

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

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

1.1. Product Identifier

Product Name BOSTIK BONDFLEX 100 CLEAR
Pure substance/mixture Mixture

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

Recommended use Sealant.
Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Company Name	Supplier
Bostik GmbH	Bostik Limited
An der Bundesstrasse 16	Common Rd
33829 Borgholzhausen, Germany	ST16 3EH
Tel: +49 (0) 5425 / 801 0	Stafford UK
Fax: +49 (0) 5425 / 801 140	Tel: +44 (1785) 27 26 25
	Fax: +44 (1785) 25 72 36

E-mail address SDS.box-EU@bostik.com

1.4. Emergency telephone number

United Kingdom +44 (1785) 272650
Ireland +353 (1) 8624900 (Monday- Friday 9am-5pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Not classified

2.2. Label Elements

Not classified

Signal word
None

Hazard statements
Not classified

EU Specific Hazard Statements

EUH208 - Contains 4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT]. May produce an allergic reaction

Precautionary statements

P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children

2.3. Other Hazards

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supercedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Small amounts of ethanol (CAS 64-17-5) are formed by hydrolysis and released upon curing

PBT and vPvB assessment

This preparation contains substances considered to be persistent, bio-accumulating and toxic (PBT), or to be very persistent or very bioaccumulating (vPvB)

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

Mixtures

Chemical name	EC No.	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH Registration Number
Triacetoxypropylsilane	241-816-9	17865-07-5	1 - <3	Skin Corr. 1B (H314) (EUH071)		01-2119966899-07-XXXX
Silanetriol, methyl-, triacetate	224-221-9	4253-34-3	1- <2.5	Skin Corr. 1C (H314) Acute Tox. 4 (H302) (EUH014)		01-2119962266-32-XXXX
Decamethylcyclopentasiloxane	208-764-9	541-02-6	0.1 - <1	PBT vPBT		01-2119511367-43-XXXX
Octamethylcyclotetrasiloxane	209-136-7	556-67-2	0.1 - <1	Repr. 2 (H361f) Aquatic Chronic 4 (H413) Flam. Liq. 3 (H226) PBT vPBT		01-2119529238-36-XXXX
Dodecamethylcyclohexasiloxane	208-762-8	540-97-6	0.1 - <1	PBT vPvB		01-2119517435-42-XXXX
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT]	264-843-8	64359-81-5	0.01 - <0.05	Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Acute Tox. 4 (H302) Acute Tox. 2 (H330) Aquatic Acute 1 (H400) Aquatic Chronic 1 (410)		No data available

Full text of H- and EUH-phrases: see section 16

Note: ^ indicates not classified, however, the substance is listed in section 3 as it has an OEL

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Chemical name	CAS No.	SVHC candidates
Decamethylcyclopentasiloxane	541-02-6	X
Octamethylcyclotetrasiloxane	556-67-2	X
Dodecamethylcyclohexasiloxane	540-97-6	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Take a copy of the Safety Data Sheet when going for medical treatment.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Clean mouth with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person.

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

Symptoms No information available.

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

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Full water jet. Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Thermal decomposition can lead to release of toxic and corrosive gases/vapours.

Hazardous combustion products Carbon monoxide. Carbon oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing.

Other information Ventilate the area. Prevent further leakage or spillage if safe to do so.

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supercedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system. Do not allow to enter into soil/subsoil. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Specific Use(s)
Sealant.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Other information Observe technical data sheet.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available

Derived No Effect Level (DNEL)

Dodecamethylcyclohexasiloxane (540-97-6)

Type	worker Long term Systemic health effects
------	--

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Exposure route	Inhalation
Derived No Effect Level (DNEL)	11 mg/m ³

Type	worker Long term Local health effects
Exposure route	Inhalation
Derived No Effect Level (DNEL)	1.22 mg/m ³

Derived No Effect Level (DNEL)	
Dodecamethylcyclohexasiloxane (540-97-6)	
Type	Consumer Long term Systemic health effects
Exposure route	Inhalation
Derived No Effect Level (DNEL)	2.7 mg/m ³

Type	Consumer Long term Local health effects
Exposure route	Inhalation
Derived No Effect Level (DNEL)	0.3 mg/m ³

Type	Consumer Short term Local health effects
Exposure route	Inhalation
Derived No Effect Level (DNEL)	1.5 mg/m ³

Type	Consumer Long term Systemic health effects
Exposure route	Oral
Derived No Effect Level (DNEL)	1.7 mg/kg bw/d

Type	Consumer Short term Systemic health effects
Exposure route	Oral
Derived No Effect Level (DNEL)	1.7 mg/kg bw/d

Predicted No Effect Concentration (PNEC) No information available.

Predicted No Effect Concentration (PNEC)	
Dodecamethylcyclohexasiloxane (540-97-6)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Sewage treatment plant	1 mg/l
Freshwater sediment	13 mg/kg dry weight
Marine sediment	1.3 mg/kg dry weight
Soil	3.77 mg/kg dry weight

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

- Eye/face protection** Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166
- Hand protection** Wear protective gloves. Gloves made of plastic or rubber.
- Skin and body protection** Wear suitable protective clothing.
- Respiratory protection** Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection. Wear a respirator conforming to EN 140 with Type A/P2 filter or better.
- Recommended filter type:** Recommended filter type: Brown; White.

Environmental exposure controls Prevent product from entering drains.

SECTION 9: Physical and chemical properties

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Paste
Colour	Colourless
Odour	Acetic acid
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	300 °C	
Flash point	> 100 °C	
Evaporation rate	No data available	
Flammability (solid, gas)	Not applicable for liquids	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	
Vapour density	No data available	
Relative density	1.03 - 1.05	
Water solubility	Insoluble in water	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	> 200 °C	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Explosive properties	No data available	
Oxidising properties	No data available	

9.2. Other information

Solid content (%)	No information available
Softening Point	No information available
Molecular weight	No information available
VOC Content (%)	< 3 g/L
Density	1.03 - 1.05 g/cm ³
Bulk density	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion Data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions. Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Based on available data, the classification criteria are not met.
Eye contact Based on available data, the classification criteria are not met.
Skin contact Based on available data, the classification criteria are not met.
Ingestion Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal) 8,579.40 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Silanetriol, methyl-, triacetate 4253-34-3	LD50 = 1600 mg/kg (Rat) OECD 401		
Decamethylcyclotrasiloxane 541-02-6	> 24134 mg/kg (Rat)	> 16 mL/kg (Rabbit)	
Octamethylcyclotetrasiloxane 556-67-2	LD50 > 4800 mg/kg (Rat) OECD 401	LD50 > 2400 mg/kg (Rat) OECD 402	= 36 g/m ³ (Rat) 4 h
Dodecamethylcyclohexasiloxane 540-97-6	> 50 g/kg (Rat)		
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT] 64359-81-5	= 1636 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 0.26 mg/L (Rat) 4 h

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Product Information					
Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal			Non-irritant

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Product Information					
Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	eye			Non-irritant

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Octamethylcyclotetrasiloxane 556-67-2	Repr. 2

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

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to Micro-organisms	Crustacea	M-Factor
Octamethylcyclotetrasiloxane 556-67-2	-	LC50: >1000mg/L (96h, Lepomis macrochirus) LC50: >500mg/L (96h, Brachydanio rerio)	-	EC50: =25.2mg/L (24h, Daphnia magna)	-
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT] 64359-81-5	EC50 (72h) =0.025 mg/L Algae (Scenedesmus subspicatus)(OEC D 201)	LC50 (96h) 0.0078 mg/L Fish (Oncorhynchus mykiss)(OECD 203)	-	EC50 (48h) 0.0097 mg/L Daphnia magna (OECD 202)	-

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Decamethylcyclopentasiloxane 541-02-6	8.02	-
Octamethylcyclotetrasiloxane 556-67-2	6.49	12400
Dodecamethylcyclohexasiloxane 540-97-6	8.87	-
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT] 64359-81-5	4.4	13

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment This preparation contains substances considered to be persistent, bio-accumulating and toxic (PBT), or to be very persistent or very bioaccumulating (vPvB).

Chemical name	PBT and vPvB assessment
Triacetoxypolypropylsilane 17865-07-5	The substance is not PBT / vPvB
Silanetriol, methyl-, triacetate 4253-34-3	The substance is not PBT / vPvB
Decamethylcyclopentasiloxane 541-02-6	PBT / vPvB substance The substance is not PBT / vPvB
Octamethylcyclotetrasiloxane 556-67-2	PBT / vPvB substance The substance is not PBT / vPvB
Dodecamethylcyclohexasiloxane 540-97-6	PBT / vPvB substance The substance is not PBT / vPvB

12.6. Other adverse effects

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Contaminated packaging Do not reuse empty containers. Handle contaminated packages in the same way as the product itself.

European Waste Catalogue 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

Other information Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supercedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Land transport (ADR/RID)

14.1 UN Number	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special Provisions	None

IMDG

14.1 UN number	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Marine Pollutant	Np
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special Provisions	None

Section 15: REGULATORY INFORMATION

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No.
Decamethylcyclopentasiloxane	541-02-6
Octamethylcyclotetrasiloxane	556-67-2
Dodecamethylcyclohexasiloxane	540-97-6

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	CAS No.	Restricted substance per REACH Annex XVII
Decamethylcyclopentasiloxane	541-02-6	70.
Octamethylcyclotetrasiloxane	556-67-2	70.

Substance subject to authorisation per REACH Annex XIV

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

Persistent Organic Pollutants
Not applicable

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

EUH014 - Reacts violently with water
EUH071 - Corrosive to the respiratory tract
H226 - Flammable liquid and vapour
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H330 - Fatal if inhaled
H361f - Suspected of damaging fertility
H400 - Very toxic to aquatic life
H413 - May cause long lasting harmful effects to aquatic life

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend SECTION 8: Exposure controls/personal protection
TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation
PBT Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
STOT RE Specific target organ toxicity - Repeated exposure
STOT SE Specific target organ toxicity - Single exposure
EWC: European Waste Catalogue

Key literature references and sources for data

No information available

Prepared By Product Safety & Regulatory Affairs

Revision date 02-Aug-2019

Indication of changes

Revision note First time release.

Training Advice No information available

SAFETY DATA SHEET

BOSTIK BONDFLEX 100 CLEAR
Supersedes Date: 28-Aug-2018

Revision date 02-Aug-2019
Revision Number 1.01

Further information No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet