

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 1 of 8

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

1.1 Product identifier

Trade name: Therm 180

This safety data sheet pertains to the following products:

LZB 114: 5 L

LZB 214: 10 L

LZB 314: 20 L

CAS-Number: 63148-62-9

List number: 613-156-5

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

General use: Heat transfer fluids
Industrial use
Professional uses / Public domain

1.3 Details of the supplier of the safety data sheet

Company name: Lauda Dr. R. Wobser GmbH & Co. KG

Street/POB-No.: Laudaplatz 1

Postal Code, city: 97922 Lauda-Königshofen

Germany

WWW: www.lauda.de

E-mail: info@lauda.de

Telephone: +49 (0)9343-503-0

Telefax: +49 (0)9343-503-222

Department responsible for information:

Department Quality Management,

Telephone: +49 9343 503-331, e-mail info@lauda.de

1.4 Emergency telephone number

National Poisons Information Service (Birmingham Unit)

Telephone: 844 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This substance is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

Hazard statements: not applicable

Precautionary statements: not applicable

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 2 of 8

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% (w/w) or higher.

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterisation: Polydimethylsiloxane
CAS-Number: 63148-62-9
List number: 613-156-5

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Do not leave affected persons alone. Remove victim out of the danger area. Put victim at rest, cover with a blanket and keep warm. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation: Provide fresh air. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Change contaminated clothing.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist in the event of irritation.

After swallowing: Rinse mouth immediately and drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No data 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: Water spray jet, extinguishing powder, carbon dioxide
Extinguishing media which must not be used for safety reasons:
Full water jet

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 3 of 8

5.2 Special hazards arising from the substance or mixture

Flammable liquid.
May form dangerous gases and vapours in case of fire.
Furthermore, there may develop: smoke, silicon dioxide, carbon monoxide and carbon dioxide. This product can generate small amounts of formaldehyde at approximately 150 °C and above in the presence of air.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Hazchem-Code: -

Use fine water spray to cool endangered containers. Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the substance. Do not breathe mist/vapours/spray. Ensure adequate ventilation, especially in confined areas. Use respiratory protection whenever ventilation is inadequate. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance.

Additional information:

Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling:

Do not breathe mist/vapours/spray. Avoid contact with skin. Provide adequate ventilation, and local exhaust as needed. Wear appropriate protective equipment. When using do not eat, drink or smoke. Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking. Take action to prevent static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Store in well closed containers in a cool, dry, well-ventilated area. Keep away from sources of ignition. Protect from direct sunlight.

Hints on joint storage:

Do not store together with oxidizing agents and reducing agents. Do not store together with acids.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 4 of 8

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information: Contains no substances with occupational exposure limit values.

DNEL/DMEL: Information about Dodecamethylcyclohexasiloxane:
DNEL workers, short-term, inhalative, local: 6.1 mg/m³
DNEL workers, long-term, inhalative, local: 1.22 mg/m³
DNEL workers, long-term, inhalative, systemic: 11 mg/m³
DNEL consumers, short-term, inhalative, local: 1.5 mg/m³
DNEL consumers, long-term, inhalative, local: 0.3 mg/m³
DNEL consumers, long-term, inhalative, systemic: 2.7 mg/m³
DNEL consumers, short-term, oral, systemic: 1.7 mg/kg KG/d
DNEL consumers, long-term, oral, systemic: 1.7 mg/kg KG/d

PNEC: Information about Dodecamethylcyclohexasiloxane:
PNEC sediment (freshwater): 13 mg/kg
PNEC sediment (marine water): 1.3 mg/kg
PNEC sewage treatment plant: 1 mg/L
PNEC soil (soil organisms): 3.77 mg/kg

8.2 Exposure controls

When aerosols and vapours form: Withdraw by suction.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Respiratory protection in case of aerosol or vapour formation.
Use filter type A (= against vapours of organic substances).

Hand protection: Protective gloves according to BS EN 374.
Glove material: Nitrile rubber, PVC, Neoprene, Butyl caoutchouc (butyl rubber), PVA (Polyvinyl alcohol)
Breakthrough time: >60min.
Layer thickness: 0.35 mm.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to BS EN ISO 16321-1:2022.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

When using do not eat, drink or smoke. Do not breathe mist/vapours/spray. Avoid contact with skin. Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Use appropriate container to avoid environmental contamination.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 5 of 8

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Physical state at 20 °C and 101.3 kPa: liquid Colour: colourless
Odour:	characteristic
Odour threshold:	No data available
pH:	not determined
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	not determined
Flash point/flash point range:	> 240 °C
Evaporation rate:	not determined
Flammability:	No data available
Explosion limits:	No data available
Vapour pressure:	not determined
Vapour density:	No data available
Density:	at 25 °C: approx. 0.96 g/mL
Solubility:	at 20 °C: insoluble in ethanol
Water solubility:	insoluble
Fat solubility:	soluble in various organic solvents
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	at 25 °C: 20 mm ² /s
Explosive properties:	Product is not explosive.
Oxidizing characteristics:	not oxidising

9.2 Other information

Additional information: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

refer to 10.3

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Measurements taken at temperatures exceeding 150 °C have revealed that a small quantity of formaldehyde splits off through oxidative decomposition.

10.4 Conditions to avoid

Keep away from sources of ignition. Protect from direct sunlight.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 6 of 8

10.5 Incompatible materials

Oxidizing agents, reducing agent, acids

10.6 Hazardous decomposition products

No known hazardous decomposition products.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

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

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

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

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

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

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

Other information: Measurements taken at temperatures exceeding 150 °C have revealed that a small quantity of formaldehyde splits off through oxidative decomposition. Formaldehyde vapour is harmful by inhalation and irritating to eyes and respiratory system at breathing concentration less than one part per million (1ppm).

SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Bioaccumulative potential: low.

Partition coefficient: n-octanol/water:

No data available

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 7 of 8

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 07 02 17 = waste containing silicones other than those mentioned in 07 02 16
Recommendation: Special waste. Dispose of waste according to applicable legislation.

Package

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR: not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR: not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR: not applicable

14.5 Environmental hazards

Marine pollutant: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, as retained and amended in UK law [UK REACH]

Revision date: 29/9/2023
Version: 9.0
Replaces version: 8.0
Language: en-GB
Date of print: 4/12/2023

Therm 180

Material number LZB x14

Page: 8 of 8

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code: -
No data available

National regulations - EC member states

List number: 613-156-5

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Further information

Abbreviations and acronyms:

- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- AS/NZS: Australian Standards/New Zealand Standards
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC: European Community
- EN: European Standard
- EQ: Excepted quantities
- IATA: International Air Transport Association
- IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- PVC: Polyvinyl chloride
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- TRGS: Technical Rules for Hazardous Substances
- vPvB: Very persistent and very bioaccumulative

Reason of change: Changes in section 1: Product identifier

General revision

Date of first version: 19/10/2012

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.