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

Silikon Neutral transparent 310 ml
Art.: 9094854

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)

Hazard class	Hazard category	Hazard statement
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements

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

H412-Harmful to aquatic life with long lasting effects.

P273-Avoid release to the environment.
P501-Dispose of contents / container to an approved waste disposal facility.

EUH208-Contains Butanone oxime, 3-aminopropyltriethoxysilane. May produce an allergic reaction.

2.3 Other hazards
The mixture contains a vPvB substance (vPvB = very persistent, very bioaccumulative).
The mixture contains a PBT substance (PBT = persistent, bioaccumulative, toxic).
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

Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	
Registration number (REACH)	01-2119552497-29-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	932-078-5
CAS	---
content %	10-<20
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

Dodecamethylcyclohexasiloxane	**PBT-substance** **vPvB-substance** **SVHC-substance**
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	208-762-8
CAS	540-97-6
content %	0,1-<2
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	---

Butanone oxime	
Registration number (REACH)	01-2119539477-28-XXXX
Index	616-014-00-0
EINECS, ELINCS, NLP, REACH-IT List-No.	202-496-6
CAS	96-29-7
content %	0,1-<1

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 3, H301 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 1, H370 (upper respiratory tract) STOT SE 3, H336 STOT RE 2, H373 (blood circulation)
Specific Concentration Limits and ATE	ATE (oral): 100 mg/kg ATE (dermal): 1100 mg/kg

Decamethylcyclopentasiloxane	**PBT-substance** **vPvB-substance** **SVHC-substance**
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	208-764-9
CAS	541-02-6
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	---

3-aminopropyltriethoxysilane	
Registration number (REACH)	01-2119480479-24-XXXX
Index	612-108-00-0
EINECS, ELINCS, NLP, REACH-IT List-No.	213-048-4
CAS	919-30-2
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317

Dibutyltin di(acetate)	
Registration number (REACH)	01-2119634587-29-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	213-928-8
CAS	1067-33-0
content %	0,025-<0,25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360FD STOT SE 1, H370 STOT RE 1, H372 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

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.
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.
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
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
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.
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.
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.
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.
Store product closed and only in original packing.
Store at room temperature.
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

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40):
1200 mg/m3

GB	**Chemical Name**	Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	Content %:10-<20
WEL-TWA: 1200 mg/m3 (>=C7 normal and branched chain alkanes)	WEL-STEL: ---	---	
Monitoring procedures:	- Draeger - Hydrocarbons 0,1%/c (81 03 571) - Draeger - Hydrocarbons 2/a (81 03 581) - Compur - KITA-187 S (551 174)		
BMGV: ---	Other information: ---		

GB	**Chemical Name**	Dibutyltin di(acetate)	Content %:0,025-<0,25
WEL-TWA: 0,1 mg/m3 (Sn) (tin compounds, organic)	WEL-STEL: 0,2 mg/m3 (Sn) (tin compounds, organic)	---	
Monitoring procedures:	---		
BMGV: ---	Other information: Sk (Sn) (tin compounds, organic)		

GB	**Chemical Name**	Silica, amorphous	Content %:
WEL-TWA: 6 mg/m3 (total inh. dust), 2,4 mg/m3 (resp. dust)	WEL-STEL: ---	---	
Monitoring procedures:	---		
BMGV: ---	Other information: ---		

Dodecamethylcyclohexasiloxane						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - sediment, freshwater		PNEC	2,826	mg/kg dw	

	Environment - sediment, marine		PNEC	0,282	mg/kg dw	
	Environment - soil		PNEC	3,336	mg/kg dw	
	Environment - sewage treatment plant		PNEC	1	mg/l	
Consumer	Human - oral	Short term, systemic effects	DNEL	1,7	mg/kg bw/d	
Consumer	Human - inhalation	Short term, local effects	DNEL	1,5	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2,7	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	1,7	mg/kg bw/d	
Consumer	Human - inhalation	Long term, local effects	DNEL	0,3	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	6,1	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	11	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	1,22	mg/m3	

Butanone oxime						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - sewage treatment plant		PNEC	177	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,118	mg/l	
	Environment - freshwater		PNEC	0,256	mg/l	
Consumer	Human - dermal	Short term, systemic effects	DNEL	1,5	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,78	mg/kg bw/day	
Consumer	Human - inhalation	Long term, local effects	DNEL	2	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2,7	mg/m3	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	2,5	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,3	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	3,33	mg/m3	

Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	9	mg/m3	

Decamethylcyclopentasiloxane						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,0012	mg/l	
	Environment - marine		PNEC	0,00012	mg/l	
	Environment - sediment, freshwater		PNEC	2,4	mg/kg	
	Environment - sediment, marine		PNEC	0,24	mg/kg	
	Environment - soil		PNEC	1,1	mg/kg	
	Environment - sewage treatment plant		PNEC	10	mg/l	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	17,3	mg/m3	
Consumer	Human - inhalation	Short term, local effects	DNEL	4,3	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	17,3	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	4,3	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	5	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	5	mg/kg bw/d	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	97,3	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	24,2	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	97,3	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	24,2	mg/m3	

Silica, amorphous						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - oral (animal feed)		PNEC	60000	mg/kg feed	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	4	mg/m3	

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:
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 Neoprene® / polychloroprene gloves (EN ISO 374).
Protective nitrile gloves (EN ISO 374).
Minimum layer thickness in mm:
0,5
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.

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:	Transparent
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:	Not combustible.
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.
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:	1,000000000 g/cm3
Relative vapour density:	Does not apply to solids.

9.2 Other information

Explosives:	Product is not explosive.
Oxidizing solids:	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
Strong heat
Moisture
10.5 Incompatible materials
Avoid contact with strong oxidizing agents.
10.6 Hazardous decomposition products
No decomposition when used as directed.

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).

Silikon Neutral transparent 310 ml Art.: 9094854						
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:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
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.

Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, <0.03% aromatics						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>3160	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5266	mg/m3/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
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
Respiratory or skin sensitisation:				Human being		No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):				Rat		Negative
Aspiration hazard:						Yes
Symptoms:						nausea and vomiting., lower abdominal pain, diarrhoea, stomach pain, drowsiness

Dodecamethylcyclohexasiloxane						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal 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
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	0,15	mg/kg bw/d	Rat	OECD 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	1000	mg/kg	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	

Butanone oxime						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	ATE	100	mg/kg			
Acute toxicity, by dermal route:	ATE	1100	mg/kg			
Acute toxicity, by inhalation:	LC0	4,83	mg/l/4h		OECD 403 (Acute Inhalation Toxicity)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Skin Sens. 1

Germ cell mutagenicity:					OECD 482 (Gen. Tox. - DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells In Vitro)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity:	NOAEL	200	mg/kg bw/d	Rat		
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness., STOT SE 3, H336
Symptoms:						respiratory distress, drop in blood pressure, disturbed heart rhythm, headaches, cramps

Decamethylcyclopentasiloxane						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by dermal route:	LD50	> 2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	8,67	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
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

Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	No (skin contact)
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:				Rat	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negativevapour
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Rat	OECD 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells In Vivo)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:				Rat		Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	>=1000	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	>=1600	mg/kg bw/d	Rat	OECD 410 (Repeated Dose Dermal Toxicity - 90-Day)	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	>=160	mg/l/6h/d	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Vapours

3-aminopropyltriethoxysilane						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	1780	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>=4000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	

Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Corr. 1B
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Skin Sens. 1B
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Symptoms:						respiratory distress, burning of the membranes of the nose and throat, coughing, mucous membrane irritation
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	200	mg/kg	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	

Dibutyltin di(acetate)						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	32	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		

Symptoms:						breathing difficulties, cramps, mucous membrane irritation

Silica, amorphous						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		References
Acute toxicity, by inhalation:	LC50	>0,139	mg/l/4h	Rat		References, Maximum achievable concentration.
Skin corrosion/irritation:				Rabbit		Not irritant, References
Serious eye damage/irritation:				Rabbit		Not irritant, Mechanical irritation possible., References
Respiratory or skin sensitisation:				Guinea pig		Not sensitizising
Germ cell mutagenicity:						Negative
Carcinogenicity:						No indications of such an effect.
Reproductive toxicity (Developmental toxicity):						No indications of such an effect.
Symptoms:						eyes, reddened

11.2. Information on other hazards

Silikon Neutral transparent 310 ml Art.: 9094854						
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).

Silikon Neutral transparent 310 ml Art.: 9094854							
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 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:							DOC-elimination degree(complexing organic substance)>= 80%/28d: n.a.

Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, <0.03% aromatics							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.4. Mobility in soil:							Slight, Analogous conclusion
12.1. Toxicity to fish:	LL50	96h	>1028	mg/l	Scophthalmus maximus	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	>1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	NOELR	21d	>1000	mg/l	Daphnia magna	QSAR	
12.1. Toxicity to daphnia:	LL50	48h	>3193	mg/l	Acartia tonsa	ISO 14669	
12.1. Toxicity to algae:	ErL50	72h	>10000	mg/l	Skeletonema costatum	ISO 10253	
12.2. Persistence and degradability:		28d	74	%		OECD 306 (Biodegradability in Seawater)	Readily biodegradable
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Dodecamethylcyclohexasiloxane							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to algae:	NOEC/NOEL	72h	>= 2	µg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to fish:	NOEC/NOEL	49d	>= 4,4	µg/l	Pimephales promelas		
12.1. Toxicity to fish:	LD50	49d	>4,4	µg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>4,6	µg/l	Daphnia magna		
12.3. Bioaccumulative potential:	Log Pow		8,87-9,45				
12.3. Bioaccumulative potential:	BCF	49d	1160			OECD 305 (Bioconcentration - Flow-Through Fish Test)	
12.1. Toxicity to algae:	EC50	72h	>2	µg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	

12.2. Persistence and degradability:		28d	4,47	%		OECD 310 (Ready Biodegradability - CO2 in sealed vessels (Headspace Test))	Not readily biodegradable CO2 evolution
Toxicity to bacteria:	EC50	3h	>100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
12.5. Results of PBT and vPvB assessment							vPvB-substance, PBT-substance

Butanone oxime							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	NOEC/NOEL	14d	50	mg/l	Oryzias latipes	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>100	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.3. Bioaccumulative potential:	BCF	42d	0,5-0,6			OECD 305 (Bioconcentration - Flow-Through Fish Test)	
12.1. Toxicity to fish:	LC50	96h	843	mg/l	Pimephales promelas		
12.1. Toxicity to fish:	LC50	96h	760	mg/l	Poecilia reticulata		
12.1. Toxicity to daphnia:	EC50	48h	201	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	

12.1. Toxicity to algae:	EC50	72h	11,8	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to fish:	LC50	96h	48	mg/l	Lepomis macrochirus		
12.2. Persistence and degradability:	BOD	21d	14,5	%		OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		0,63				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	17h	281	mg/l	Pseudomonas putida	DIN 38412 T.8	
Other information:	BOD	28d	24,7	%			
Other information:	DOC	28d	25	%			

Decamethylcyclopentasiloxane							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	>16	µg/l	Oncorhynchus mykiss	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	Water toxicology is above the water-solubility value.
12.1. Toxicity to fish:	NOEC/NOEL	>60d	>14	µg/l	Oncorhynchus mykiss	OECD 210 (Fish, Early-Life Stage Toxicity Test)	Water toxicology is above the water-solubility value.90 d
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>15	µg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	Water toxicology is above the water-solubility value.
12.1. Toxicity to daphnia:	EC50	48h	>2,9	µg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Water toxicology is above the water-solubility value.

12.1. Toxicity to algae:	EC50	96h	>12	µg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	Water toxicology is above the water-solubility value.
12.1. Toxicity to algae:	NOEC/NOEL	96h	>= 12	µg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	Water toxicology is above the water-solubility value.
12.2. Persistence and degradability:		28d	0,14	%		OECD 310 (Ready Biodegradability - CO2 in sealed vessels (Headspace Test))	Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		7060			OECD 305 (Bioconcentration - Flow-Through Fish Test)	High
12.3. Bioaccumulative potential:	Log Pow		8,023				A notable biological accumulation potential has to be expected (LogPow > 3).
12.5. Results of PBT and vPvB assessment							vPvB-substance, PBT-substance
Toxicity to annelids:	NOEC/NOEL		>=76	mg/kg	Eisenia foetida		
Toxicity to bacteria:	EC50	3h	>2000	mg/l	activated sludge	Regulation (EC) 440/2008 C.11 (BIODEGRADATION - ACTIVATED SLUDGE RESPIRATION INHIBITION)	
Water solubility:			<0,05	mg/l			@25°C

3-aminopropyltriethoxysilane							
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)	
12.1. Toxicity to daphnia:	EC50	48h	331	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	603	mg/l	Scenedesmus subspicatus		
12.1. Toxicity to algae:	NOEC/NOEL	72h	1,3	mg/l	Scenedesmus subspicatus		
12.2. Persistence and degradability:	DOC	28d	67	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	
12.3. Bioaccumulative potential:	BCF		3,4		Cyprinus caprio		

Silica, amorphous							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	>10000	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	24h	>10000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EL50	72h	>10000	mg/l		OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Abiotically degradable.
12.3. Bioaccumulative potential:							Not to be expected
12.4. Mobility in soil:							Not to be expected
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

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 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.
E.g. suitable incineration plant.
Hardened product:
Can be disposed of with household rubbish.
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.
15 01 02 plastic packaging

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:
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!
Regulation (EC) No 1907/2006, Annex XVII
Decamethylcyclopentasiloxane
Dibutyltin di(acetate)
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: 1-16
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 (EC) No. 1272/2008 (CLP)	Evaluation method used
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).
H360FD May damage fertility. May damage the unborn child.
H317 May cause an allergic skin reaction.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H341 Suspected of causing genetic defects.
H370 Causes damage to organs.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
H350 May cause cancer.

Aquatic Chronic — Hazardous to the aquatic environment - chronic
Asp. Tox. — Aspiration hazard
Acute Tox. — Acute toxicity - oral
Acute Tox. — Acute toxicity - dermal
Skin Irrit. — Skin irritation
Eye Dam. — Serious eye damage
Skin Sens. — Skin sensitization
Carc. — Carcinogenicity
STOT SE — Specific target organ toxicity - single exposure
STOT SE — Specific target organ toxicity - single exposure - narcotic effects
STOT RE — Specific target organ toxicity - repeated exposure
Skin Corr. — Skin corrosion
Muta. — Germ cell mutagenicity
Repr. — Reproductive toxicity
Aquatic Acute — Hazardous to the aquatic environment - acute

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
IUPACInternational 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.