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

Revision date / version: 05.01.2023 / 0012

Replacing version dated / version: 01.11.2021 / 0011

Valid from: 05.01.2023 PDF print date: 05.01.2023

Knet-Metall Metal Putty

# 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

# Knet-Metall Metal Putty

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

Adhesive sealant

## **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:

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### 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)

Hazard class Hazard category Hazard statement

Eye Irrit. 2 H319-Causes serious eye irritation.

Skin Irrit. 2 H315-Causes skin irritation.

Skin Sens. 1 H317-May cause an allergic skin reaction.

Aquatic Chronic 3 H412-Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

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



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H319-Causes serious eye irritation. H315-Causes skin irritation. H317-May cause an allergic skin reaction. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P261-Avoid breathing dust. P273-Avoid release to the environment. P280-Wear protective gloves / eye protection / face protection. P302+P352-IF ON SKIN: Wash with plenty of water / soap. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P314-Get medical advice / attention if you feel unwell.

P501-Dispose of contents / container to an approved waste disposal facility.

EUH212-Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

Bis-[4-(2,3-epoxypropoxy)phenyl]propane

Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide

#### 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 %).

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

## 3.1 Substances

## n.a. 3.2 Mixtures

Bis-[4-(2,3-epoxypropoxy)phenyl]propane	
Registration number (REACH)	01-2119456619-26-XXXX
Index	603-073-00-2
EINECS, ELINCS, NLP, REACH-IT List-No.	216-823-5
CAS	1675-54-3
content %	10-<20
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315
	Eye Irrit. 2, H319
	Skin Sens. 1, H317
	Aquatic Chronic 2, H411
Specific Concentration Limits and ATE	Skin Irrit. 2, H315: >=5 %
	Eye Irrit. 2, H319: >=5 %

Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-	
epoxypropane with hydrogen sulfide	
Registration number (REACH)	01-2120118957-46-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	701-196-7
CAS	
content %	10-<20



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Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Sens. 1B, H317
	Aquatic Chronic 3, H412

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-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Carc. 2, H351 (as inhalation)

2,4,6-tris(dimethylaminomethyl)phenol	
Registration number (REACH)	01-2119560597-27-XXXX
Index	603-069-00-0
EINECS, ELINCS, NLP, REACH-IT List-No.	202-013-9
CAS	90-72-2
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302
	Skin Irrit. 2, H315
	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.

eyes, reddened

watering eyes

reddening of the skin

Dermatitis (skin inflammation)

Allergic reaction

## 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



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Water jet spray/foam/CO2/dry extinguisher

## 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 Oxides of nitrogen Hydrogen chloride Metal oxides 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.

According to size of fire

Full protection, if necessary.

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.

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

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

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

## 6.3 Methods and material for containment and cleaning up

Pick up mechanically 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 or skin.

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

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

## 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

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.



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Store product closed and only in original packing.

Do not store with oxidizing agents. Store in a well ventilated place.

Store cool.

## 7.3 Specific end use(s)

No information available at present.

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

## 8.1 Control parameters

WEL-TWA: 10 mg/m3 (total inhalable dust), 4 mg/m3   WEL-STEL:	©B Chemical Name		n powder form containing 1 % or more of particles with	
(respirable dust)    Monitoring procedures:				
Monitoring procedures:   Section   WEL-STEL:   Section   Sectio	(respirable dust)			
Chemical Name		-		
WEL-TWA: 1 mg/m3 (res. dust)	BIVIGV:		Other information:	
Monitoring procedures:	Chemical Name	Talc		
Other information:				
Chemical Name				
WEL-TWA: 1 mg/m3 (dusts and mists, as Cu)	BMGV:		Other information:	
Monitoring procedures:    SO 15202 (Workplace air - Determination of metals and metalloids in airborne particulate matter by Inductively Coupled Plasma Atomic Emission Spectrometry), Part 1-3 - 2012(Part 1), 2012(Part 2), 2004 (Part 3) - EU project BC/CEN/ENTR/000/2002-1 16 card 84-1 (2004)   MDHS 9112 (Metals and metalloids in workplace air by X-ray fluorescence spectrometry) - 2015 - EU project BC/CEN/ENTR/000/2002-16 card 84-2 (2004)   NIOSH 7029 (Copper (dust and fume)) - 1994     NIOSH 7300 (ELEMENTS by ICP (Nitric/Perchloric Acid Ashing)) - 2003     NIOSH 7301 (Elements by ICP (aqua regia ashing)) - 2003     NIOSH 7303 (Elements by ICP (aqua regia ashing)) - 2003     NIOSH 7303 (Elements by ICP (Hot Not HOUR) Additional Council (India)     NIOSH 7301 (Elements by ICP (Metal Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not HOUR) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not HOUR) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not HOUR) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hour) Additional Council (India)     NIOSH 7303 (Elements by ICP (Hot Not Hou	Chemical Name			
particulate matter by Inductively Coupled Plasma Atomic Emission Spectrometry), Part 1-3 - 2012(Part 1), 2012(Part 2), 2004 (Part 3) - EU project BC/CEN/ENTR/000/2002- 16 card 84-1 (2004)  MDHS 91/2 (Metals and metalloids in workplace air by X-ray fluorescence - spectrometry) - 2015 - EU project BC/CEN/ENTR/000/2002-16 card 84-2 (2004) - NIOSH 7029 (Copper (dust and fume)) - 1994 - NIOSH 7029 (Copper (dust and fume)) - 1994 - NIOSH 7300 (ELEMENTS by ICP (Nitric/Perchloric Acid Ashing)) - 2003 - NIOSH 7301 (Elements by ICP (qua regia ashing)) - 2003 - OSHA ID-121 (Metal and metalloid particulates in workplace atmospheres (Atomic absorption)) - 2002 - EU project BC/CEN/ENTR/000/2002-16 card 84-10 (2004) - OSHA ID-125G (Metal and metalloid particulates in workplace atmospheres (ICP)) - 2002 - OSHA ID-206 (ICP analysis of metal/metallloid particulates from solder operations) - 1991				
Chemical Name  WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3  WEL-STEL:  WEL-TWA: 2 mg/m3 (res, dust)  Monitoring procedures:  WEL-TWA: 2 mg/m3 (res, dust)  Monitoring procedures:  WEL-TWA: 2 mg/m3 (res, dust)  WEL-STEL:  Monitoring procedures:  WEL-TWA: 2 mg/m3 (res, dust)  WEL-STEL:  Other information:  WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3  WEL-STEL:  WEL-STEL:  Other information:  WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3  WEL-STEL:  WEL-STEL:  WEL-STEL:  Other information:  Other information:	Monitoring procedures:	- 1 - 1 - 1 - s - N - N - N - 0 - 2	particulate matter by Inductively Coupled Plasma Atomic Em I-3 - 2012(Part 1), 2012(Part 2), 2004 (Part 3) - EU project El 6 card 84-1 (2004)  MDHS 91/2 (Metals and metalloids in workplace air by X-ray spectrometry) - 2015 - EU project BC/CEN/ENTR/000/2002-NIOSH 7029 (Copper (dust and fume)) - 1994  NIOSH 7300 (ELEMENTS by ICP (Nitric/Perchloric Acid Ash NIOSH 7301 (Elements by ICP (aqua regia ashing)) - 2003  NIOSH 7303 (Elements by ICP (Hot block HCI/HNO3 digesting)) - 2002 - EU project BC/CEN/ENTR/000/2002-10 (DSHA ID-125G (Metal and metalloid particulates in workplace 2002  DSHA ID-206 (ICP analysis of metal/metallloid particulates f	rission Spectrometry), Part 3C/CEN/ENTR/000/2002- If fluorescence 16 card 84-2 (2004) Ining)) - 2003 Ining)) - 2003 Ining) - 2003 Ining) - 2003 Ining) - 2004 Ining) - 2005 Ining) - 2006 Ining) - 2006 Ining) - 2007 Ining) - 2008 Ining) - 2009 Ining) - 200
WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3   WEL-STEL:      Monitoring procedures:   Other information:    Chemical Name   Kaolin    WEL-TWA: 2 mg/m3 (res. dust)   WEL-STEL:      Monitoring procedures:   Other information:    Monitoring procedures:   Other information:    Chemical Name   Calcium carbonate    WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3   WEL-STEL:      WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3   WEL-STEL:    WEL-STEL:   Other information:    Monitoring procedures:   Other information:	BMGV:		<u> </u>	
WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3   WEL-STEL:      Monitoring procedures:   Other information:    Chemical Name   Kaolin   WEL-STEL:      WEL-TWA: 2 mg/m3 (res. dust)   WEL-STEL:      Monitoring procedures:   Other information:    Monitoring procedures:   Other information:    Chemical Name   Calcium carbonate   WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3   WEL-STEL:      WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3   WEL-STEL:      WEL-STEL:   Other information:    Monitoring procedures:   Other information:	Chemical Name	Calcium carbonate		
BMGV:  Chemical Name  WEL-TWA: 2 mg/m3 (res. dust)  Monitoring procedures:  BMGV:  Other information:  Monitoring procedures:  BMGV:  Other information:	WEL-TWA: 4 mg/m3 (respirable du (total inhalable dust)			
Chemical Name WEL-TWA: 2 mg/m3 (res. dust) WEL-STEL: Monitoring procedures: BMGV:  Chemical Name Calcium carbonate WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 (total inhalable dust) Monitoring procedures:  MONITORING PROCEDURES:  CHEMICAL NAME  Calcium carbonate  WEL-STEL:  Other information:  Other information:				
WEL-TWA: 2 mg/m3 (res. dust)  Monitoring procedures:  BMGV:  Chemical Name  Calcium carbonate  WEL-STEL:  WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 (total inhalable dust)  Monitoring procedures:  Monitoring procedures:  Chemical Name  General dust limit  Chemical Name  General dust limit	BIVIGV:		Other information:	
Monitoring procedures: BMGV: Other information:  ***EL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 WEL-STEL: (total inhalable dust)  Monitoring procedures: BMGV: Other information:	Chemical Name	Kaolin		
BMGV:  Chemical Name Calcium carbonate  WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 (total inhalable dust)  Monitoring procedures:  BMGV:  Chemical Name  General dust limit  Other information:			-	
WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 WEL-STEL: (total inhalable dust) Monitoring procedures: BMGV:  Chemical Name  General dust limit  WEL-STEL: Other information:		-		
WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 WEL-STEL: (total inhalable dust) Monitoring procedures: BMGV:  Chemical Name  General dust limit  WEL-STEL: Other information:	Chemical Name	Calcium carbonate		
BMGV: Other information:  © Chemical Name general dust limit	(total inhalable dust)			
© Chemical Name general dust limit		-		
	BIVIGV:		Other information:	
WEL-TWA: 10 mg/m3 (inhal dust) 4 mg/m3 (respir WEL-STEL:	Chemical Name			
dust)  Monitoring procedures:	dust)		WEL-STEL:	
monitoring procedures.	Monitoring procedures.	<del>-</del>		



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BMGV: ---Other information: ---

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	3	μg/l	
	Environment - marine		PNEC	0,3	μg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sporadic (intermittent) release		PNEC	0,012	mg/l	
	Environment - sediment		PNEC	0,05	mg/kg dw	
	Environment - sediment, freshwater		PNEC	0,5	mg/kg dw	
	Environment - sediment, marine		PNEC	0,5	mg/kg dw	
Consumer	Human - dermal	Short term, systemic effects	DNEL	3,6	mg/kg bw/d	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,75	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	0,75	mg/kg bw/d	
Consumer	Human - dermal	Long term, systemic effects	DNEL	3,6	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,75	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,75	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	8,3	mg/kg bw/d	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	12,3	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8,3	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	12,3	mg/m3	

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic 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,		PNEC	0,193	mg/l	
	sporadic (intermittent)					
	release					
	Environment - sewage		PNEC	100	mg/l	
	treatment plant					
	Environment - sediment,		PNEC	1000	mg/kg dw	
	freshwater					
	Environment - sediment,		PNEC	100	mg/kg dw	
	marine					
	Environment - soil		PNEC	100	mg/kg dw	
	Environment - oral (animal		PNEC	1667	mg/kg feed	
	feed)					
Consumer	Human - oral	Long term, systemic	DNEL	700	mg/kg bw/d	
		effects				
Workers / employees	Human - inhalation	Long term, local effects	DNEL	10	mg/m3	



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Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	0,046	mg/l	
	Environment - marine		PNEC	0,005	mg/l	
	Environment - water,		PNEC	0,46	mg/l	
	sporadic (intermittent)					
	release					
	Environment - sewage		PNEC	0,2	mg/l	
	treatment plant					
	Environment - sediment,		PNEC	0,262	mg/kg dw	
	freshwater					
	Environment - sediment,		PNEC	0,026	mg/kg dw	
	marine					
	Environment - soil		PNEC	0,025	mg/kg dw	
Consumer	Human - inhalation	Long term, systemic	DNEL	0,13	mg/m3	
		effects				
Consumer	Human - inhalation	Short term, local	DNEL	0,13	mg/m3	
		effects				
Consumer	Human - dermal	Long term, systemic	DNEL	0,075	mg/kg	
		effects			bw/day	
Consumer	Human - dermal	Short term, local	DNEL	0,075	mg/kg	
		effects			bw/day	
Consumer	Human - oral	Long term, systemic	DNEL	0,075	mg/kg	
		effects			bw/day	
Workers / employees	Human - inhalation	Long term, systemic	DNEL	0,53	mg/m3	
, ,		effects				
Workers / employees	Human - inhalation	Short term, local	DNEL	2,1	mg/m3	
		effects				
Workers / employees	Human - dermal	Long term, systemic	DNEL	0,15	mg/kg	
		effects			bw/day	
Workers / employees	Human - dermal	Short term, local	DNEL	0,6	mg/kg	
		effects			bw/day	

Copper						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	7,8	μg/l	
	Environment - marine		PNEC	5,2	μg/l	
	Environment - sewage treatment plant		PNEC	230	μg/l	
	Environment - sediment, freshwater		PNEC	87	mg/kg dw	
	Environment - sediment, marine		PNEC	676	mg/kg dw	
	Environment - soil		PNEC	65	mg/kg dw	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	18,2	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	137	mg/kg bw/day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	273	mg/kg bw/day	

Calcium carbonate						
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - sewage		PNEC	100	mg/l	
	treatment plant					



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Consumer	Human - oral	Long term, systemic effects	DNEL	6,1	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	1,06	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	6,1	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	4,26	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	

- 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.

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:

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

Skin protection - Hand protection:

Chemical resistant protective gloves (EN ISO 374).

Recommended

Protective gloves in butyl rubber (EN ISO 374).

Minimum layer thickness in mm:

> 0.4

Permeation time (penetration time) in minutes:

> 480

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.



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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, solid. 20°C

Colour: Grey

Odour: Characteristic

Melting point/freezing point: There is no information available on this parameter. There is no information available on this parameter.

Boiling point or initial boiling point and boiling range:

Flammability: Flammable

Lower explosion limit: Does not apply to solids. Upper explosion limit: Does not apply to solids.

Flash point: >100 °C

Does not apply to solids. Auto-ignition temperature: Decomposition temperature: There is no information available on this parameter.

pH:

Mixture is non-soluble (in water).

Kinematic viscosity: There is no information available on this parameter.

Solubility: Not miscible

Partition coefficient n-octanol/water (log value): Does not apply to mixtures. Vapour pressure:

There is no information available on this parameter. Density and/or relative density: 1,9-2,09 g/cm3

Relative vapour density: Does not apply to solids.

Particle characteristics: There is no information available on this parameter.

9.2 Other information

Explosives: There is no information available on this parameter.

Oxidizing solids:

## **SECTION 10: Stability and reactivity**

## 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.

Strong heat

### 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.



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## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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:	ATE	>2000	mg/kg			calculated value
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 - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 420 (Acute Oral	
					toxicity - Fixe Dose	
					Procedure)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
					Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Skin Irrit. 2
					Dermal	
					Irritation/Corrosion)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Eye Irrit. 2
_					Irritation/Corrosion)	
Respiratory or skin				Mouse	OECD 429 (Skin	Yes (skin
sensitisation:					Sensitisation - Local	contact)
					Lymph Node Assay)	,
Germ cell mutagenicity:					OECD 471 (Bacterial	Positive
					Reverse Mutation Test)	
Germ cell mutagenicity:					OECD 476 (In Vitro	Positive
					Mammalian Cell Gene	
					Mutation Test)	
Germ cell mutagenicity:					OECD 478 (Genetic	Negative
					Toxicology - Rodent	_
					dominant Lethal Test)	
Germ cell mutagenicity:				Salmonella	OECD 472 (Genetic	Negative
				typhimurium	Toxicology - Escherichia	
					coli, Reverse Assay)	
Reproductive toxicity				Rat	OECD 414 (Prenatal	Negative
(Developmental toxicity):					Developmental Toxicity	_
•					Study)	
Carcinogenicity:				Rat	OECD 453 (Combined	Negative
					Chronic	-
					Toxicity/Carcinogenicity	
					Studies)	
Reproductive toxicity				Rabbit	OECD 414 (Prenatal	Negative
(Developmental toxicity):					Developmental Toxicity	-
•					Study)	



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Reproductive toxicity (Effects on fertility):	NOAEL	540	mg/kg bw/d	Rat	OECD 416 (Two- generation Reproduction Toxicity Study)	
Symptoms:						breathing difficulties, coughing, gastrointestinal disturbances
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	50	mg/kg	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	10	mg/kg	Rat	,	
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	100	mg/kg	Mouse		

Titanium dioxide (in powder for						
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	1 1000ddio)	
Acute toxicity, by inhalation:	LC50	>6.8	mg/l/4h	Rat		
Skin corrosion/irritation:	2000	7 5,5		Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Mechanical irritation possible.
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Not sensitizising
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	(Ames-Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	No indications of such an effect.
Specific target organ toxicity - single exposure (STOT-SE):						Not irritant (respiratory tract).
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	3500	mg/kg/d	Rat		(90d)
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	10	mg/m3	Rat		(90d)



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Symptoms:						mucous membrane irritation, coughing, respiratory distress, drying of the skin.
2,4,6-tris(dimethylaminomethy	l)phenol					or the oran.
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>1916-<2455	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	15	mg/kg	Ŕat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Symptoms:						breathing difficulties, headaches, gastrointestinal disturbances, mucous membrane irritation, dizziness, nausea

Talc						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Skin corrosion/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitizising
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative
-					Reverse Mutation Test)	
Carcinogenicity:					·	Negative
Reproductive toxicity:				Rat		Negative
Symptoms:						mucous membrane irritation

Copper							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Skin corrosion/irritation:						Not irritant	
Serious eye damage/irritation:						Not irritant	
Respiratory or skin						Not sensitizising	
sensitisation:							
Symptoms:						abdominal pain,	
						vomiting, weight	
						loss, headaches,	
						metal fume fever	



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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 420 (Acute Oral	
, ,					toxicity - Fixe Dose	
					Procedure)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
• • •					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>3	mg/l/4h	Rat	OECD 403 (Acute	
• •					Inhalation Toxicity)	
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				Mouse	OECD 429 (Skin	No (skin contact)
sensitisation:					Sensitisation - Local	
					Lymph Node Assay)	
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative
					Reverse Mutation Test)	
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative
					Mammalian	
					Chromosome	
					Aberration Test)	
Germ cell mutagenicity:					OECD 476 (In Vitro	Negative
					Mammalian Cell Gene	
					Mutation Test)	
Carcinogenicity:						No indications of
				_		such an effect.
Reproductive toxicity:	NOEL	1000	mg/kg	Rat	OECD 422 (Combined	
			bw/d		Repeated Dose Tox.	
					Study with the	
					Reproduction/Developm.	
					Tox. Screening Test)	N
Specific target organ toxicity -						No indications of
single exposure (STOT-SE):						such an effect.
Specific target organ toxicity -						No indications of
repeated exposure (STOT-RE):					_	such an effect.
Aspiration hazard:	NOAEL	4000	//	D (	0505 400 (0 1: 1	No
Specific target organ toxicity -	NOAEL	1000	mg/kg	Rat	OECD 422 (Combined	
repeated exposure (STOT-RE),			bw/d		Repeated Dose Tox.	
oral:					Study with the	
					Reproduction/Developm.	
0 '6' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NOAFO	0.040		<b>+ D</b> (	Tox. Screening Test)	
Specific target organ toxicity -	NOAEC	0,212	mg/l	Rat	OECD 413 (Subchronic	
repeated exposure (STOT-RE),					Inhalation Toxicity - 90-	
inhalat.:		1			Day Study)	

Kaolin						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rat		
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant,
						Mechanical
						irritation possible.
Aspiration hazard:						No

Calcium carbonate								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 420 (Acute Oral toxicity - Fixe Dose Procedure)			
Acute toxicity, by oral route:	LD50	> 5000	mg/kg	Rat				



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Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Mechanical irritation possible.
Respiratory or skin sensitisation:						No (skin contact)
Germ cell mutagenicity:					in vitro	Negative
Carcinogenicity:						Negative, administered as Ca-lactate
Reproductive toxicity:						Negative, administered as Ca-carbonate

## 11.2. Information on other hazards

Knet-Metall						
Metal Putty						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply
						to mixtures.
Other information:						No other
						relevant
						information
						available on
						adverse effects
						on health.

## **SECTION 12: Ecological information**

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

Knet-Metall							
Metal Putty							
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. Endocrine							Does not apply
disrupting properties:							to mixtures.
12.7. Other adverse							No information
effects:							available on
							other adverse
							effects on the
							environment.

Bis-[4-(2,3-epoxypropoxy)phenyl]propane											
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.1. Toxicity to algae:	NOEC/NOEL	72h	4,2	mg/l	Scenedesmus						
					subspicatus						



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12.1. Toxicity to fish:	LC50	96h	1,5-2	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	1,8-2,7	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,3	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	LC50	72h	9,4	mg/l	Selenastrum capricornutum	U.S. EPA ECOTOX Database	
12.2. Persistence and degradability:		28d	6-12	%	activated sludge	OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradable
12.2. Persistence and degradability:		28d	5	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		3-31				Low
12.3. Bioaccumulative potential:	Log Pow		2,64- 3,78			OECD 117 (Partition Coefficient (n- octanol/water) - HPLC method)	Low
12.4. Mobility in soil:	Koc		445				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	IC50	3h	>100	mg/l	activated sludge		_

Titanium dioxide (in pow	der form cont		or more of pa	articles wit	h aerodynamic diamete	er <= 10 µm)	
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus	OECD 203 (Fish,	
					mykiss	Acute Toxicity	
10.1 <del>-</del> 1.11 1.11	1.050	401	100			Test)	
12.1. Toxicity to daphnia:	LC50	48h	>100	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp. Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	EC50	72h	16	mg/l	Pseudokirchneriell	U.S. EPA-600/9-	
					a subcapitata	78-018	
12.2. Persistence and							Not relevant for
degradability:							inorganic
							substances.
12.3. Bioaccumulative	BCF	42d	9,6				Not to be
potential:							expected
12.3. Bioaccumulative	BCF	14d	19-352				Oncorhynchus
potential:							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		



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Toxicity to annelids:	NOEC/NOEL	>1000	mg/kg	Eisenia foetida	
Water solubility:					Insoluble20°C

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to daphnia:	LC50	96h	718	mg/l			
12.2. Persistence and		28d	4	%	activated sludge	OECD 301 D	Not readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Closed Bottle Test)	
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
12.1. Toxicity to fish:	LC50	96h	153	mg/l	Brachydanio rerio	ISO 7346	
12.1. Toxicity to fish:	LC50	96h	175	mg/l	Cyprinus carpio		
12.1. Toxicity to algae:	EC50	72h	84	mg/l	Desmodesmus	OECD 201 (Alga,	
					subspicatus	Growth Inhibition	
					subspicatus	Growth Inhibition Test)	

Talc	Talc											
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes					
Water solubility:			<0,1	%								
12.2. Persistence and							Not relevant for					
degradability:							inorganic					
							substances.					
12.5. Results of PBT							No PBT					
and vPvB assessment							substance, No					
							vPvB substance					

Copper							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and							Not relevant for
degradability:							inorganic
							substances.
12.5. Results of PBT							Not relevant for
and vPvB assessment							inorganic
							substances.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h			Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	No observation with saturated solution of test material.
12.1. Toxicity to daphnia:	EC50	48h			Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	No observation with saturated solution of test material.
12.1. Toxicity to algae:	EC50	72h	>14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:							Not to be expected
12.4. Mobility in soil:							n.a.



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12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	W VB Gubblance
Toxicity to bacteria:	NOEC/NOEL	3h	1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other organisms:	EC50	21d	>1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Glycine max
Other organisms:	EC50	21d	>1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Lycopersicon esculentum
Other organisms:	EC50	21d	>1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Avena sativa
Other organisms:	NOEC/NOEL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Glycine max
Other organisms:	NOEC/NOEL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Lycopersicon esculentum
Other organisms:	NOEC/NOEL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Avena sativa
Other organisms:	EC50	14d	>1000	mg/kg dw	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	
Other organisms:	NOEC/NOEL	14d	1000	mg/kg dw	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	
Other organisms:	EC50	28d	>1000	mg/kg dw		OECD 216 (Soil Microorganisms - Nitrogen Transformation Test)	
Other organisms:	NOEC/NOEL	28d	1000	mg/kg dw		OECD 216 (Soil Microorganisms - Nitrogen Transformation Test)	
Water solubility:			0,0166	g/l		OECD 105 (Water Solubility)	20°C

Kaolin											
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 fish:	LC50	96h	>1000	mg/l							



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12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	Analogous conclusion
12.1. Toxicity to daphnia:	LC50	48h	>1100	mg/l	Daphnia magna		References
12.1. Toxicity to algae:	IC50		>1000	mg/l			
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion
12.2. Persistence and degradability:						,	Not biodegradable
12.3. Bioaccumulative potential:							Not to be expected, Analogous conclusion
Water solubility:							Insoluble

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and	
Toxicity to annelids:					Eisenia foetida	Ammonium Oxidation)) OECD 207	Negative
						(Earthworm, Acute Toxicity Tests)	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LC50	96h	>10000	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	>200	mg/l	Desmodesmus subspicatus		
12.1. Toxicity to algae:	EC50	72h	>14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Inorganic products cannot be eliminated from water through biological purification methods.
12.3. Bioaccumulative potential:							Not relevant for inorganic substances.
12.4. Mobility in soil:							Not relevant for inorganic substances.
12.5. Results of PBT and vPvB assessment							Not relevant for inorganic substances.



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## **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)

08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Allow product to harden.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

## For contaminated packing material

Pay attention to local and national official regulations.

Uncontaminated packaging can be recycled.

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

## **SECTION 14: Transport information**

#### **General statements**

Transport by road/by rail (ADR/RID)

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name:

Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicableTunnel restriction code:Not applicableClassification code:Not applicableLQ:Not applicableTransport category:Not applicable

Transport by sea (IMDG-code)

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name:

Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicableMarine Pollutant:Not applicableEmS:Not applicable

Transport by air (IATA)

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name:

Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicable

## 14.6. Special precautions for user

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

## 14.7. Maritime transport in bulk according to IMO instruments

Non-dangerous material according to Transport Regulations.

## **SECTION 15: Regulatory information**



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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Comply with trade association/occupational health regulations.

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:

2, 3, 4, 8, 9, 11, 12, 15

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

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

Classification in accordance with regulation	Evaluation method used
(EC) No. 1272/2008 (CLP)	
Eye Irrit. 2, H319	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

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.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eve irritation.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Eye Irrit. — Eye irritation Skin Irrit. — Skin irritation

Skin Sens. — Skin sensitization

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Carc. — Carcinogenicity

Acute Tox. — Acute toxicity - oral

#### **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:



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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

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 applicablen.av. not availablen.c. not checkedn.d.a. no data available

NIOSH National Institute for Occupational Safety and Health (USA)

NLP No-longer-Polymer



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NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

organic

OSHA Occupational Safety and Health Administration (USA)

persistent, bioaccumulative and toxic PBT

PΕ Polyethylene

PNEC Predicted No Effect Concentration

parts per million ppm PVC Polyvinylchloride

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

Evaluation, Authorisation and Restriction of Chemicals)

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.

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

wet weight wwt

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

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