ECHA - European Chemicals Agency
GHS - Globally Harmonized System
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LoW - List of Wastes
OEL - Occupational Exposure Limit
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Environmental Concentration
PNEC - Predicted No Effect Concentration(s)
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SCBA - Self-Contained Breathing Apparatus
STOT - Specific Target Organ Toxicity
SVHC - Substances of Very High Concern
UFI - Unique Formula Identifier
vPvB - Very Persistent and Very Bioaccumulative