

Safety data sheet

according to 1907/2006/EC, Article 31 and 453/2010/EC

Printing date 02.06.2015

Version number 1

Revision: 02.06.2015

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

1.1 Product identifier

Trade name: Wärmeleitpaste
Thermal grease

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Felder GmbH
Im Lipperfeld 11
D-46047 Oberhausen

Tel.: +49 (0)208/ 85035-0

Fax.: +49 (0)208/ 26080

<http://www.felder.de>

e-mail: info@felder.de

Further information obtainable from:

Labor

(Mo-Do. 8:00-16:00/ Fr. 8:00-13:00)

Tel.: +49(0)208/ 8 50 35-0

e-mail: mprobst@felder.de

1.4 Emergency telephone number: Tel.: +49(0)208/85035-11

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS09

Signal word *Warning*

Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Labelling of packages where the contents do not exceed 125 ml**Hazard pictograms**

GHS09

Signal word *Warning*

Hazard statements *Void*

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

(Contd. on page 2)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 453/2010/EC

Printing date 02.06.2015

Version number 1

Revision: 02.06.2015

Trade name: Wärmeleitpaste
Thermal grease

(Contd. of page 1)

P102 Keep out of reach of children.

P103 Read label before use.

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 characterisation: Mixtures

Description: Mixture: consisting of the following components.

Dangerous components:

CAS: 1314-13-2	zinc oxide	☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	60-80%
EINECS: 215-222-5			

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

After inhalation: Supply fresh air or oxygen; call for doctor.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Do not induce vomiting; call for medical help immediately.

Rinse out mouth and then drink plenty of water.

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: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.**5.3 Advice for firefighters**

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.**6.3 Methods and material for containment and cleaning up:** Pick up mechanically.**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 No special precautions are necessary if used correctly.**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:** Store in cool, dry conditions in well sealed receptacles.**7.3 Specific end use(s)** No further relevant information available.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31 and 453/2010/EC

Printing date 02.06.2015

Version number 1

Revision: 02.06.2015

Trade name: Wärmeleitpaste
Thermal grease

(Contd. of page 2)

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

1314-13-2 zinc oxide

MAK (Germany)	1A mg/m ³ Rauch
---------------	-------------------------------

recommended monitoring procedures in accordance with 453/2010/EU no. 8.1.2:

1314-13-2 zinc oxide: NIOSH 7502(E), OSHA ID-143(E), BIA 8985(D)

Additional information: *The lists valid during the making were used as basis.*

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures: *Wash hands before breaks and at the end of work.*

Respiratory protection: *Not required.*

Protection of hands:

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Nitrile rubber, NBR

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 cannot be calculated in advance and has therefore to be checked prior to the application.

Recommended thickness of the material: $\geq 0,33$ mm

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.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Value for the permeation: Level ≤ 6

Eye protection: *Safety glasses*

Body protection: *Protective work clothing*

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Pasty
Colour:	Whitish
Odour:	Uncharacteristic.
Odour threshold:	Not determined.
pH-value:	Not applicable.

Change in condition

Boiling point/Boiling range:	Undetermined.
Flash point:	> 230 °C
Flammability (solid, gaseous):	Not determined.

Ignition temperature:

Decomposition temperature: *Not determined.*

Self-igniting: *Product is not selfigniting.*

Danger of explosion: *Product does not present an explosion hazard.*

Explosion limits:

Lower: *Not determined.*
Upper: *Not determined.*

Vapour pressure: *Not applicable.*

Density: *Not determined.*

Relative density *Not determined.*

Vapour density *Not applicable.*

Evaporation rate *Not applicable.*

Solubility in / Miscibility with water: *Insoluble.*

(Contd. on page 4)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 453/2010/EC

Printing date 02.06.2015

Version number 1

Revision: 02.06.2015

Trade name: Wärmeleitpaste
Thermal grease

(Contd. of page 3)

Partition coefficient (n-octanol/water): *Not determined.*

Viscosity:

Dynamic: *Not applicable.*

Kinematic: *Not applicable.*

Solvent content:

Organic solvents: 0,0 %

VOC (EC) 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: *No dangerous decomposition products known.*

SECTION 11: Toxicological information

11.1 Information on toxicological effects**Acute toxicity****LD/LC50 values relevant for classification:****1314-13-2 zinc oxide**

Oral	LD50	7950 mg/kg (mouse)
------	------	--------------------

Primary irritant effect:

Skin corrosion/irritation *No irritant effect.*

Serious eye damage/irritation *No irritating effect.*

Respiratory or skin sensitisation *No sensitising effects known.*

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: *No further relevant information available.*

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.*

Ecotoxicological effects:

Remark: *Very toxic for fish*

Additional ecological information:**General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): 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.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: *Not applicable.*

vPvB: *Not applicable.*

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods**Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

08 04 09*	<i>waste adhesives and sealants containing organic solvents or other dangerous substances</i>
-----------	---

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31 and 453/2010/EC

Printing date 02.06.2015

Version number 1

Revision: 02.06.2015

Trade name: Wärmeleitpaste
Thermal grease

(Contd. of page 4)

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

SECTION 14: Transport information

14.1 UN-Number**ADR, IMDG, IATA**

UN3077

14.2 UN proper shipping name**ADR**

3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide), MARINE POLLUTANT

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)

14.3 Transport hazard class(es)**ADR, IMDG, IATA****Class**

9 Miscellaneous dangerous substances and articles.

Label

9

14.4 Packing group**ADR, IMDG, IATA**

III

14.5 Environmental hazards:

Product contains environmentally hazardous substances: zinc oxide

Marine pollutant:

Yes

Symbol (fish and tree)

Special marking (ADR):

Symbol (fish and tree)

Special marking (IATA):

Symbol (fish and tree)

14.6 Special precautions for user

Warning: Miscellaneous dangerous substances and articles.

Danger code (Kemler):

90

EMS Number:

F-A,S-F

14.7 Transport in bulk according to Annex II of**MARPOL73/78 and the IBC Code**

Not applicable.

Transport/Additional information:**ADR****Limited quantities (LQ)**

5 kg

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

Transport category

3

Tunnel restriction code

E

IMDG**Limited quantities (LQ)**

5 kg

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

UN "Model Regulation":

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide), 9, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**National regulations:****Information about limitation of use:** *Employment restrictions concerning juveniles must be observed.***Waterhazard class:** *Water hazard class 2 (Self-assessment): hazardous for water.***15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31 and 453/2010/EC

Printing date 02.06.2015

Version number 1

Revision: 02.06.2015

Trade name: Wärmeleitpaste
Thermal grease

(Contd. of page 5)

SECTION 16: Other information

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.

Relevant phrases

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Recommended restriction of use *For commercial use only.*

Contact: *Dr. M. Probst*

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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised 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

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Safety data sheet SD3206

— EU —