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

Silicone Sanitary Plus White 9016 310 ml
Art.: 9093987

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

Relevant identified uses of the substance or mixture:
Silicone sealant
Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

BTI Befestigungstechnik GmbH & Co. KG
Salzstr. 51
74653 Ingelfingen
Tel.: +49 7940 141 141
Fax: +49 7940 141 9141
Email: info@bti.de
Homepage: www.bti.de

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

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (BRC)
+1 872 5888271 (BRC)

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)

EUH208-Contains 4,5-Dichloro-2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
EUH210-Safety data sheet available on request.

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

Triacetoxyethylsilane	
Registration number (REACH)	01-2119881778-15-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	241-677-4
CAS	17689-77-9
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH014 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

Methylsilanetriyl triacetate	
Registration number (REACH)	01-2119962266-32-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	224-221-9
CAS	4253-34-3
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH014 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

Oligomeric ethyl and methylacetoxysilanes	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	---
CAS	---
content %	<2
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Corr. 1B, H314 Eye Dam. 1, H318

4,5-Dichloro-2-octyl-2H-isothiazol-3-one	
Registration number (REACH)	---
Index	613-335-00-8
EINECS, ELINCS, NLP, REACH-IT List-No.	264-843-8
CAS	64359-81-5
content %	0,01-<0,1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH071 Acute Tox. 2, H330 Acute Tox. 4, H302 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
Specific Concentration Limits and ATE	Skin Irrit. 2, H315: >=0,025 % Eye Irrit. 2, H319: >=0,025 % Skin Sens. 1A, H317: >=0,0015 % ATE (oral): 567 mg/kg ATE (as inhalation, Mist): 0,16 mg/l/4h

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.

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.
Do not induce vomiting - 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.
Sensitive individuals:
Allergic reaction possible.

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
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
Silicon dioxide
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.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
6.1.1 For non-emergency personnel
In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.
Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Ensure sufficient supply of air.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.
6.1.2 For emergency responders
See section 8 for suitable protective equipment and material specifications.
6.2 Environmental precautions
If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.
6.3 Methods and material for containment and cleaning up
Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.
Flush residue using copious water.
Or:
Allow product to harden.
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.
Avoid long lasting or intensive contact with skin.
An combustible atmosphere can develop in closed vessels.
Remove possible causes of ignition - do not smoke.
Take measures against electrostatic charging, if appropriate.
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 cool.
Store in a dry place.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB **Chemical Name**	Acetic acid	
WEL-TWA: 10 ppm (25 mg/m3) (WEL, EU)	WEL-STEL: 20 ppm (50 mg/m3) (WEL, EU)	---
Monitoring procedures:	- Draeger - Acetic Acid 5/a (67 22 101) - Compur - KITA-216 S (549 194) - NIOSH 1603 (Acetic acid in workplace atmospheres) - 1994 OSHA PV2119 (Acetic acid) - 2003 - EU project - BC/CEN/ENTR/000/2002-16 card 64-5 (2004)	
BMGV: ---		Other information: ---

Triacetoxyethylsilane						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**

	Environment - freshwater		PNEC	0,2	mg/l	
	Environment - marine		PNEC	0,02	mg/l	
	Environment - sediment, freshwater		PNEC	0,16	mg/kg	
	Environment - sediment, marine		PNEC	0,016	mg/kg	
	Environment - soil		PNEC	0,031	mg/kg	
	Environment - sewage treatment plant		PNEC	1	mg/l	
	Environment - sporadic (intermittent) release		PNEC	1,7	mg/l	
Consumer	Human - inhalation	Short term, local effects	DNEL	65	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	10,8	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	32,5	mg/m3	

Methylsilanetriyl triacetate						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Human - inhalation	Long term, systemic effects	DNEL	6,3	mg/m3	
	Environment - freshwater		PNEC	1	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - soil		PNEC	0,145	mg/kg dw	
	Environment - marine		PNEC	0,1	mg/l	
	Environment - sediment, marine		PNEC	0,34	mg/kg dw	
	Environment - sediment, freshwater		PNEC	3,4	mg/kg dw	
	Environment - water, sporadic (intermittent) release		PNEC	10	mg/l	
Consumer	Human - oral	Short term, systemic effects	DNEL	1	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	1	mg/kg bw/d	
Consumer	Human - dermal	Short term, systemic effects	DNEL	7,2	mg/kg bw/d	
Consumer	Human - dermal	Long term, systemic effects	DNEL	7,2	mg/kg bw/d	

Consumer	Human - inhalation	Short term, local effects	DNEL	5,1	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	6,3	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	5,1	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	31	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	25	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	31	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	25	mg/m3	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	14,5	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	14,5	mg/kg bw/d	

4,5-Dichloro-2-octyl-2H-isothiazol-3-one						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,034	µg/l	
	Environment - sediment, freshwater		PNEC	0,41	mg/kg	
	Environment - sediment, marine		PNEC	0,41	mg/kg	
	Environment - sewage treatment plant		PNEC	0,064	mg/l	
	Environment - soil		PNEC	0,062	mg/kg	

GB 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 nitrile gloves (EN ISO 374).
Minimum layer thickness in mm:
> 0,1
Permeation time (penetration time) in minutes:
60 - 120
Protective gloves in butyl rubber (EN ISO 374).
Minimum layer thickness in mm:
> 0,3
Permeation time (penetration time) in minutes:
> 480
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 hand cream recommended.

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

Respiratory protection:
Normally not necessary.
If OES or MEL is exceeded.
Gas mask filter ABEK (EN 14387), code colour brown, grey, yellow, green
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls
No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Paste, liquid.
Colour:	White
Odour:	Penetrating
Melting point/freezing point:	n.a.
Boiling point or initial boiling point and boiling range:	n.a.
Flammability:	Flammable
Lower explosion limit:	4 Vol-% (Acetic acid)
Upper explosion limit:	17 Vol-% (Acetic acid)
Flash point:	100 °C (ISO 3679 (Setaflash, RECC))
Auto-ignition temperature:	>400 °C (DIN 51794)
Decomposition temperature:	>300 °C
pH:	Mixture is non-soluble (in water).
Kinematic viscosity:	>20,5 mm2/s (40°C)
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:	1,02 g/cm3 (23°C, ISO 1183)
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.

9.2 Other information

Explosives:	Product is not explosive.
Oxidising liquids:	No

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.
Moisture
Strong heat
T > 150°C

10.5 Incompatible materials

See also section 7.
Water
Bases
Alcohols

10.6 Hazardous decomposition products

See also section 5.2
In case of contact with water:
Acetic acid

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).

Silicone Sanitary Plus White 9016 310 ml Art.: 9093987						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		Analogous conclusion
Acute toxicity, by dermal route:	LD50	>2009	mg/kg	Rabbit		Analogous conclusion
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:				Rabbit		Not irritant, Expert judgement.
Serious eye damage/irritation:				Rabbit		Not irritant, Expert judgement.
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact), Expert judgement
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.

Triacetoxyethylsilane						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	1460	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Corrosive
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant, Classification based on toxicological analyses.<5 %
Skin corrosion/irritation:				Rabbit		Corrosive
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Classification based on toxicological analyses.<5 %
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative, Analogous conclusion
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative, Analogous conclusion
Symptoms:						mucous membrane irritation

Methylsilanetriyl triacetate						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	1600	mg/kg	Rat		

Symptoms:						mucous membrane irritation

4,5-Dichloro-2-octyl-2H-isothiazol-3-one						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	ATE	567	mg/kg			
Acute toxicity, by inhalation:	ATE	0,16	mg/l/4h			Dust, Mist
Skin corrosion/irritation:				Guinea pig	OECD 404 (Acute Dermal Irritation/Corrosion)	Corrosive
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Skin Sens. 1A
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	20	mg/kg	Rat		28d
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	LOAEL	100	mg/kg	Rat		28d

11.2. Information on other hazards

Silicone Sanitary Plus White 9016 310 ml Art.: 9093987						
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).

Silicone Sanitary Plus White 9016 310 ml Art.: 9093987							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**

12.1. Toxicity to fish:	LC50	96h	>10-<100	mg/l	Oncorhynchus mykiss		Expert judgement
12.1. Toxicity to fish:	NOEC/NOEL		>1	mg/l	Oncorhynchus mykiss		Expert judgementearly life stage test
12.1. Toxicity to daphnia:	NOEC/NOEL		>1	mg/l	Daphnia magna		Expert judgementreproduction rate
12.1. Toxicity to algae:	ErC50	24h	>1-<10	mg/l	Navicula pelliculosa		Expert judgement
12.1. Toxicity to algae:	NOEC/NOEL	24h	>1	mg/l	Navicula pelliculosa		Expert judgementgrowth rate
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.
Other information:	AOX		0,04	%			Contains organically bound halogens, which may contribute to the AOX value in wastewater.

Other information:							DOC-elimination degree(complexing organic substance)>= 80%/28d: n.a.

Triacetoxyethylsilane							
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	251	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	168,7	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
12.1. Toxicity to algae:	EC50	72h	210	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>=100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
Toxicity to bacteria:	EC50	3h	>100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
12.1. Toxicity to daphnia:	EC50	48h	62	mg/l	Daphnia magna		
12.1. Toxicity to algae:	IC50	72h	73	mg/l	Scenedesmus subspicatus		

12.2. Persistence and degradability:		21d	74	%		Regulation (EC) 440/2008 C.4-A (DETERMINATION OF 'READY' BIODEGRADABILITY - DOC DIE-AWAY TEST)	
12.2. Persistence and degradability:		21d	70	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable

4,5-Dichloro-2-octyl-2H-isothiazol-3-one							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to algae:	ErC50	24h	0,0016	mg/l	Navicula pelliculosa	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	24h	0,00034	mg/l	Navicula pelliculosa	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to fish:	NOEC/NOEL	>60d	0,00056	mg/l	Oncorhynchus mykiss	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,00063	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to fish:	LC50	96h	0,0027	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	28d	0,00047	mg/l	Oncorhynchus mykiss	OECD 210 (Fish, Early-Life Stage Toxicity Test)	

12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,0004	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	0,0052	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.3. Bioaccumulative potential:	BCF		750		Lepomis macrochirus		
12.3. Bioaccumulative potential:	Log Pow		2,8				
12.1. Toxicity to algae:	ErC50	72h	0,077	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,015	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Readily biodegradable

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)
07 02 17 waste containing silicones other than those mentioned in 07 02 16
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. dispose at suitable refuse site.
E.g. suitable incineration plant.
For contaminated packing material
Pay attention to local and national official regulations.
Empty container completely.
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

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):	n.a.
14.4. Packing group:	n.a.
Classification code:	n.a.
LQ:	n.a.
14.5. Environmental hazards:	Not applicable
Tunnel restriction code:	
Transport by sea (IMDG-code)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
Marine Pollutant:	n.a
14.5. 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:
General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC): < 1 %

Treated goods as per Regulation (EU) No. 528/2012 must display specific information on the label.
Please note Article 58 paragraph (3) subparagraph 2 of Regulation (EU) No. 528/2012.
Approval of the biocidal active substance may mean that special conditions are required for marketing the treated goods.
These are indicated in the approval of the active substance.

15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 9, 11

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).
H330 Fatal if inhaled.
H317 May cause an allergic skin reaction.
H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH014 Reacts violently with water.
EUH071 Corrosive to the respiratory tract.

Acute Tox. — Acute toxicity - oral
Skin Corr. — Skin corrosion
Eye Dam. — Serious eye damage
Acute Tox. — Acute toxicity - inhalation
Skin Sens. — Skin sensitization
Aquatic Acute — Hazardous to the aquatic environment - acute
Aquatic Chronic — Hazardous to the aquatic environment - chronic

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
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient

LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
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.