Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Product name: Sitol Deck Bonding

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

Intended use: Hybrid polymer-based adhesive/sealant with high elastic modulus and long open time, for bonding and sealing in the marine industry.

1.3. Details of the supplier of the safety data sheet

Name: TORGGLER S.R.L.
Full address: Via Prati Nuovi 9
District and Country: 39020 Marlengo (BZ)
Italy
Tel. +39 0473 282400
Fax +39 0473 282501
e-mail address of the competent person responsible for the Safety Data Sheet: reach@torggler.com

1.4. Emergency telephone number

For urgent inquiries refer to: +39 348 662 70 93 (08.00 - 17.30)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P501	Dispose of contents / container according to the regulation in force.
P102	Keep out of reach of children.
P280	Wear protective gloves.
P101	If medical advice is needed, have product container or label at hand.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.

SECTION 2. Hazards identification ... / >>

P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

Contains: 2-octyl-2H-isothiazol-3-one
trimethoxyvinylsilane
N-(3-(trimethoxysilyl)propyl)ethylenediamine

Contains biocides. Contains 2-octyl-2H-isothiazol-3-one (OIT) CAS No. 26530-20-1 for antimicrobical protection of the cured sealant.

2.3. Other hazards

vPvB substances contained:
2-tert-butyl-6-(5-chloro-2H-1,2,3-benzotriazol-2-yl)-4-methylphenol

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

None under normal use conditions. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification		x = Conc. %	Classification (EC) 1272/2008 (CLP)
Limestone			
CAS	*1317-65-3*	14,8 ≤ x < 19,9	
EC	*215-279-6*		
INDEX			
TITANIUM DIOXIDE			
CAS	*13463-67-7*	5 ≤ x < 9,9	
EC	*236-675-5*		
INDEX			
trimethoxyvinylsilane			
CAS	*2768-02-7*	1,5 ≤ x < 2	**Flam. Liq. 3 H226, Acute Tox. 4 H332, Skin Sens. 1B H317**
EC	*220-449-8*		**STA Inhalation vapours: 11 mg/l**
INDEX			
REACH Reg.	*01-2119513215-52-xxxx*		
Fatty acids, C16-18, sodium salts			
CAS	*68424-38-4*	1 ≤ x < 1,5	**Aquatic Chronic 3 H412**
EC	*270-299-2*		
INDEX			
REACH Reg.	*01-2119648083-41-xxxx*		
N-(3-(trimethoxysilyl)propyl)ethylenediamine			
CAS	*1760-24-3*	0,8 ≤ x < 1	**Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1 H317**
EC	*217-164-6*		
INDEX			
REACH Reg.	*01-2119970215-39-xxxx*		
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate			
CAS	*52829-07-9*	0,32 ≤ x < 0,34	**Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411**
EC	*258-207-9*		
INDEX			
REACH Reg.	*01-2119537297-32-xxxx*		
2-tert-butyl-6-(5-chloro-2H-1,2,3-benzotriazol-2-yl)-4-methylphenol			
CAS	*3896-11-5*	0,159 ≤ x < 0,18	**Substance vPvB**
EC	*223-445-4*		**Substance with a community workplace exposure limit.**
INDEX			
REACH Reg.	*01-2119971796-18-xxxx*		

SECTION 3. Composition/information on ingredients ... / >>

METHANOL			
CAS	*67-56-1*	0,059 ≤ x < 0,06	**Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370**
EC	*200-659-6*		**STOT SE 2 H371: ≥ 3%**
INDEX	*603-001-00-X*		**STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation vapours: 3 mg/l, STA Inhalation mists/powders: 0,501 mg/l, STA Inhalation gas: 700 ppm**
REACH Reg.	*01-2119433307-44-xxxx*		
ETHYL SILICATE			
CAS	*78-10-4*	0,025 ≤ x < 0,026	**Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335**
EC	*201-083-8*		**STA Inhalation vapours: 11 mg/l, STA Inhalation mists/powders: 1,5 mg/l, STA Inhalation gas: 4500 ppm**
INDEX	*014-005-00-0*		
2-octyl-2H-isothiazol-3-one			
CAS	*26530-20-1*	0,003 ≤ x < 0,004	**Acute Tox. 1 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100**
EC	*247-761-7*		**Skin Sens. 1A H317: ≥ 0,0015%**
INDEX	*613-112-00-5*		**LD50 Oral: 125 mg/kg bw, LD50 Dermal: 311 mg/kg bw, STA Inhalation mists/powders: 0,005 mg/l**

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 10

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing
Methanol (CAS 67-56-1): (EU) TWA: 200 ppm

Regulatory references:

CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ''σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία''»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama

SECTION 8. Exposure controls/personal protection ... / >>

		na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2022

trimethoxyvinylsilane

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,4	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	1,5	mg/kg/d
Normal value for marine water sediment	0,15	mg/kg/d
Normal value for water, intermittent release	2,4	mg/l
Normal value of STP microorganisms	6,6	mg/l
Normal value for the terrestrial compartment	0,06	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,3 mg/kg bw/d				
Inhalation		26400 mg/m3		6,7 mg/m3				27,6 mg/m3
Skin						7,8 mg/kg bw/d		3,9 mg/kg bw/d

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,062	mg/l
Normal value in marine water	0,0062	mg/l
Normal value for fresh water sediment	0,22	mg/kg/d
Normal value for marine water sediment	0,022	mg/kg/d
Normal value for water, intermittent release	0,62	mg/l
Normal value of STP microorganisms	25	mg/l
Normal value for the terrestrial compartment	0,0085	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	4 mg/m3		0,1 mg/m3		5,36 mg/m3		0,6 mg/kg	

SECTION 8. Exposure controls/personal protection ... / >>

METHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	250	187,75	1000	751	SKIN
AGW	DEU	270	200	1080	800	SKIN
MAK	DEU	130	100	260	200	SKIN
VLA	ESP	266	200			SKIN
VLEP	FRA	260	200	1300	1000	SKIN 11
HTP	FIN	270	200	330	250	SKIN
TLV	GRC	260	200	325	250	
AK	HUN	260				SKIN
GVI/KGVI	HRV	260	200			SKIN
VLEP	ITA	260	200			SKIN
TLV	NOR	130	100			SKIN
VLE	PRT	260	200			SKIN
NDS/NDSCh	POL	100		300		SKIN
TLV	ROU	260	200			SKIN
NGV/KGV	SWE	250	200	350 (C)	250 (C)	SKIN
NPEL	SVK	260	200			SKIN
MV	SVN	260	200	1040	800	SKIN
WEL	GBR	266	200	333	250	SKIN
OEL	EU	260	200			
TLV-ACGIH		262	200	328	250	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	154	mg/l
Normal value in marine water	15,4	mg/l
Normal value for fresh water sediment	570,4	mg/kg
Normal value for water, intermittent release	1540	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	23,5	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					260 mg/m3	260 mg/m3	260 mg/m3	260 mg/m3
Skin					VND	40 mg/kg/d	VND	40 mg/kg/d

ETHYL SILICATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	44	5,06	200	23	
AGW	DEU	12	1,4	12 (C)	1,4 (C)	
MAK	DEU	86	10	86	10	
VLEP	FRA	85	10			
HTP	FIN	43	5	86	10	
TLV	GRC	44	5			
AK	HUN	44				
GVI/KGVI	HRV	44	5			
VLEP	ITA	44	5			
TLV	NOR	44	5			
VLE	PRT	44	5			
NDS/NDSCh	POL	44				
TLV	ROU	44	5			
NPEL	SVK	44	5			
MV	SVN	170	20	170	20	
WEL	GBR	44	5			
OEL	EU	44	5			
TLV-ACGIH		85	10			

SECTION 8. Exposure controls/personal protection ... / >>

2-octyl-2H-isothiazol-3-one

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		0,05				RESP

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,0022	mg/l
Normal value in marine water	0,00022	mg/l
Normal value for fresh water sediment	0,0475	mg/kg/d
Normal value for marine water sediment	0,00475	mg/kg/d
Normal value for water, intermittent release	0,00122	mg/l
Normal value for the terrestrial compartment	0,0082	mg/kg/d

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
Provide an emergency shower with face and eye wash station.
HAND PROTECTION
Protect hands with category III work gloves.
The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.
EYE PROTECTION
Wear airtight protective goggles (see standard EN ISO 16321).
RESPIRATORY PROTECTION
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. Use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.
ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties		Value		Information
Appearance		pasty liquid		
Colour		white		
Odour		mild		
Odour threshold		not applicable		
Melting point / freezing point		not available		
Initial boiling point		not available		
Flammability		not applicable		
Lower explosive limit		not available		
Upper explosive limit		not available		
Flash point	>	60	°C	
Auto-ignition temperature		not available		
pH		not applicable		Reason for missing data:not soluble in water
Kinematic viscosity		>20,5 mm2/sec (40°C)		
Solubility		insoluble in water		
Partition coefficient: n-octanol/water		not available		

SECTION 9. Physical and chemical properties ... / >>

Vapour pressure	not available
Density and/or relative density	1,4
Relative vapour density	not available
Particle characteristics	not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10. Stability and reactivity

Limestone

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

CALCIUM CARBONATE
Decomposes at temperatures above 800°C/1472°F.

Product cures with moisture.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

N-(3-(trimethoxysilyl)propyl)ethylenediamine
Avoid exposure to: heat,naked flames,moisture,ignition sources.

Product cures with moisture. Protect from moisture. Exposure to air or moisture over prolonged periods. Do not freeze. Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

CALCIUM CARBONATE
Incompatible with: acids.
N-(3-(trimethoxysilyl)propyl)ethylenediamine
Avoid contact with: water,acids,bases.
2-tert-butyl-6-(5-chloro-2H-1,2,3-benzotriazol-2-yl)-4-methylphenol
Incompatible with: strong acids,strong bases.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

CALCIUM CARBONATE
May develop: calcium oxides,carbon oxides.

None under normal use conditions. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

SECTION 11. Toxicological information ... / >>

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

METHANOL
WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

METHANOL
The minimum lethal dose for humans by ingestion is considered to be in the range from 300 to 1000 mg/kg. Ingestion of 4-10 ml of the substance may cause permanent blindness in adult humans (IPCS).

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

terminal silane polyether

LD50 (Oral):	> 2000 mg/kg Rat
LD50 (Dermal):	> 2000 mg/kg Rat

CALCIUM CARBONATE

LD50 (Oral):	6450 mg/kg Rat

Limestone

LD50 (Oral):	> 5000 mg/kg Rat
LD50 (Dermal):	6450 mg/kg RAT

DIISONONYL PHTHALATE

LD50 (Oral):	> 10000 mg/kg Rat - Sprague-Dawley
LD50 (Dermal):	> 3160 mg/kg Rabbit - New Zeland white
LC50 (Inhalation vapours):	> 4,4 mg/l Rat - Sprague-Dawley

TITANIUM DIOXIDE

LD50 (Oral):	> 10000 mg/kg Rat

trimethoxyvinylsilane

LD50 (Oral):	7120 mg/kg bw Rat
LD50 (Dermal):	3200 mg/kg Rabbit
LC50 (Inhalation vapours):	2773 ppm/4h Rat
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

Fatty acids, C16-18, sodium salts

LD50 (Oral):	> 5000 mg/kg Rat

N-(3-(trimethoxysilyl)propyl)ethylenediamine

LD50 (Oral):	2995 mg/kg bw Rat
LD50 (Dermal):	> 2000 mg/kg bw Rat
LC50 (Inhalation vapours):	1,49 mg/l Rat (aerosol 4h)

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

LD50 (Oral):	3700 mg/kg bw Rat
LD50 (Dermal):	> 2000 mg/kg bw Rat
LC50 (Inhalation vapours):	500 mg/m3/4h Rat

SECTION 11. Toxicological information ... / >>

2-tert-butyl-6-(5-chloro-2H-1,2,3-benzotriazol-2-yl)-4-methylphenol

LD50 (Oral):	> 2000 mg/kg Rat
LD50 (Dermal):	> 2000 mg/kg Rat

METHANOL

STA (Oral):	100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Dermal):	300 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation mists/powders):	0,501 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation vapours):	3 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation gas):	700 ppm estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

ETHYL SILICATE

STA (Inhalation mists/powders):	1,5 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation gas):	4500 ppm estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

2-octyl-2H-isothiazol-3-one

LD50 (Oral):	125 mg/kg bw Rat
LD50 (Dermal):	311 mg/kg bw
LC50 (Inhalation mists/powders):	0,27 mg/l
STA (Inhalation mists/powders):	0,005 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Based on the information provided by our suppliers, the total concentration of titanium dioxide with an aerodynamic diameter of 10 µm can be given as < 600 ppmw. However, the product is not a powder mixture, but a pasty suspension in the fresh state and an elastomeric monolithic solid in the polymerised state, which as such is not covered by EU Regulation 2020/217.
However, our laboratory has performed artificial UV ageing and subsequent tensile tests on polymerised product samples without finding any signs of deterioration or evidence that the product releases TiO_2 particles over time.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

SECTION 11. Toxicological information ... / >>

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: >20,5 mm2/sec (40°C)

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

2-octyl-2H-isothiazol-3-one	
LC50 - for Fish	0,036 mg/l/96h Oncorhynchus mykiss (OECD 203)
EC50 - for Crustacea	0,42 mg/l/48h Daphnia magna (OECD 202)
EC50 - for Algae / Aquatic Plants	0,084 mg/l/72h Desmodesmus subspicatus (OECD 201)
Chronic NOEC for Fish	0,022 mg/l Oncorhynchus mykiss (OECD 210) / 28 d
Chronic NOEC for Crustacea	0,002 mg/l Daphnia magna (OECD 211) / 21 d
Chronic NOEC for Algae / Aquatic Plants	0,004 mg/l Algae (OECD 201) / 72 h
DIISONONYL PHTHALATE	
LC50 - for Fish	> 102 mg/l/96h Danio rerio
EC50 - for Crustacea	> 74 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 88 mg/l/72h Scenedesmus subspicatus
METHANOL	
LC50 - for Fish	15400 mg/l/96h Lepomis macrochirus
EC50 - for Crustacea	> 10000 mg/l/48h Daphnia magna
N-(3-(trimethoxysilyl)propyl)ethylenediamine	
LC50 - for Fish	597 mg/l/96h Danio rerio
EC50 - for Crustacea	81 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	8,8 mg/l/72h Desmodesmus Subspicatus

SECTION 12. Ecological information ... / >>

Chronic NOEC for Fish	344 mg/l Danio rerio
Chronic NOEC for Crustacea	35 mg/l Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	1,6 mg/l Pseudokirchnerella subcapitata

trimethoxyvinylsilane

LC50 - for Fish	191 mg/l/96h Oncorhyncus mykiss
EC50 - for Crustacea	169 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	89 mg/l/72h Selenestrum capricornutum
Chronic NOEC for Fish	100 mg/l Oncorhynchus mykiss
Chronic NOEC for Crustacea	28 mg/l Daphnia magna

Limestone

LC50 - for Fish	> 10000 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 1000 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 200 mg/l/72h Desmodesmus subspicatus

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

LC50 - for Fish	4,4 mg/l/96h Lepomis macrochirus
EC50 - for Crustacea	8,6 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,705 mg/l/72h Pseudokirchnerella subcapitata

2-tert-butyl-6-(5-chloro-2H-1,2,3-benzotriazol-2-yl)-4-methylphenol

LC50 - for Fish	> 100 mg/l/96h Brachydanio rerio
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h Scenedesmus sp.
Chronic NOEC for Algae / Aquatic Plants	100 mg/l/72h Scenedesmus so.

Fatty acids, C16-18, sodium salts

LC50 - for Fish	46 mg/l/96h Brachydanio rerio
EC50 - for Algae / Aquatic Plants	160 mg/l/72h Desmodesmus subspicatus

terminal silane polyether

LC50 - for Fish	> 100 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h Desmodesmus subspicatus

12.2. Persistence and degradability

2-octyl-2H-isothiazol-3-one
Entirely degradable

ETHYL SILICATE

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

TITANIUM DIOXIDE

Solubility in water	< 0,001 mg/l

Degradability: information not available

DIISONONYL PHTHALATE

Solubility in water	< 0,1 mg/l

Rapidly degradable

METHANOL

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

CALCIUM CARBONATE

Solubility in water	0,1 - 100 mg/l

N-(3-(trimethoxysilyl)propyl)ethylenediamine
NOT rapidly degradable

trimethoxyvinylsilane
NOT rapidly degradable

Limestone
Degradability: information not available

SECTION 12. Ecological information ... / >>

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate
Solubility in water 18,8 mg/l 23 °C

Fatty acids, C16-18, sodium salts
Rapidly degradable

terminal silane polyether
NOT rapidly degradable

12.3. Bioaccumulative potential

2-octyl-2H-isothiazol-3-one
Partition coefficient: n-octanol/water 2,92 Log Kow OECD 117

ETHYL SILICATE
Partition coefficient: n-octanol/water 3,18
BCF 3,16

DIISONONYL PHTHALATE
Partition coefficient: n-octanol/water 8,8
BCF > 3

METHANOL
Partition coefficient: n-octanol/water -0,77
BCF 0,2

Limestone
Partition coefficient: n-octanol/water < 1 Kow stimato

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate
Partition coefficient: n-octanol/water 0,35 Log Kow 25 °C
BCF 0,35

2-tert-butyl-6-(5-chloro-2H-1,2,3-benzotriazol-2-yl)-4-methylphenol
BCF 7075 (44 d) Oncorhynchus mykiss

Fatty acids, C16-18, sodium salts
Partition coefficient: n-octanol/water 3,3 Log Kow

12.4. Mobility in soil

DIISONONYL PHTHALATE
Partition coefficient: soil/water 6

12.5. Results of PBT and vPvB assessment

vPvB substances contained:
2-tert-butyl-6-(5-chloro-2H-1,2,3-benzotriazol-2-yl)-4-methylphenol

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

EWC: 080410.

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

SECTION 13. Disposal considerations ... / >>

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

not applicable

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product		
Point	3 - 40	
Contained substance		
Point	75	
Point	52	DIISONONYL PHTHALATE REACH Reg.: 01-2119430798-28-xxxx
Point	20	Dioctyltin oxide REACH Reg.: 01-2119971268-27-xxxx

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

SECTION 15. Regulatory information ... / >>

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)
WGK 3: Severe hazard to waters

Reg. (EU) No 528/2012 on biocides
This product contains: 2-octyl-2H-isothiazol-3-one (OIT) CAS No. 26530-20-1 for antimicrobical protection of the cured sealant (PT7).

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2	Flammable liquid, category 2
Acute Tox. 1	Acute toxicity, category 1
Acute Tox. 3	Acute toxicity, category 3
STOT SE 1	Specific target organ toxicity - single exposure, category 1
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1A	Skin sensitization, category 1A
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H225	Highly flammable liquid and vapour.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H370	Causes damage to organs.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration

SECTION 16. Other information ... / >>

- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.