



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

BOSTIK PRO SEALANT S21 MULTI PURPOSE SILICONE BROWN

Revision date 08-Apr-2022

Supersedes Date: 08-Apr-2022

Revision Number 1

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

1.1. Product identifier

Product Name BOSTIK PRO SEALANT S21 MULTI PURPOSE SILICONE BROWN

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

Bostik Limited
Common Rd
ST16 3EH
Stafford UK
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

NPIC - National Poison Information Centre

Members of the Public: +353 (01) 8092166 (8.00 am to 10.00 pm - 7 days a week)

Healthcare Professionals: +353 (01) 8092566 (24 hour service)

Europe

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity

Category 3 - (H412)

2.2. Label elements

Signal word

None

Hazard statements

H412 - Harmful to aquatic life with long lasting effects.

EU Specific Hazard Statements

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

Precautionary Statements - EU (§28, 1272/2008)

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P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P273 - Avoid release to the environment
P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

Small amounts of ethanol (CAS 64-17-5) are formed by hydrolysis and released upon curing. Small amounts of acetic acid (CAS 64-19-7) are formed by hydrolysis and released upon curing. Harmful to aquatic life.

PBT & vPvB

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH registration number
Triacetoxypoly(propyl)silane	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
Titanium dioxide	236-675-5	13463-67-7	0.1 - <1	^	-	01-2119489379-17-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 (H410) (EUH071)	Skin Irrit. 2 :: 0.025%<=C<5% Eye Irrit. 2 :: 0.025%<=C<3% Skin Sens. 1A :: C>=0.0015%	-

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 does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No.

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1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. If medical advice is needed, have product container or label at hand.
Inhalation	Remove to fresh air. If symptoms persist, call a doctor.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult an ophthalmologist.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.

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

Symptoms None known.

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 Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Unsuitable extinguishing media Full water jet.

5.2. Special hazards arising from the substance or mixture

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

Hazardous combustion products Carbon oxides. Carbon dioxide (CO₂). Silicon oxides. Silicon dioxide. Thermal decomposition can lead to release of irritating and toxic gases and vapours.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required. Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

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Environmental precautions Prevent product from entering drains. 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 Do not scatter spilled material with high pressure water streams.

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

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Take off all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from moisture. Keep away from food, drink and animal feedingstuffs.

Recommended storage temperature Keep at temperatures between 10 and 35 °C.

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 Small amounts of ethanol (CAS 64-17-5) are formed by hydrolysis and released upon curing Small amounts of acetic acid (CAS 64-19-7) are formed by hydrolysis and released upon curing This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product

Chemical name	European Union	United Kingdom
Acetic acid 64-19-7	TWA: 25 mg/m ³ TWA: 10 ppm STEL: 50 mg/m ³ STEL: 20 ppm	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 20 ppm STEL: 50 mg/m ³
Titanium dioxide 13463-67-7	-	TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 30 mg/m ³ STEL: 12 mg/m ³

Derived No Effect Level (DNEL) No information available

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Derived No Effect Level (DNEL)			
Titanium dioxide (13463-67-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Local health effects	Inhalation	10 mg/m ³	

Derived No Effect Level (DNEL)			
Titanium dioxide (13463-67-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Oral	700 mg/kg bw/d	

Predicted No Effect Concentration (PNEC) No information available.

Predicted No Effect Concentration (PNEC)	
Titanium dioxide (13463-67-7)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Marine water	0.0184 mg/l
Freshwater sediment	1000 mg/kg
Freshwater	0.184 mg/l
Marine sediment	100 mg/kg
Soil	100 mg/kg
Microorganisms in sewage treatment	100 mg/l
Freshwater - intermittent	0.193 mg/l

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 suitable gloves. Recommended Use: Neoprene™. Nitrile rubber. Butyl rubber. Glove thickness > 0.7mm. The breakthrough time for the mentioned glove material is in general greater than 480 min. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374

Skin and body protection None under normal use conditions.

Respiratory protection In case of inadequate ventilation wear respiratory protection. Wear a respirator conforming to EN 140 with Type A/P2 filter or better. Ensure adequate ventilation, especially in confined areas.

Recommended filter type: Organic gases and vapours filter conforming to EN 14387. White. Brown.

Environmental exposure controls Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid

Appearance Paste

Colour Brown

Odour Acetic acid.

Odour threshold No information available

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<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	≥ 300 °C	
Flammability	Not applicable for liquids .	
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	> 100 °C	CC (closed cup)
Autoignition temperature	> 200 °C	
Decomposition temperature		None known
pH	No data available	Not applicable Insoluble in water
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	> 21	@ 40 °C
Dynamic viscosity	No data available	Water solubility No data available Insoluble in water Product cures with moisture
None known		Solubility(ies) No data available
None known		Partition coefficient No data available
None known		Vapour pressure No data available
		Relative density 1.02 - 1.05
		Bulk Density No data available
		Density 1.02
None known		Relative vapour density No data available
		Particle characteristics
		Particle Size No information available
		Particle Size No information available
		Distribution

9.2. Other information

VOC Content (%)

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Product cures with moisture.

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

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Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid 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

Incompatible materials Strong oxidising agents.

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 hazard classes as defined in Regulation (EC) No 1272/2008

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. May cause sensitisation in susceptible persons.
Ingestion	Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Silanetriol, methyl-, triacetate	LD50 = 1600 mg/kg (Rattus) OECD 401	-	-
Titanium dioxide	>10000 mg/kg (Rattus)	LD50 > 5000 mg/Kg	= 5.09 mg/L (Rattus) 4 h
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT]	=1636 mg/kg (Rattus)	> 2000 mg/kg (Oryctolagus cuniculus)	=0.26 mg/L (Rattus) 4 h

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

Skin corrosion/irritation The assessment of the result of testing was done in accordance with the guideline of the Commission 92/ 69/ EEC.

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal		6 days	Product score <=1

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					Non-irritant
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Serious eye damage/eye irritation By analogy to another tested similar product: No irritation after contact to the eyes. (H319 is void). The assessment of the result of testing was done in accordance with the guideline of the Commission 92/ 69/ EEC.

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Non-irritant
	Rabbit	eye		6 days	Product score <=1 Non-irritant

Respiratory or skin sensitisation No classification is proposed, based on conclusive negative data. May produce an allergic reaction. OECD Test No. 406: Skin Sensitisation. May cause sensitisation in susceptible persons.

Method	Species	Exposure route	Results
OECD Test No. 406: Skin Sensitisation	Guinea pig	Dermal	No sensitisation responses were observed

Titanium dioxide (13463-67-7)
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT] (64359-81-5)

Method	Species	Exposure route	Results
OECD Test No. 406: Skin Sensitisation	Guinea pig		sensitising

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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

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Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Triacetoxyp(ropyl)silane 17865-07-5	EC50 (72h): approx. 24 mg/l(Pseudokirchhenriella subpicata)	LC50 (96h) = 108.89 mg/L	-	EC50 (48h) = 89.59 mg/L		
Silanetriol, methyl-, triacetate 4253-34-3	EC50 (72h): >500 mg/l (Pseudokirchnerella subcapitata)	LC50 (96h) >500 mg/l (Brachydanio rerio)	-	EC50 (48h) >500 mg/l (Daphnia magna)		
Titanium dioxide 13463-67-7	LC50 (96h) >10000 mg/l (Cyprinodon variegatus) OECD 203	-	-	-		
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT] 64359-81-5	EC50 (72h) =0.025 mg/L Algae (Scenedesmus subspicatus)(OECD 201)	LC50 (96h) 0.0078 mg/L (Oncorhynchus mykiss)(OECD 203)	-	EC50 (48h) 0.0097 mg/L Daphnia magna (OECD 202)	100	100

12.2. Persistence and degradability

Persistence and degradability No information available.

4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT] (64359-81-5)

Method	Exposure time	Value	Results
OECD Test No. 308: Aerobic and Anaerobic Transformation in Aquatic Sediment Systems		Half-life	1.1-1.3 days

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Triacetoxyp(ropyl)silane	1.23
Silanetriol, methyl-, triacetate	-2.4
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT]	4.4

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product contains substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Triacetoxyp(ropyl)silane	The substance is not PBT / vPvB
Silanetriol, methyl-, triacetate	The substance is not PBT / vPvB
Titanium dioxide	The substance is not PBT / vPvB PBT assessment does not apply
4,5-dichloro-2-octyl-2H-isothiazol-3-one [DCOIT]	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

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12.7. 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	Handle contaminated packages in the same way as the product itself.
European Waste Catalogue	08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
Other information	Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN number or ID 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 or ID 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 Maritime transport in bulk according to IMO instruments	Not applicable

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID 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

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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 does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

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

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

Substance subject to authorisation per REACH Annex XIV

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

National regulations

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
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
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value
*	Skin designation
SVHC	Substance(s) of Very High Concern
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB	Very Persistent and very Bioaccumulative (vPvB) Chemicals

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STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
EWC	European Waste Catalogue
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods (IMDG)
IATA	International Air Transport Association (IATA)
RID	Regulations concerning the International Transport of Dangerous Goods by Rail

Key literature references and sources for data

No information available

Prepared By Product Safety & Regulatory Affairs

Revision date 08-Apr-2022

Indication of changes

Revision note SDS sections updated, 2, 3, 11, 12.

Training Advice No information available

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