

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

- **1.1 Product identifier**
- **Trade name:** THERMAL HL60  
Element 14\*PDMS 5
- **Article number:**  
Order No. (5 L): 8940141  
Order No. (10 L): 8940140
- **1.2 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
- **Application of the substance / the mixture**  
temperature control liquid  
working temperature range: -60°C - + 250°C
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Julabo GmbH  
Eisenbahnstrasse 45  
D-77960 Seelbach/Deutschland
- **Further information obtainable from:**  
sales & technical support  
+49(0)782351-180
- **1.4 Emergency telephone number:** +49(0)89-19240 (24h)

**SECTION 2: Hazards identification**

- **2.1 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.
- **2.2 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).
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

- **3.2 Chemical characterization: Mixtures**
- **Description:** Polydimethylsiloxane
- **Dangerous components:** Void
- **Additional information:** For the wording of the listed risk phrases refer to section 16.

**SECTION 4: First aid measures**

- **4.1 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:**  
Do not induce vomiting; call for medical help immediately.  
If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:**  
Water with full jet  
Water spray
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Keep receptacles tightly sealed.  
Store in cool, dry place in tightly closed receptacles.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 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
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical facilities:** No further data; see item 7.

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- **8.1 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.*
- **8.2 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*



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

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

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Odourless
- **Change in condition**

<b>Boiling point/Boiling range:</b>	288 °C
<b>Solidification point:</b>	-100 °C
- **Flash point:** 124 °C (EN ISO 2592 (c.o.c.))
- **Ignition temperature:** 350 °C (DIN 51794)
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapour pressure at 20 °C:** <0.01 hPa
- **Density at 20 °C:** 0.92 g/cm<sup>3</sup>
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Viscosity:**

<b>Kinematic at 20 °C:</b>	5.66 mm <sup>2</sup> /s
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- **Solvent content:**
  - Organic solvents:** 0.0 %
  - VOC (EC)** 0.0 %
  - 0.00 %
- **9.2 Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Formaldehyde may be released at temperatures in excess of 150 °C / 302°F and under presence of Oxygen

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**  
LD50, oral, rat >5000 mg/kg  
LC50, inhalation, rat >535 mg/kg (1 h, Aerosol)  
LD50, dermal, rabbit >10000 mg/kg"
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:**  
There is some experience in regard to toxicity on humans. Contact of the product with the human eye may result in a harmless and reversible clouding of sight which is of short duration, caused by formation of an oil film on the Cornea.
- **Sensitization:**  
Magnusson-Kligmann Guinea Pig: This product has no sensitizing effect on Guinea Pigs (OECD406; GPMT according to Magnusson-Kligmann).
- **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.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
Mutagenity: Negative according to Ames test

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**  
LC0, 96 h, 200 mg/l, *Leuciscus idus*  
EC0, > 10.000 mg/l *Pseudomonas putida*
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **European waste catalogue 07 01 99:** wastes not otherwise specified
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

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|---|--|
| · <b>14.1 UN-Number</b>   | --   |
| · <b>14.2 UN proper shipping name</b>   | --   |
| · <b>14.3 Transport hazard class(es)</b>  | --   |
| · <b>14.4 Packing group</b>   | --   |
| · <b>14.5 Environmental hazards:</b>  | Not applicable.                                      |
| · <b>14.6 Special precautions for user</b>  | Not applicable.                                      |
| · <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>  | Not dangerous according to the above specifications. |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

Creation date: 19.09.2014

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.

- **Department issuing MSDS:**  
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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:**  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent