

(B)

Page 1 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Keramikpaste Ceramic Paste

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

Lubricant

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH Jerg-Wieland-Str. 4 89081 Ulm-Lehr Tel.: (+49) 0731-1420

Tel.: (+49) 0731-1420-0 Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

+1 872 5888271 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH210-Safety data sheet available on request.

EUH211-Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).



Page 2 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020

PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

3.1 Substances

3.2 Mixtures

SECTION 3: Composition/information on ingredients

| Titanium dioxide (in powder form containing 1 % or more of particles | |
|--|-------------------------------|
| with aerodynamic diameter <= 10 μm) | |
| Registration number (REACH) | 01-2119489379-17-XXXX |
| Index | 022-006-002 |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 236-675-5 |
| CAS | 13463-67-7 |
| content % | 1-2,5 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Carc. 2, H351 (as inhalation) |

| Disodium sebacate | |
|--|-----------------------|
| Registration number (REACH) | 01-2120762063-61-XXXX |
| Index | |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 241-300-3 |
| CAS | 17265-14-4 |
| content % | 1-2,5 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Eye Irrit. 2, H319 |

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water.

Give copious water to drink - consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO₂



Page 3 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

Extinction powder Water jet spray Large fire: Water jet spray Alcohol resistant foam

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Toxic gases

5.3 Advice for firefighters

For personal protective equipment see Section 8.

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

Prevent surface and ground-water infiltration, as well as ground penetration.

Do not pour down the drain undiluted.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.

Or:

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities



③B)·

Page 4 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

Store product closed and only in original packing. Not to be stored in gangways or stair wells. Store cool.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| ® | Titanium dioxide (ii | Titanium dioxide (in powder form containing 1 % or more of particles with | | | | | | |
|----------------------------------|----------------------|---|--------------------|---|------------|--|--|--|
| Chemical Name | aerodynamic diam | | ' | | , | | | |
| WEL-TWA: 10 mg/m3 (total inhala | ble dust), 4 mg/m3 | WEL-STEL: | | | | | | |
| (respirable dust) | | | | | | | | |
| Monitoring procedures: | - | | | | | | | |
| BMGV: | | | Other information: | | | | | |
| | | | | | 0 1 10/ | | | |
| Chemical Name | Silicon dioxide - an | norphous | | | Content %: | | | |
| WEL-TWA: 6 mg/m3 (total inh. dus | st), 2,4 mg/m3 | WEL-STEL: | | | | | | |
| (resp. dust) | | | | | | | | |
| Monitoring procedures: | - | | | | | | | |
| BMGV: | | | Other information: | • | | | | |

| Titanium dioxide (in pow | der form containing 1 % or more | of particles with aerodyna | mic diameter | <= 10 μm) | | |
|--------------------------|--|-----------------------------|--------------|-----------|------------|------|
| Area of application | Exposure route / | Effect on health | Descriptor | Value | Unit | Note |
| | Environmental | | | | | |
| | compartment | | | | | |
| | Environment - freshwater | | PNEC | 0,184 | mg/l | |
| | Environment - marine | | PNEC | 0,0184 | mg/l | |
| | Environment - water, sporadic (intermittent) release | | PNEC | 0,193 | mg/l | |
| | Environment - sewage treatment plant | | PNEC | 100 | mg/l | |
| | Environment - sediment, freshwater | | PNEC | 1000 | mg/kg dw | |
| | Environment - sediment, marine | | PNEC | 100 | mg/kg dw | |
| | Environment - soil | | PNEC | 100 | mg/kg dw | |
| | Environment - oral (animal feed) | | PNEC | 1667 | mg/kg feed | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 700 | mg/kg bw/d | |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 10 | mg/m3 | |

| rea of application | Exposure route / | Effect on health | Descriptor | Value | Unit | Note |
|--------------------|--------------------------|------------------|------------|-------|-------|------|
| | Environmental | | | | | |
| | compartment | | | | | |
| | Environment - freshwater | | PNEC | 0,018 | mg/l | |
| | Environment - marine | | PNEC | 0,002 | mg/l | |
| | Environment - sediment, | | PNEC | 0,548 | mg/kg | |
| | freshwater | | | | | |
| | Environment - sediment, | | PNEC | 0,055 | mg/kg | |
| | marine | | | | | |
| | Environment - soil | | PNEC | 0,099 | mg/kg | |
| | Environment - sewage | | PNEC | 10 | mg/l | |
| | treatment plant | | | | | |



ദ

Page 5 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

| Consumer | Human - oral | Long term, systemic effects | DNEL | 5 | mg/kg bw/day | |
|-------------------------|--------------------|-----------------------------|------|-------|-----------------|--|
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 5 | mg/kg bw/day | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 8,7 | mg/m3 | |
| Industrial / commercial | Human - inhalation | Long term, systemic effects | DNEL | 35,26 | mg/m3 | |
| Industrial / commercial | Human - dermal | Long term, systemic effects | DNEL | 10 | mg/kg bw/day | |

| Area of application | Exposure route / | Effect on health | Descriptor | Value | Unit | Note |
|---------------------|--------------------------------------|-----------------------------|------------|-------|---------------------|------|
| • | Environmental | | | | | |
| | compartment | | | | | |
| | Environment - freshwater | | PNEC | 20,6 | μg/l | |
| | Environment - marine | | PNEC | 6,1 | μg/l | |
| | Environment - sediment, freshwater | | PNEC | 117,8 | mg/kg dry weight | |
| | Environment - sediment, marine | | PNEC | 56,5 | mg/kg dry weight | |
| | Environment - soil | | PNEC | 35,5 | mg/kg dry weight | |
| | Environment - sewage treatment plant | | PNEC | 100 | μg/l | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 2,5 | mg/m3 | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 83 | mg/kg bw/day | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 0,83 | mg/kg bw/day | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 5 | mg/m3 | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 83 | mg/kg bw/day | |

| Silicon dioxide - amorphous | | | | | | | | | | | |
|-----------------------------|--------------------|---------------------|------------|-------|-------|------|--|--|--|--|--|
| Area of application | Exposure route / | Effect on health | Descriptor | Value | Unit | Note | | | | | |
| | Environmental | | - | | | | | | | | |
| | compartment | | | | | | | | | | |
| Workers / employees | Human - inhalation | Long term, systemic | DNEL | 4 | mg/m3 | | | | | | |
| | | effects | | | | | | | | | |

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

- (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit Short-term exposure limit (15-minute reference period).
- (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
- ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.
- (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.



Page 6 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

With danger of contact with eyes.

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Protective nitrile gloves (EN ISO 374).

Minimum layer thickness in mm:

>= 0,5

Permeation time (penetration time) in minutes:

400

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

Normally not necessary.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Paste, Liquid
Colour: White
Odour: Characteristic
Odour throubold: Net determine

Odour threshold:

Melting point/freezing point:

Initial boiling point and boiling range:

Flammability (solid, gas):

Not determined

Not determined

Not determined

Lower explosive limit:

n.a.

Upper explosive limit:

n.a.

Flash point: Not determined



Page 7 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

Auto-ignition temperature:

Decomposition temperature: Not determined

pH-value: n.a.

Viscosity: Not determined

Water solubility: Insoluble
Partition coefficient (n-octanol/water): Not determined

Vapour pressure:

Density:

Vapour density (air = 1):

Vapour density (air = 1):

Evaporation rate:

Not determined

Not determined

Evaporation rate: Not Bulk density: n.a.

Solubility(ies):

Not determined

Explosive properties: Product is not explosive.

Oxidising properties:

9.2 Other information

Miscibility:

Conductivity:

Not determined

Fat solubility / solvent:

Not determined

SECTION 10: Stability and reactivity

n.a.

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

None known

10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|----------------------------------|----------|-------|------|----------|-------------|--------|
| Acute toxicity, by oral route: | | | 3 | 2.3 | | n.d.a. |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin | | | | | | n.d.a. |
| sensitisation: | | | | | | |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - | | | | | | n.d.a. |
| single exposure (STOT-SE): | | | | | | |



Page 8 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

| Specific target organ toxicity - | | | n.d.a. |
|----------------------------------|--|--|--------|
| repeated exposure (STOT-RE): | | | |
| Aspiration hazard: | | | n.d.a. |
| Symptoms: | | | n.d.a. |

| Titanium dioxide (in powder fo | | | | | | Mataa |
|----------------------------------|----------|-------|---------|-------------|------------------------|---------------------|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 425 (Acute Oral | |
| | | | | | Toxicity - Up-and-Down | |
| | | | | | Procedure) | |
| Acute toxicity, by dermal route: | LD50 | >5000 | mg/kg | Rabbit | | |
| Acute toxicity, by inhalation: | LD50 | >6,8 | mg/l/4h | Rat | | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute | Not irritant |
| | | | | | Dermal ` | |
| | | | | | Irritation/Corrosion) | |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye | Not irritant. |
| Conodo oyo damago, madom | | | | rabbit | Irritation/Corrosion) | Mechanical |
| | | | | | intation/Conosion) | irritation possible |
| Respiratory or skin | | | | Marras | OECD 429 (Skin | Not sensitizising |
| | | | | Mouse | OECD 429 (SKIII | Not sensitizising |
| sensitisation: | | | | | Sensitisation - Local | |
| | | | | | Lymph Node Assay) | |
| Respiratory or skin | | | | Guinea pig | OECD 406 (Skin | No (skin contact) |
| sensitisation: | | | | | Sensitisation) | |
| Germ cell mutagenicity: | | | | Mouse | OECD 474 (Mammalian | Negative |
| | | | | | Erythrocyte | |
| | | | | | Micronucleus Test) | |
| Germ cell mutagenicity: | | | | Mammalian | OECD 473 (In Vitro | Negative |
| g,- | | | | | Mammalian | |
| | | | | | Chromosome | |
| | | | | | Aberration Test) | |
| Germ cell mutagenicity: | | | | Salmonella | (Ames-Test) | Negative |
| Germ cen mutagemony. | | | | typhimurium | (Ames-rest) | Negative |
| O | | | | typnimunum | OFOD 470 (la) (ita- | Nicochina |
| Germ cell mutagenicity: | | | | | OECD 476 (In Vitro | Negative |
| | | | | | Mammalian Cell Gene | |
| _ | | | | | Mutation Test) | |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial | Negative |
| | | | | | Reverse Mutation Test) | |
| Reproductive toxicity | | | | Rat | OECD 414 (Prenatal | No indications of |
| (Developmental toxicity): | | | | | Developmental Toxicity | such an effect. |
| | | | | | Study) | |
| Specific target organ toxicity - | | | | | , | Not irritant |
| single exposure (STOT-SE): | | | | | | (respiratory tract) |
| Symptoms: | | | | | | mucous |
| Cymptome. | | | | | | membrane |
| | | | | | | irritation, |
| | | | | | | coughing, |
| | | | | | | |
| | | | | | | respiratory |
| | | | | | | distress, drying |
| 0 7 1 | NOAE: | 0500 | | P . | | of the skin. |
| Specific target organ toxicity - | NOAEL | 3500 | mg/kg/d | Rat | | 90d |
| repeated exposure (STOT-RE), | | | | | | |
| oral: | | | | | | |
| Specific target organ toxicity - | NOAEC | 10 | mg/m3 | Rat | | 90d |
| repeated exposure (STOT-RE), | | | | | | |
| inhalat.: | 1 | | | | | |

| Disodium sebacate | | | | | | | | | |
|----------------------------------|----------|-------|-------|----------|-------------------------------------|-------|--|--|--|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes | | | |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | | | | |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rat | OECD 402 (Acute Dermal Toxicity) | | | | |



B.

Page 9 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

. Keramikpaste Ceramic Paste

| Skin corrosion/irritation: | Rabbit | OECD 404 (Acute Dermal | Not irritant |
|--------------------------------|--------|---------------------------|--------------|
| | | Irritation/Corrosion) | |
| Serious eye damage/irritation: | | OECD 492 | Eye Irrit. 2 |
| | | (Reconstructed Human | |
| | | Cornea-like Epithelium | |
| | | Not Requir. C. + L. for | |
| | | Eye Irrit./Dam.) | |

| Silicon dioxide - amorphous | | | | | | |
|----------------------------------|----------|-------|-------|-------------|-----------------------|-------------------|
| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral | |
| | | | | | Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >5000 | mg/kg | Rabbit | IUCLID Chem. Data | |
| | | | | | Sheet (ESIS) | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute | Not irritant |
| | | | | | Dermal | |
| | | | | | Irritation/Corrosion) | |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye | Not irritant |
| | | | | | Irritation/Corrosion) | |
| Respiratory or skin | | | | Guinea pig | IUCLID Chem. Data | Not sensitizising |
| sensitisation: | | | | | Sheet (ESIS) | |
| Germ cell mutagenicity: | | | | Salmonella | (Ames-Test) | Negative |
| | | | | typhimurium | | |
| Carcinogenicity: | | | | | | Negative |
| Reproductive toxicity: | NOAEL | >497 | mg/kg | | | No indications of |
| | | | bw/d | | | such an effect. |
| Aspiration hazard: | | | | | | No |
| Specific target organ toxicity - | NOAEL | 0,035 | mg/l | | | Negative |
| repeated exposure (STOT-RE), | | | | | | |
| inhalat.: | | | | | | |

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|----------------------------|----------|------|-------|------|----------|-------------|------------------|
| 12.1. Toxicity to fish: | • | | | | | | n.d.a. |
| 12.1. Toxicity to daphnia: | | | | | | | n.d.a. |
| 12.1. Toxicity to algae: | | | | | | | n.d.a. |
| 12.2. Persistence and | | | | | | | n.d.a. |
| degradability: | | | | | | | |
| 12.3. Bioaccumulative | | | | | | | n.d.a. |
| potential: | | | | | | | |
| 12.4. Mobility in soil: | | | | | | | n.d.a. |
| 12.5. Results of PBT | | | | | | | n.d.a. |
| and vPvB assessment | | | | | | | |
| 12.6. Other adverse | | | | | | | n.d.a. |
| effects: | | | | | | | |
| Other information: | | | | | | | According to the |
| | | | | | | | recipe, contains |
| | | | | | | | no AOX. |

| Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 μm) | | | | | | | | | | |
|--|----------|------|-------|------|------------------------|--|-------|--|--|--|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes | | | |
| 12.1. Toxicity to fish: | LC50 | 96h | >100 | mg/l | Oncorhynchus mykiss | OECD 203 (Fish, Acute Toxicity Test) | | | | |



Page 10 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

| 12.1. Toxicity to daphnia: | LC50 | 48h | >100 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation | |
|--------------------------------------|-----------|-----|--------|-------|----------------------------------|---|--|
| 12.1. Toxicity to algae: | EC50 | 72h | 16 | mg/l | Pseudokirchneriell a subcapitata | Test) U.S. EPA-600/9- 78-018 | |
| 12.2. Persistence and degradability: | | | | | | | Not relevant for inorganic substances. |
| 12.3. Bioaccumulative potential: | BCF | 42d | 9,6 | | | | Not to be expected |
| 12.3. Bioaccumulative potential: | BCF | 14d | 19-352 | | | | Oncorhynchus mykiss |
| 12.4. Mobility in soil: | | | | | | | Negative |
| 12.5. Results of PBT | | | | | | | No PBT |
| and vPvB assessment | | | | | | | substance, No vPvB substance |
| Toxicity to bacteria: | | | >5000 | mg/l | Escherichia coli | | |
| Toxicity to bacteria: | LC0 | 24h | >10000 | mg/l | Pseudomonas fluorescens | | |
| Toxicity to annelids: | NOEC/NOEL | | >1000 | mg/kg | Eisenia foetida | | |
| Water solubility: | | | | | | | Insoluble20°C |

| Disodium sebacate | | | | | | | |
|--------------------------------------|----------|------|-------|------|----------------------|--|--------------------------|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to fish: | LC50 | 96h | >100 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to algae: | EL50 | 72h | 38,7 | mg/l | Skeletonema costatum | ISO 10253 | |
| 12.1. Toxicity to daphnia: | EC0 | 48h | >100 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.2. Persistence and degradability: | | 28d | 89 | % | | OECD 306 (Biodegradability in Seawater) | Readily biodegradable |

| Silicon dioxide - amorphous | | | | | | | | |
|--|-----------|------|--------|------|----------------------------------|---|---|--|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes | |
| 12.5. Results of PBT and vPvB assessment | - | | | | - | | No PBT substance, No vPvB substance | |
| 12.1. Toxicity to algae: | EC50 | 72h | >10000 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 30d | 34223 | mg/l | Daphnia magna | | | |
| 12.1. Toxicity to fish: | LC50 | 96h | >10000 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | | |
| 12.2. Persistence and degradability: | | | | | | , | Not relevant for inorganic substances. | |
| 12.1. Toxicity to algae: | IC50 | 72h | 440 | mg/l | Pseudokirchneriell a subcapitata | IUCLID Chem. Data Sheet (ESIS) | | |
| 12.1. Toxicity to algae: | NOEC/NOEL | 72h | 60 | mg/l | Pseudokirchneriell a subcapitata | IUCLID Chem. Data Sheet (ESIS) | | |



Page 11 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

| 12.1. Toxicity to daphnia: | EC50 | 24h | >1000 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute |
|----------------------------|------|-----|-------|------|---------------|-----------------------------------|
| | | | | | | Immobilisation Test) |

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

12 01 12 spent waxes and fats

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

15 01 04 metallic packaging

SECTION 14: Transport information

General statements

14.1. UN number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name: 14.3. Transport hazard class(es):

14.3. Transport hazard class(es):n.a.14.4. Packing group:n.a.Classification code:n.a.LQ:n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es):n.a.14.4. Packing group:n.a.Marine Pollutant:n.a.14.5. Equisappental hazards:Net

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

n.a.
14.4. Packing group:

n.a.

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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



(B)

Page 12 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

Observe restrictions:

General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC):

0 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

1, 2, 3, 8, 11, 12, 15

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Not applicable

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H351 Suspected of causing cancer by inhalation.

H319 Causes serious eye irritation.

Carc. — Carcinogenicity Eye Irrit. — Eye irritation

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the

International Carriage of Dangerous Goods by Road)

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

ATE Acute Toxicity Estimate

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BSEF The International Bromine Council

bw body weight

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon



Page 13 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)

EC European Community
ECHA European Chemicals Agency

ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ErCx, EµCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

etc. et cetera

EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax. Fax number gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

Koc Adsorption coefficient of organic carbon in the soil

Kow octanol-water partition coefficient

IARC International Agency for Research on Cancer IATA International Air Transport Association IBC (Code) International Bulk Chemical (Code)

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

Log Koc Logarithm of adsorption coefficient of organic carbon in the soil Log Kow, Log Pow Logarithm of octanol-water partition coefficient

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable n.av. not available n.c. not checked n.d.a. no data available NLP No-longer-Polymer

NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

org. organic

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million PVC Polyvinylchloride

REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

TOC Total organic carbon

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are



③B)·

Page 14 of 14

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 29.09.2020 / 0015

Replacing version dated / version: 18.08.2020 / 0014

Valid from: 29.09.2020 PDF print date: 20.10.2021

Keramikpaste Ceramic Paste

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by: Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

 $\@$ by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.