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Replacing version dated / version: 01.11.2021 / 0005

Valid from: 08.02.2022 PDF print date: 08.02.2022 beko MS-Flex farbig

# 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

## beko MS-Flex farbig

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

Seam sealant

#### Uses advised against:

No information available at present.

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

beko GmbH Rappenfeldstr. 5 DE-86653 Monheim

Tel: +49 (0) 90 91 / 9 08 98-0 Fax: +49 (0) 90 91 / 9 08 98-29

info@beko-group.com www.beko-group.com

Qualified person's e-mail address: info@beko-group.com

## 1.4 Emergency telephone number

**Emergency information services / official advisory body:** 

Poison Control Center Mainz - 24 hour emergency service - phone: +49 (0) 6131/19240

#### Telephone number of the company in case of emergencies:

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#### **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)



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EUH208-Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, Trimethoxyvinylsilane. May produce an allergic reaction.

EUH210-Safety data sheet available on request.

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

#### 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

3-(trimethoxysilyl)propylamine	
Registration number (REACH)	01-2119510159-45-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	237-511-5
CAS	13822-56-5
content %	1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Skin Irrit. 2, H315
factors	Eye Dam. 1, H318

Trimethoxyvinylsilane	
Registration number (REACH)	01-2119513215-52-XXXX
Index	014-049-00-0
EINECS, ELINCS, NLP, REACH-IT List-No.	220-449-8
CAS	2768-02-7
content %	0,1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Flam. Liq. 3, H226
factors	Acute Tox. 4, H332
	Skin Sens. 1B, H317

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 %	0,01-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Carc. 2, H351 (as inhalation)
factors	· · · · · ·

N-(3-(trimethoxysilyl)propyl)ethylenediamine	
Registration number (REACH)	01-2119970215-39-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	217-164-6
CAS	1760-24-3
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Eye Dam. 1, H318
factors	Skin Sens. 1B, H317
	STOT SE 3, H335
Specific Concentration Limits and ATE	ATE (as inhalation, Vapours): 12,6 mg/l/4h



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Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

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

Wipe off residual product carefully with a soft, dry cloth.

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

#### **Eve contact**

Remove contact lenses.

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

#### Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

Upon contact with stomach acid development of:

Methanol

#### 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.

The following may occur:

Irritation of the eyes

Skin irritation possible with prolonged contact.

Developement of:

Methanol

The following applies to this substance:

Product results in a poisonous effect.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

#### 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

Adapt to the nature and extent of fire.

Water jet spray / alcohol resistant foam / CO2 / dry extinguisher.

#### Unsuitable extinguishing media

None known

#### 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

Methanol

Formaldehyde

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.



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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.

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

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

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

Or:

Pick up mechanically and dispose of according to Section 13.

Flush residue using copious water.

#### 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

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Store in a well ventilated place.

Store in a dry place.

#### 7.3 Specific end use(s)

No information available at present.

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



Other information: Sk (WEL, EU)

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BMGV: ---

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## 8.1 Control parameters

	listed below can ari						
(B) Chemical	Namo	Titanium dioxide (	(in powder form	containing 1 %	or more of particles wit	th	Content %:0,01-
		aerodynamic dian	neter <= 10 µm	)			<2,5
WEL-TWA:	10 mg/m3 (total inh	alable dust), 4	WEL-STEL:				
mg/m3 (respira	able dust)						
Monitoring pro	cedures:	-					
BMGV:					Other information:		
© Chemical	Name	Calcium carbonat	e				Content %:
WEL-TWA: 4	4 mg/m3 (respirable	e dust), 10 mg/m3	WEL-STEL:				
(total inhalable	e dust)	,					
Monitoring pro	cedures:		<u> </u>			•	
BMGV:					Other information:		
Chemical	Name	Methanol					Content %:
	Name 200 ppm (266 mg/n		WEL-STEL:	250 ppm (333	mg/m3 (WEL)		Content %:
	200 ppm (266 mg/n		WEL-STEL:	250 ppm (333	mg/m3 (WEL)		Content %:
WEL-TWA: 2	200 ppm (266 mg/n m3) (EU)	13) (WEL), 200		250 ppm (333 ol 25/a Methano			Content %:
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	n3) (WEL), 200 - [	Draeger - Alcoh	\	I (81 01 631)		Content %:
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	n3) (WEL), 200 - E - C	Draeger - Alcoh Compur - KITA-	ol 25/a Methano	I (81 01 631)		Content %:
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	- E - C - C	Draeger - Alcoh Compur - KITA- Compur - KITA-	ol 25/a Methano 119 SA (549 640 119 U (549 657)	I (81 01 631)		
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	13) (WEL), 200 - C - C - C	Draeger - Alcoh Compur - KITA- Compur - KITA- DFG Meth. Nr. (	ol 25/a Methano 119 SA (549 640 119 U (549 657) 3 (D) (Loesungsi	I (81 01 631)	G (E) (So	lvent mixtures 6) -
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	13) (WEL), 200 - C - C - C - 2	Draeger - Alcoh Compur - KITA- Compur - KITA- DFG Meth. Nr. ( 2013, 2002 - EL	ol 25/a Methano 119 SA (549 640 119 U (549 657) 3 (D) (Loesungsi	I (81 01 631) 0) mittelgemische 6), DFG	G (E) (So	lvent mixtures 6) -
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	13) (WEL), 200 - E - C - C E - 2 - N	Draeger - Alcoh Compur - KITA- Compur - KITA- DFG Meth. Nr. 6 2013, 2002 - EL NIOSH 2000 (M	ol 25/a Methano 119 SA (549 640 119 U (549 657) 6 (D) (Loesungsi J project BC/CEI IETHANOL) - 19	I (81 01 631) 0) mittelgemische 6), DFG	G (E) (So card 65-1	lvent mixtures 6) - (2004)
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	- E - C - C - C - C - C - C - C - C - C	Draeger - Alcoh Compur - KITA- Compur - KITA- DFG Meth. Nr. 6 2013, 2002 - EL NIOSH 2000 (M NIOSH 2549 (V	ol 25/a Methano 119 SA (549 640 119 U (549 657) 6 (D) (Loesungsi J project BC/CEI ETHANOL) - 19 OLATILE ORGA	I (81 01 631)  i)  mittelgemische 6), DFG N/ENTR/000/2002-16 c 98  NIC COMPOUNDS (S	G (E) (So card 65-1	lvent mixtures 6) - (2004) NG)) - 1996
WEL-TWA: 2 ppm (260 mg/l	200 ppm (266 mg/n m3) (EU)	13) (WEL), 200 - E - C - C - 2 - N - N	Draeger - Alcoh Compur - KITA- Compur - KITA- DFG Meth. Nr. 6 2013, 2002 - EL NIOSH 2000 (M NIOSH 2549 (V	ol 25/a Methano 119 SA (549 64/ 119 U (549 657) 6 (D) (Loesungsi J project BC/CEI IETHANOL) - 19 OLATILE ORGA RGANIC AND II	I (81 01 631) 0) mittelgemische 6), DFG N/ENTR/000/2002-16 c	G (E) (So card 65-1	lvent mixtures 6) - (2004) NG)) - 1996

Trimethoxyvinylsilane						
Area of application	Exposure route / Environmental compartment	Effect on health	Descripto r	Value	Unit	Note
	Environment - freshwater		PNEC	0,4	mg/l	Für entsprech endes Silantriol (Hydrolysp rodukt) ermittelt.
	Environment - marine		PNEC	0,04	mg/l	Für entsprech endes Silantriol (Hydrolysp rodukt) ermittelt.
	Environment - water, sporadic (intermittent) release		PNEC	2,4	mg/l	Für entsprech endes Silantriol (Hydrolysp rodukt) ermittelt.



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	Environment - sewage treatment plant		PNEC	6,6	mg/l	Für entsprech endes Silantriol (Hydrolysp rodukt) ermittelt.
	Environment - sediment, freshwater		PNEC	1,5	mg/kg dw	Für entsprech endes Silantriol (Hydrolysp rodukt) ermittelt.
	Environment - sediment, marine		PNEC	0,15	mg/kg dw	Für entsprech endes Silantriol (Hydrolysp rodukt) ermittelt.
	Environment - soil		PNEC	0,06	mg/kg dw	Für entsprech endes Silantriol (Hydrolysp rodukt) ermittelt.
Consumer	Human - dermal	Short term, systemic effects	DNEL	0,1	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,1	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,7	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,1	mg/kg bw/day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	93,4	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,2	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2,6	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	4,9	mg/m3	

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 μm)						
Area of application	Exposure route / Environmental compartment	Effect on health	Descripto r	Value	Unit	Note
	Environment - freshwater		PNEC	0,184	mg/l	
	Environment - marine Environment - water, sporadic (intermittent) release		PNEC PNEC	0,0184	mg/l 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	



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	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

3-(trimethoxysilyl)propy Area of application	Exposure route / Environmental compartment	Effect on health	Descripto r	Value	Unit	Note
	Environment - freshwater		PNEC	0,33	mg/l	
	Environment - marine		PNEC	0,033	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	3,3	mg/l	
	Environment - sediment, freshwater		PNEC	1,2	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,12	mg/kg dry weight	
	Environment - soil		PNEC	0,045	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	0,81	mg/l	
	Environment - oral (animal feed)		PNEC	11,1	mg/kg	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	17,4	mg/m3	
Consumer	Human - dermal	Short term, systemic effects	DNEL	5	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,7	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,5	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	5	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	17,4	mg/m3	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	8,3	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	7,1	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1	mg/kg	

N-(3-(trimethoxysilyl)pro	pyl)ethylenediamine					
Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note
	Environmental		r			
	compartment					
	Environment - freshwater		PNEC	0,062	mg/l	
	Environment - marine		PNEC	0,0062	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,62	mg/l	
	Environment - sediment, freshwater		PNEC	0,05	mg/kg wet weight	
	Environment - sediment, marine		PNEC	0,005	mg/kg wet weight	



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	Environment - sewage treatment plant		PNEC	25	mg/l
	Environment - soil		PNEC	0,009	mg/kg
Consumer	Human - oral	Long term, systemic effects	DNEL	2,5	mg/kg
Consumer	Human - inhalation	Short term, systemic effects	DNEL	50	mg/m3
Consumer	Human - inhalation	Long term, local effects	DNEL	0,1	mg/m3
Consumer	Human - inhalation	Short term, local effects	DNEL	4	mg/m3
Consumer	Human - oral	Short term, systemic effects	DNEL	2,5	mg/kg bw/d
Consumer	Human - inhalation	Long term, systemic effects	DNEL	8,7	mg/m3
Consumer	Human - dermal	Long term, systemic effects	DNEL	2,5	mg/kg bw/d
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	35,5	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	5	mg/kg bw/d
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,6	mg/m3
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	260	mg/m3
Workers / employees	Human - inhalation	Short term, local effects	DNEL	5,36	mg/m3

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

Methanol										
Area of application	Exposure route /	Effect on health	fect on health Descripto		Unit	Note				
	Environmental		r							
	compartment									
	Environment - freshwater		PNEC	154	mg/l					
	Environment - marine		PNEC	15,4	mg/l					
	Environment - sediment, freshwater		PNEC	570,4	mg/kg					
	Environment - sediment, marine		PNEC	57,04	mg/kg					
	Environment - soil		PNEC	23,5	mg/kg					



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	Environment - water, sporadic (intermittent) release		PNEC	1540	mg/l
	Environment - sewage treatment plant		PNEC	100	mg/l
Consumer	Human - inhalation	Long term, local effects	DNEL	26	mg/m3
Consumer	Human - inhalation	Short term, local effects	DNEL	26	mg/m3
Consumer	Human - dermal	Short term, systemic effects	DNEL	4	mg/kg body weight/day
Consumer	Human - inhalation	Short term, systemic effects	DNEL	26	mg/m3
Consumer	Human - oral	Short term, systemic effects	DNEL	4	mg/kg body weight/day
Consumer	Human - dermal	Long term, systemic effects	DNEL	4	mg/kg body weight/day
Consumer	Human - inhalation	Long term, systemic effects	DNEL	26	mg/m3
Consumer	Human - oral	Long term, systemic effects	DNEL	4	mg/kg body weight/day
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	20	mg/kg body weight/day
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	130	mg/m3
Workers / employees	Human - inhalation	Short term, local effects	DNEL	130	mg/m3
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	20	mg/kg body weight/day
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	130	mg/m3
Workers / employees	Human - inhalation	Long term, local effects	DNEL	130	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.



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Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and nonmetrological 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:

Chemical resistant protective gloves (EN ISO 374).

If applicable

Protective gloves made of butyl (EN ISO 374).

Protective nitrile gloves (EN ISO 374).

Protective gloves made of fluorocarbon rubber (EN ISO 374).

Protective gloves made of vinyl (EN ISO 374).

Permeation time (penetration time) in minutes:

>480

Minimum layer thickness in mm:

>0,1

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.

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, solid.

Colour: According to specification

Odour: Characteristic

Melting point/freezing point: There is no information available on this parameter. Boiling point or initial boiling point and boiling range: There is no information available on this parameter.

Flammability: There is no information available on this parameter.



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Lower explosion limit: Does not apply to solids. Upper explosion limit: Does not apply to solids. Flash point: Does not apply to solids. Auto-ignition temperature: Does not apply to solids.

Decomposition temperature: There is no information available on this parameter.

Mixture is non-soluble (in water).

Kinematic viscosity: Does not apply to solids.

Solubility: Insoluble

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: 1,57 g/cm3

Relative vapour density: Does not apply to solids.

9.2 Other information

Explosives: Product is not explosive.

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

Protect from humidity.

Product may hydrolyse.

#### 10.5 Incompatible materials

See also section 7.

Avoid contact with strong alkalis.

Avoid contact with strong acids. 10.6 Hazardous decomposition products

See also section 5.2 On contact with moist air:

Methanol

## **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:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:	ATE	>5	mg/l/4h			calculated
						value, Dust
Skin corrosion/irritation:						n.d.a.
Serious eye					Expert Judgement	Not irritant,
damage/irritation:						Analogous
						conclusion
Respiratory or skin				Mouse	OECD 429 (Skin	No (skin
sensitisation:					Sensitisation - Local	contact),
					Lymph Node Assay)	Analogous
						conclusion
Germ cell mutagenicity:						n.d.a.



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Carcinogenicity:			n.d.a.
Reproductive toxicity:			n.d.a.
Specific target organ toxicity -			n.d.a.
single exposure (STOT-SE):			
Specific target organ toxicity -			n.d.a.
repeated exposure (STOT-			
RÉ):			
Aspiration hazard:			n.d.a.
Symptoms:			n.d.a.

3-(trimethoxysilyl)propylamine								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	3030	mg/kg	Rat	OECD 401 (Acute			
					Oral Toxicity)			
Acute toxicity, by dermal	LD50	> 10000	mg/kg	Rabbit	OECD 402 (Acute			
route:					Dermal Toxicity)			
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Skin Irrit. 2		
					Dermal			
					Irritation/Corrosion)			
Serious eye				Rabbit	OECD 405 (Acute	Eye Dam. 1		
damage/irritation:					Eye			
-					Irritation/Corrosion)			
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin		
sensitisation:					Sensitisation)	contact)		
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative		
				typhimurium	Reverse Mutation	_		
					Test)			
Germ cell mutagenicity:				Human being	OECD 473 (In Vitro	Negative,		
g ,					Mammalian `	Analogous		
					Chromosome	conclusion		
					Aberration Test)			
Germ cell mutagenicity:				Mouse	OECD 474	Negative,		
g ,					(Mammalian	Analogous		
					Erythrocyte	conclusion		
					Micronucleus Test)			
Germ cell mutagenicity:					OECD 476 (In Vitro	Negative,		
c ,					Mammalian Cell Gene	Analogous		
					Mutation Test)	conclusion		
					•	Chinese		
						hamster		
Specific target organ toxicity -	NOAEL	200	mg/kg	Rat	OECD 408 (Repeated	Target		
repeated exposure (STOT-					Dose 90-Day Oral	organ(s): liver,		
RÉ), oral:					Toxicity Study in	Analogous		
•					Rodents)	conclusion		
Specific target organ toxicity -	LOAEL	600	mg/kg	Rat	OECD 408 (Repeated	Target		
repeated exposure (STOT-					Dose 90-Day Oral	organ(s): liver,		
RE), oral:					Toxicity Study in	Analogous		
,-					Rodents)	conclusion		

Trimethoxyvinylsilane							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	LD50	7120	mg/kg	Rat	OECD 401 (Acute		
					Oral Toxicity)		
Acute toxicity, by dermal	LD50	3200	mg/kg	Rabbit	OECD 402 (Acute		
route:					Dermal Toxicity)		
Acute toxicity, by inhalation:	LC50	16,8	mg/l/4h	Rat	OECD 403 (Acute	Vapours	
					Inhalation Toxicity)		
Acute toxicity, by inhalation:	LD50	2773	ppm/4h	Rat	OECD 403 (Acute	Aerosol	
					Inhalation Toxicity)		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant	
					Dermal		
					Irritation/Corrosion)		



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Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant
					Irritation/Corrosion)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	Skin Sens. 1B
sensitisation:					Sensitisation)	
Germ cell mutagenicity:					OECD 476 (In Vitro	Negative
0 ,					Mammalian Cell Gene	Chinese
					Mutation Test)	hamster
Germ cell mutagenicity:				Mouse	OECD 474	Negative
					(Mammalian	
					Erythrocyte	
					Micronucleus Test)	
Germ cell mutagenicity:				Rat	OECD 489 (In Vivo	Negative
definition managements.				Ital	Mammalian Alkaline	ricgative
					Comet Assay)	
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
Germ cell mutagemony.				typhimurium	Reverse Mutation	ivegative
				typnimunum		
Daniel de Alexandre	NOAFI	4000		D-4	Test)	NI 4i
Reproductive toxicity:	NOAEL	1000	mg/kg	Rat	OECD 422	Negative
					(Combined Repeated	
					Dose Tox. Study with	
					the	
					Reproduction/Develop	
					m. Tox. Screening	
					Test)	
Reproductive toxicity	NOAEL	>= 75	mg/kg	Rabbit	OECD 414 (Prenatal	Negative
(Developmental toxicity):					Developmental	
					Toxicity Study)	
Specific target organ toxicity -	LOAEL	0,58	mg/l	Rat	OECD 413	Vapours
repeated exposure (STOT-					(Subchronic Inhalation	
RE), inhalat.:					Toxicity - 90-Day	
,					Study)	
Symptoms:					3,	drowsiness,
, ,						dizziness,
						nausea.
						abdominal
						pain, breathing
						difficulties,
						visual
						disturbances
Specific target organ toxicity -	NOAEL	62,5	mg/kg	Rat	OECD 422	Target
	NOAEL	02,3	ilig/kg	rial		
repeated exposure (STOT-					(Combined Repeated	organ(s):
RE), oral:					Dose Tox. Study with	bladder
					the	
					Reproduction/Develop	
					m. Tox. Screening	
					Test)	

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 μm)								
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	LD50	>5000	mg/kg	Rabbit				
route:								
Acute toxicity, by inhalation:	LD50	>6,8	mg/l/4h	Rat				
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant		
					Dermal			
					Irritation/Corrosion)			



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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).
Symptoms:						mucous membrane irritation, coughing, respiratory distress, drying of the skin.
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

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	2413	mg/kg	Rat	OECD 401 (Acute	
					Oral Toxicity)	
Acute toxicity, by dermal	LD50	> 2000	mg/kg	Rat	OECD 402 (Acute	
route:					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	1,49-2,44	mg/l/4h	Rat	OECD 403 (Acute	Aerosol
					Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant
					Dermal	
					Irritation/Corrosion)	
Serious eye				Rabbit	OECD 405 (Acute	Eye Dam. 1
damage/irritation:					Eye	
					Irritation/Corrosion)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	Skin Sens. 1B
sensitisation:					Sensitisation)	



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Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1B
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative Chinese hamster
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	>=500	mg/kg	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Develop m. Tox. Screening Test)	
Reproductive toxicity (Effects on fertility):	NOAEL	>=500	mg/kg	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Develop m. Tox. Screening Test)	
Specific target organ toxicity - repeated exposure (STOT- RE), oral:	NOAEL	>= 500	mg/kg	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Develop m. Tox. Screening Test)	
Specific target organ toxicity - repeated exposure (STOT- RE), inhalat.:	NOAEC	0,015	mg/l/6h/d	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90-Day Study)	

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	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
route:					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				Rabbit	OECD 405 (Acute	Not irritant
damage/irritation:					Eye	
					Irritation/Corrosion)	
Respiratory or skin				Mouse	OECD 429 (Skin	No (skin
sensitisation:					Sensitisation - Local	contact)
					Lymph Node Assay)	
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative
					Reverse Mutation	
					Test)	



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Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Carcinogenicity:						No indications of such an effect.
Reproductive toxicity:	NOEL	1000	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Develop m. Tox. Screening Test)	
Specific target organ toxicity - single exposure (STOT-SE):						No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE):						No indications of such an effect.
Aspiration hazard:						No
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	1000	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Develop m. Tox. Screening Test)	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	0,212	mg/l	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90-Day Study)	

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	300	mg/kg	Human being		Experiences on
						persons.
Acute toxicity, by dermal	LD50	17100	mg/kg	Rabbit		Does not
route:						conform with
						EU
						classification.
Acute toxicity, by inhalation:	LC50	85	mg/l/4h	Rat		Not relevant for
						classification.,
						Vapours
Serious eye				Rabbit	OECD 405 (Acute	Not irritant
damage/irritation:					Eye	
-					Irritation/Corrosion)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:					Sensitisation)	contact)
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation	
					Test)	
Germ cell mutagenicity:				Mouse	OECD 474	Negative
					(Mammalian	
					Erythrocyte	
					Micronucleus Test)	



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Carcinogenicity:				Mouse	OECD 453	Negative
					(Combined Chronic	
					Toxicity/Carcinogenicit	
					y Studies)	
Reproductive toxicity:	NOAEL	1,3	mg/l	Mouse	OECD 416 (Two-	
					generation	
					Reproduction Toxicity	
					Study)	
Specific target organ toxicity -	NOAEL	0,13	mg/l	Rat	OECD 453	
repeated exposure (STOT-					(Combined Chronic	
RE):					Toxicity/Carcinogenicit	
					y Studies)	
Symptoms:						abdominal
						pain, vomiting,
						headaches,
						gastrointestinal
						disturbances,
						drowsiness,
						visual
						disturbances,
						watering eyes,
						nausea, mental
						confusion,
						intoxication,
						dizziness

#### 11.2. Information on other hazards

beko MS-Flex farbig											
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes					
Endocrine disrupting						Does not apply					
properties:						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).

beko MS-Flex farbig							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to							n.d.a.
daphnia:							
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.



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12.7. Other adverse effects:		No information available on other adverse effects on the environment.
Other information:		DOC- elimination degree(complex ing organic substance)>= 80%/28d: n.a.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	> 934	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	Analogous conclusion
12.1. Toxicity to daphnia:	EC50	48h	331	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
12.1. Toxicity to algae:	EC50	72h	> 1000	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion
12.2. Persistence and degradability:	DOC	28d	67	%		Regulation (EC) 440/2008 C.4-A (DETERMINATI ON OF 'READY' BIODEGRADABI LITY - DOC DIE- AWAY TEST)	Not readily biodegradable (Analogous conclusion)
12.3. Bioaccumulative potential:	Log Kow		0,2				Not to be expected 20 °C
QSAR							Cliabt
12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment							Slight No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	6h	13	mg/l	Pseudomonas fluorescens		Analogous conclusion
Toxicity to bacteria:	EC50		3400	mg/l	activated sludge		

Trimethoxyvinylsilane							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	191	mg/l	Oncorhynchus	OECD 203	
					mykiss	(Fish, Acute	
						Toxicity Test)	
12.1. Toxicity to	EC50	48h	168,7	mg/l	Daphnia magna	Regulation (EC)	
daphnia:						440/2008 C.2	
						(DAPHNIA SP.	
						ACUTE	
						IMMOBILISATIO	
						N TEST)	
12.1. Toxicity to	NOEC/NOEL	21d	28	mg/l	Daphnia magna	OECD 211	
daphnia:						(Daphnia magna	
						Reproduction	
						Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Selenastrum	OECD 201	
					capricornutum	(Alga, Growth	
						Inhibition Test)	



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12.1. Toxicity to algae:	NOEC/NOEL	72h	25	mg/l	Selenastrum capricornutum		
12.2. Persistence and degradability:	BOD	28d	51	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable
12.3. Bioaccumulative potential:  QSAR	Log Kow		1,1				Not to be expected 20 °C
12.4. Mobility in soil:							Slight
Toxicity to bacteria:	EC50	3h	>2500	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	Ţ
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	5h	1000	mg/l	Pseudomonas putida		

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus	OECD 203	
					mykiss	(Fish, Acute	
						Toxicity Test)	
12.1. Toxicity to	LC50	48h	>100	mg/l	Daphnia magna	OECD 202	
daphnia:						(Daphnia sp.	
•						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	EC50	72h	16	mg/l	Pseudokirchnerie	U.S. EPA-600/9-	
					lla 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		
Toxicity to annelids:	NOEC/NOEL		>1000	mg/kg	Eisenia foetida		
Water solubility:							Insoluble20°C

N-(3-(trimethoxysilyl)propyl)ethylenediamine											
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.4. Mobility in soil:							Slight				



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12.1. Toxicity to fish:	LC50	96h	597	mg/l	Brachydanio rerio	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	> 1	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	81	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	8,8	mg/l	Pseudokirchnerie Ila subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	3,1	mg/l	Pseudokirchnerie Ila subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:	DOC	28d	39	%	activated sludge	Regulation (EC) 440/2008 C.4-A (DETERMINATI ON OF 'READY' BIODEGRADABI LITY - DOC DIE- AWAY TEST)	Not readily biodegradable
12.3. Bioaccumulative potential:						,	Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	16h	25	mg/l	Pseudomonas putida	DIN 38412 T.8	
Other organisms:	NOEC/NOEL	14d	>= 1000	mg/kg	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	

Calcium carbonate							
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))	
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		OEĆD 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)	



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Water solubility:	0,0166	g/l	OECD 105	20°C
			(Water Solubility)	

Methanol							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
12.1. Toxicity to fish:	LC50	96h	15400	mg/l	Lepomis		EPA-660/3-75-
10.1 T ::: 1	5050	001	40000	,,	macrochirus	0500.000	009
12.1. Toxicity to	EC50	96h	18260	mg/l	Daphnia magna	OECD 202	
daphnia:						(Daphnia sp.	
						Acute Immobilisation	
						Test)	
12.1. Toxicity to algae:	EC50	96h	22000	mg/l	Pseudokirchnerie	OECD 201	
12.11. Toxiony to algue.	2000	0011	22000	9/	lla subcapitata	(Alga, Growth	
					Jan	Inhibition Test)	
12.2. Persistence and		28d	99	%		OECD 301 D	Readily
degradability:						(Ready	biodegradable
						Biodegradability -	-
						Closed Bottle	
						Test)	
12.3. Bioaccumulative	BCF		28400		Chlorella vulgaris		Not to be
potential:	1050	01	1000	,		0500.000	expected
Toxicity to bacteria:	IC50	3h	>1000	mg/l	activated sludge	OECD 209	
						(Activated Sludge,	
						Respiration	
						Inhibition Test	
						(Carbon and	
						Ammonium	
						Oxidation))	
Other information:	Log Pow		-0,77			,,	
Other information:	DOC		<70	%			
Other information:	BOD		>60	%			

## **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 10 waste adhesives and sealants other than those mentioned in 08 04 09

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

Hardened product:

E.g. dispose at suitable refuse site.

#### For contaminated packing material

Pay attention to local and national official regulations.

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

Empty container completely.

Uncontaminated packaging can be recycled.

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



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## **SECTION 14: Transport information**

**General statements** 

14.1. UN number or ID number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:
14.3. Transport hazard class(es):
14.4. Packing group:
Classification code:
LQ:
n.a.

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. 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. Maritime transport in bulk according to IMO instruments

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

Observe restrictions:

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)! General hygiene measures for the handling of chemicals are applicable.

Regulation (EU) No 649/2012 'concerning the export and import of hazardous chemicals' must be adhered to, as the product contains a substance that falls within the scope of this Regulation.

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: 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).

H226 Flammable liquid and vapour.

H351 Suspected of causing cancer by inhalation.

H317 May cause an allergic skin reaction.

H315 Causes skin irritation.



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H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Skin Irrit. — Skin irritation

Eye Dam. — Serious eye damage Flam. Liq. — Flammable liquid

Acute Tox. — Acute toxicity - inhalation

Skin Sens. — Skin sensitization

Carc. — Carcinogenicity

STOT SE — Specific target organ toxicity - single exposure - respiratory tract 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

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



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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

**IUCLIDInternational 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

NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

org. organic

OSHA Occupational Safety and Health Administration (USA)

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million PVC Polyvinylchloride

REACH Registration, 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 not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.