

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.12.2019

Version number 9

Revision: 11.04.2019

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

- **1.1 Product identifier**

- Trade name: illbruck FS500

- MSDS code: A-I-FS500

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

No further relevant information available.

- **Application of the substance / the mixture** Spacings sealant

- **1.3 Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

tremco illbruck Productie B.V.

Vlietskade 1032, 4241 WC Arkel

T: +31 (0) 183568000, F: +31 (0) 183568100

msds@tremco-illbruck.com

- **Further information obtainable from:**

tremco illbruck Ltd

Coupland Road, Hindley Green, Wigan, WN2 4HT

T: +44 (0) 1942251400, F: +44 (0) 1942251410

www.tremco-illbruck.co.uk, uk.info@tremco-illbruck.com

- **1.4 Emergency telephone number:**

During office hours tel.: +44 (0) 1942251400. At all other times it is recommended to call NHS 111 (England/Wales/Scotland), 01 809 2166 (ROI), or otherwise to contact a doctor.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008**

The product is not classified, according to the CLP regulation.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008** Void

- **Hazard pictograms** Void

- **Signal word** Void

- **Hazard statements** Void

- **Supplemental information:**

EUH210 Safety data sheet available on request.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Polydimethylsiloxane with inorganic fillers and alkoxy silane as curing agent

- **Dangerous components:**

CAS: 2768-02-7 EINECS: 220-449-8 Reg.nr.: 01-2119513215-52-xxxx	trimethoxyvinylsilane Flam. Liq. 3, H226; Acute Tox. 4, H332	1-<5%
CAS: 556-67-2 EINECS: 209-136-7 Reg.nr.: 01-2119529238-36-xxxx	octamethylcyclotetrasiloxane (D4) Flam. Liq. 3, H226; Repr. 2, H361f; Aquatic Chronic 4, H413	0.1-<1%
CAS: 541-02-6 EINECS: 208-764-9 Reg.nr.: 01-2119511367-43-xxxx	Decamethylcyclopentasiloxane (D5)	0.1-<1%
CAS: 540-97-6 EINECS: 208-762-8	Dodecamethylcyclohexasiloxane (D6)	0.1-<1%

- **SVHC**

CAS: 556-67-2	octamethylcyclotetrasiloxane (D4)
CAS: 541-02-6	Decamethylcyclopentasiloxane (D5)
CAS: 540-97-6	Dodecamethylcyclohexasiloxane (D6)

- **Additional information:**

For the wording of the listed hazard phrases refer to section 16.
 While curing the following substances are formed and released by a reaction with atmospheric humidity:
 Butan-1-ol (CAS 71-36-3)
 Methanol (CAS 67-56-1)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Take affected persons out into the fresh air.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Remove from the skin using a cloth or paper. Then clean with water and soap.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Information for doctor:** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
No special measures required.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Pick up mechanically.
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
By a reaction with atmospheric humidity by-products are released. See chapter 8.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **DNELs**

- **Long term effects**

CAS: 541-02-6 Decamethylcyclopentasiloxane (D5)

Oral	consumer	5 mg/kg/24h (consumers) (systemic effects)
Inhalative	industrial	97.3 mg/m ³ (workers) (systemic effects)
	consumer	17.3 mg/m ³ (consumers)

CAS: 540-97-6 Dodecamethylcyclohexasiloxane (D6)

Oral	consumer	1.7 mg/kg/24h (consumers) (systemic effects)
Inhalative	industrial	11 mg/m ³ (workers) (systemic effects)
	consumer	1.7 mg/m ³ (consumers) (systemic effects)

- **Short term effects**

CAS: 541-02-6 Decamethylcyclopentasiloxane (D5)

Oral	consumer	5 mg/kg/24h (consumers) (systemic effects)
Inhalative	industrial	97.3 mg/m ³ (workers) (systemic effects)
	consumer	17.3 mg/m ³ (consumers) (systemic effects)

CAS: 540-97-6 Dodecamethylcyclohexasiloxane (D6)

Oral	consumer	1.7 mg/kg/24h (consumers) (systemic effects)
Inhalative	industrial	6.1 mg/m ³ (workers) (local effects)
	consumer	1.5 mg/m ³ (consumers) (local effects)

- **PNECs**

CAS: 541-02-6 Decamethylcyclopentasiloxane (D5)

PNEC	>0.0012 mg/L (fresh water)
	>10 mg/L (sewage treatment plant)
	>0.00012 mg/L (salt water)
PNEC	1.1 mg/kg (soil)
	0.24 mg/kg (sediment (salt water))

CAS: 540-97-6 Dodecamethylcyclohexasiloxane (D6)

PNEC	>1 mg/L (sewage treatment plant)
PNEC	3.336 mg/kg (soil)
	0.282 mg/kg (sediment (salt water))
	2.826 mg/kg (sediment (fresh water))

- **Additional Occupational Exposure Limit Values for possible hazards during processing:**

While curing the following substances are formed and released by a reaction with atmospheric humidity:
Butan-1-ol (CAS 71-36-3)

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Methanol (CAS 67-56-1)

CAS: 67-56-1 methanol

WEL	Short-term value: 333 mg/m ³ , 250 ppm
	Long-term value: 266 mg/m ³ , 200 ppm
	Sk

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
- **Respiratory protection:**
Not necessary if room is well-ventilated.
Filter AX
Use suitable respiratory protective device in case of insufficient ventilation.
For further guidance,
please refer to HSE HSG53 "Respiratory Protective Equipment at work - A Practical Guide".
- **Protection of hands:** Preventive skin protection by use of skin-protecting agents is recommended.
- **Material of gloves** Natural rubber, NR
- **Penetration time of glove material** Not applicable.
- **Eye protection:** Safety glasses
- **Body protection:**



Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form: Pasty
 - Colour: According to product specification
- **Odour:** Characteristic
- **Melting point/freezing point:** Undetermined.
- **Initial boiling point and boiling range:** Not applicable.
- **Flash point:** >100 °C
- **Auto-ignition temperature:** Product is not selfigniting.

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· Explosive properties:	Product does not present an explosion hazard.
· Density at 20 °C:	1.4 g/cm ³
· Solubility in / Miscibility with water:	Immiscible / difficult to mix.
· Solvent content:	
VOC (EU)	18.2 g/l
VOC (EC)	1.30 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
None if stored according to specifications.
Beginning at approx. 150 °C small amounts of formaldehyde are formed by an oxidative decomposition.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

CAS: 2768-02-7 trimethoxyvinylsilane

Inhalative	LC50/4 h	16.8 mg/L (rat)
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CAS: 556-67-2 octamethylcyclotetrasiloxane (D4)

Oral	LD50	4,800 mg/kg (rat)
		1,700 mg/kg (mouse)
Dermal	LD50	2,400 mg/kg (rat)
		Inhalative

CAS: 541-02-6 Decamethylcyclopentasiloxane (D5)

Oral	LD50	>60,000 mg/kg (rat)
Dermal	LD50	>15,000 mg/kg (rabbit)

CAS: 540-97-6 Dodecamethylcyclohexasiloxane (D6)

Oral	LD50	>2,000 mg/kg (rat)
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Dermal	LD50	>2,000 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 541-02-6 Decamethylcyclopentasiloxane (D5)

LC50/96 h	>0.0016 mg/L (oncorhynchus mykiss)
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EC50/48 h	>0.0029 mg/L (daphnia magna)
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CAS: 540-97-6 Dodecamethylcyclohexasiloxane (D6)

EC50/72 h	>0.002 mg/L (pseudokirchneriella subcapit.) (OECD 201)
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- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is not biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

Ecotoxicological effects:

CAS: 540-97-6 Dodecamethylcyclohexasiloxane (D6)

EC50/21 d	>420 mg/L (daphnia magna)
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NOEC/21 d	0.0046 mg/L (daphnia magna)
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- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**

Uncured product may not be disposed of together with household waste and may not reach sewage system. To dispose of, open product containers and let them stand in open air until the reaction is finished totally (means there is no more smell). After that, waste can be disposed of as the cured product.

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Cured product can be deposited together with domestic waste. Observe the specific related regulations of local authorities.

- **European waste catalogue** 2008/98/EC (UK WM3) : n/a

- **Uncleaned packaging:**

- **Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, ADN, IMDG, IATA** Void

- **14.2 UN proper shipping name**

- **ADR** Void

Void

- **ADN, IMDG, IATA** Void

Void

- **14.3 Transport hazard class(es)**

- **ADR, ADN, IMDG, IATA**

- **Class** Void

Void

- **14.4 Packing group**

- **ADR, IMDG, IATA** Void

Void

- **14.5 Environmental hazards:**

- **Marine pollutant:** No

No

- **14.6 Special precautions for user**

Not applicable.

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

- **UN "Model Regulation":**

Void

SECTION 15: Regulatory information

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

"CLP" Regulation (EC) No 1272/2008 (OJ L 353, 31.12.2008, p.1).

"REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments).

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

HSE EH40/2005 Workplace Exposure Limits (as amended)

Guidance on the classification and assessment of waste | Technical Guidance WM3 (1st edition 2015)

2001/118/EC as regards the list of wastes

2008/98/EC on waste

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials, Annex II:**
No further relevant information available.
- **Information about limitation of use:** No further relevant information available.
- **Other regulations, limitations and prohibitive regulations**

Substances of very high concern (SVHC) according to REACH, Article 57	
CAS: 556-67-2	octamethylcyclotetrasiloxane (D4)
CAS: 541-02-6	Decamethylcyclopentasiloxane (D5)
CAS: 540-97-6	Dodecamethylcyclohexasiloxane (D6)

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H226 Flammable liquid and vapour.
H332 Harmful if inhaled.
H361f Suspected of damaging fertility.
H413 May cause long lasting harmful effects to aquatic life.

- **Department issuing SDS:**

Prepared and verified in accordance with "REACH" Regulation (EC) No 1907/2006, Annex II, Part A, 0.2.3.

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Repr. 2: Reproductive toxicity – Category 2
Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

- *** Data compared to the previous version altered.**