

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

- **Product identifier**
- **Trade name:** **THERMAL HS**
- **Article number:**  
 Order No. ( 5 L.): 8940103  
 Order No. (10 L.): 8940102
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use SU3** Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category PC16** Heat transfer fluids
- **Process category**  
 PROC20 Heat and pressure transfer fluids in dispersive, professional use but closed systems
- **Article category AC2** Machinery, mechanical appliances, electrical/electronic articles
- **Application of the substance / the preparation** temperature control liquid
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Julabo Labortechnik GmbH  
 Eisenbahnstrasse 45  
 D-77960 Seelbach/Deutschland
- **Further information obtainable from:**  
 sales & technical support  
 +49(0)782351-180
- **Emergency telephone number:** +49(0)89-19240 (24h)




## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
 The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void
- **Information concerning particular hazards for human and environment:**  
 The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**  
 Observe the general safety regulations when handling chemicals.  
 The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 64742-48-9 EINECS: 265-150-3	Gemisch aliphatischer, naphthenischer Kohlenwasserstoffe; Aromatengehalt: <0,5%	0,2%
	 T R45;  Xn R65	
	 Carc. 1A, H350; Asp. Tox. 1, H304	

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**· Additional information:**

*In accordance with the European Community Directive 1999/45/EC preparations are to be considered as carcinogenic where the amount of any carcinogenic substance contained in such preparation equals or exceeds 0.1 % by mass, unless other substance – specific concentration limits are stipulated by Appendix VI of the GHS Directive or the German TRGS 905 (TRGS, Technische Regeln Gefahrstoffe = Technical Rules for Hazardous substances).*

*For the wording of the listed risk phrases refer to section 16.*

**4 First aid measures**

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

**5 Firefighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
- **Reference to other sections** No dangerous substances are released.

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class:** VCI: 10

**8 Exposure controls/personal protection**

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** The lists valid during the making were used as basis.

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- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Colour:	brownish-clear
Odour:	Odourless
- **Change in condition**

Melting point/Melting range:	<-60°C
Boiling point/Boiling range:	Undetermined.
- **Flash point:** > 280°C
- **Ignition temperature:** >400°C
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapour pressure at 20°C:** <0,1 hPa
- **Density at 20°C:** 0,97 g/cm<sup>3</sup>
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Viscosity:**

Dynamic:	50 mPas
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- **Solvent content:**

Organic solvents:	0,0 %
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## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

### 12 Ecological information

· **Toxicity**

· **Acquatic toxicity:** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation** Smaller quantities can be disposed of with household waste.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** --

· **Maritime transport IMDG:**

· **IMDG Class:** --

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** --

· **UN "Model Regulation":** --

· **Special precautions for user** Not applicable.

· **Transport/Additional information:** Not dangerous according to the above specifications.

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### 15 Regulatory information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

*This document has been created on: 01.12.2009*

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

*revised: 18.02.2011*

- **Relevant phrases**

*H304 May be fatal if swallowed and enters airways.*

*H350 May cause cancer.*

*R45 May cause cancer.*

*R65 Harmful: may cause lung damage if swallowed.*

- **Department issuing MSDS:**

*LOGAR Günther Hasel e.K.*

*Baden-Airpark, Airport Boulevard B 210*

*D-77836 Rheinmünster*

*Tel: +49(0)7229-1868-163*

*Fax: +49(0)7229-1868-165*

- **Contact:** *info@logar.de*

- **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)*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*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*