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

#### 1.1 Product identifier

#### **KERATHERM® - Wärmeleitpaste KP97**

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

1.2.1 Relevant uses

Heatled paste

1.2.2 Uses advised against

None known.

#### 1.3 Details of the supplier of the safety data sheet

Company KERAFOL Keramische Folien GmbH & Co. KG

Koppe-Platz 1

92676 Eschenbach / GERMANY Phone +49 (0) 9645 88-300 Fax +49 (0) 9645 88-390 Homepage www.kerafol.com E-mail info@kerafol.com

Address enquiries to

Technical information info@kerafol.com
Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

**Advisory body** +49 (0)89-19240 (24h) (English)

#### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

No classification.

2.2 Label elements

The product does not require a hazard warning label in accordance with GHS/CLP-directives.

Hazard pictogramsnoneSignal wordnoneHazard statementsnonePrecautionary statementsnone

2.3 Other hazards

**Human health dangers** Frequent persistent contact with the skin can cause skin irritation.

**Environmental hazards**Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

# **SECTION 3: Composition / Information on ingredients**

# Product-type:

The product is a mixture.

Range [%]	Range [%] Substance	
< 80	Aluminium oxide	
	CAS: 1344-28-1, EINECS/ELINCS: 215-691-6	

Comment on component parts No dangerous components.

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.



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# **SECTION 4: First aid measures**

#### **Description of first aid measures**

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.

In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.

Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Ingestion Seek medical advice immediately.

Rinse out mouth and give plenty of water to drink.

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

None known.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Forward this sheet to the doctor.

# SECTION 5: Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media Foam.

Dry powder. Water spray jet. Carbon dioxide.

Extinguishing media that must not

be used

Full water jet.

# Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

#### Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within

the local regulations.

#### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.

Wear suitable protective equipment. For personal protection see SECTION 8.

### **Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

#### 6.3 Methods and material for containment and cleaning up

Take up mechanically.

Take up residues with absorbent material (f.ex. diatomaceous earth). Dispose of absorbed material in accordance within the regulations.

### Reference to other sections

See SECTION 8+13



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# SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid contact with eyes and skin. Use personal protective equipment.

Do not eat, drink or smoke when using this product.

Wash hands before breaks and after work.

Use barrier skin cream.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

Protect from sun. Store in a dry place.

Keep container tightly closed.

# 7.3 Specific end use(s)

See product use, SECTION 1.2

# SECTION 8: Exposure controls / personal protection

#### 8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance

Aluminium oxide

CAS: 1344-28-1, EINECS/ELINCS: 215-691-6

Long-term exposure: 10 mg/m³, inhalable dust (respirable dust: 4 mg/m³)

#### 8.2 Exposure controls

Additional advice on system design 

Ensure adequate ventilation on workstation.

Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of

hazardous substances.

Eye protection Safety glasses. (EN 166:2001)

Hand protection 0,4mm Butyl rubber, >120 min (EN 374-1/-2/-3).

The details concerned are recommendations. Please contact the glove supplier for further

information.

Skin protectionNot required under normal conditions.OtherAvoid contact with eyes and skin.Respiratory protectionNot required under normal conditions.

Thermal hazards not applicable

Delimitation and monitoring of the

environmental exposition

Comply with applicable environmental regulations limiting discharge to air, water and soil.



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# SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Form pasty Color white

Odor characteristic
Odour threshold not applicable
pH-value not applicable
pH-value [1%] not applicable
Boiling point [°C] not applicable
Flash point [°C] ca. 270
Flammability (solid, gas) [°C] > 400

Lower explosion limit not applicable
Upper explosion limit not applicable

Oxidising properties no

Vapour pressure/gas pressure [kPa] No information available.

Density [g/ml] 2,1

Bulk density [kg/m³] not applicable

Solubility in water virtually insoluble

Partition coefficient [n-octanol/water] No information available.

Viscosity 70-110 Pas

Relative vapour density determined

in air

No information available.

Evaporation speed No information available.

Melting point [°C] No information available.

Autoignition temperature [°C] > 400

Decomposition temperature [°C] > 350

9.2 Other information

Operation temperature: -60 - +150°C

#### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No dangerous reactions known if used as directed.

#### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

#### 10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

#### 10.4 Conditions to avoid

See SECTION 7

# 10.5 Incompatible materials

No information available.

# 10.6 Hazardous decomposition products

In the case of heating (150-180°C) following modest (decomposition) products may occure:

Possible in traces:

Formaldehyde.



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# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Acute toxicity

Substance

Aluminium oxide, CAS: 1344-28-1

LD50, oral, Rat: > 5000 mg/kg (Lit.).

Serious eye damage/irritation

Based on the available information, the classification criteria are not fulfilled.

Skin corrosion/irritation

Based on the available information, the classification criteria are not fulfilled.

**Respiratory or skin sensitisation** Based on the available information, the classification criteria are not fulfilled.

**Specific target organ toxicity** — Based on the available information, the classification criteria are not fulfilled. **single exposure** 

**Specific target organ toxicity** — Based on the available information, the classification criteria are not fulfilled. **repeated exposure** 

MutagenicityBased on the available information, the classification criteria are not fulfilled.Reproduction toxicityBased on the available information, the classification criteria are not fulfilled.CarcinogenicityBased on the available information, the classification criteria are not fulfilled.

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.

# **SECTION 12: Ecological information**

### 12.1 Toxicity

# 12.2 Persistence and degradability

Behaviour in environment

compartments

**General remarks** 

No information available.

Behaviour in sewage plant

e plant No information available.

**Biological degradability**The methods for determining the boilogical degradability are not applicable to inorganic

substances.

The organic component of the product is non biodegradable.

#### 12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

#### 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

#### 12.6 Other adverse effects

Ecological data of complete product are not available.



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# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

**Product** 

Disposal in an incineration plant in accordance with the regulations of the local authorities.

In according to RoHS!

070217 Waste no. (recommended)

Contaminated packaging

Uncontaminated packaging may be taken for recycling

Waste no. (recommended) 150102

# **SECTION 14: Transport information**

#### 14.1 UN number

Transport by land according to

ADR/RID

not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with

**IMDG** 

not applicable

Air transport in accordance with IATA not applicable

#### 14.2 UN proper shipping name

Transport by land according to

ADR/RID

NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

**IMDG** 

Marine transport in accordance with NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

# 14.3 Transport hazard class(es)

Transport by land according to

ADR/RID

not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with

**IMDG** 

not applicable

Air transport in accordance with IATA not applicable



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14.4 Packing group

Transport by land according to

ADR/RID

not applicable

Inland navigation (ADN)

not applicable

Marine transport in accordance with

IMDG

not applicable

Air transport in accordance with IATA not applicable

14.5 Environmental hazards

Transport by land according to

ADR/RID

no

Inland navigation (ADN)

no

Marine transport in accordance with

**IMDG** 

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

**SECTION 15: Regulatory information** 

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

**EEC-REGULATIONS** 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008;

75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions

for people

none

- VOC (2010/75/CE) 0 %

15.2 Chemical safety assessment

not applicable



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# **SECTION 16: Other information**

#### 16.1 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises

dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par

voie de navigation intérieure

ATE = acute toxicity estimate

CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging

DMEL = Derived Minimum Effect Level

DNEL = Derived No Effect Level

EC50 = Median effective concentration

ECB = European Chemicals Bureau

EEC = European Economic Community

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified Chemical Substances

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC-Code = International Code for the Construction and Equipment of Ships carrying

Dangerous Chemicals in Bulk

IC50 = Inhibition concentration, 50%

IMDG = International Maritime Code for Dangerous Goods

IUCLID = International Uniform Chemical Information Database

LC50 = Lethal concentration, 50%

LD50 = Median lethal dose

LC0 = lethal concentration, 0%

LOAEL = lowest-observed-adverse-effect level

MARPOL = International Convention for the Prevention of Marine Pollution from Ships

NOAEL = No Observed Adverse Effect Level NOEC = No Observed Effect Concentration

PBT = Persistent. Bioaccumulative and Toxic substance

PNEC = Predicted No-Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

STP = Sewage Treatment Plant

TLV®/TWA = Threshold limit value – time-weighted average TLV®STEL = Threshold limit value – short-time exposure limit

VOC = Volatile Organic Compounds

vPvB = very Persistent and very Bioaccumulative

#### 16.2 Other information

Classification procedure

**Modified position** 

SECTION 4 been added: Forward this sheet to the doctor.

SECTION 7 been added: Do not eat, drink or smoke when using this product.

SECTION 12 been added: The organic component of the product is non biodegradable.

SECTION 12 been added: The methods for determining the boilogical degradability are not applicable to inorganic substances.

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