

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008 This SDS is for generic information purposes and does not reflect required country specific information for OEL

BOSTIK FP402 FIRESEAL SILICONE WHITE Supercedes Date: 18-Feb-2020

Revision Date: 30-Sep-2020 Revision Number 2.03

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

Product NameBOSTIK FP402 FIRESEAL SILICONE WHITEPure substance/mixtureMixture

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 GmbH An der Bundesstrasse 16 33829 Borgholzhausen, Germany Tel: +49 (0) 5425 / 801 0 Fax: +49 (0) 5425 / 801 140

E-mail address

SDS.box-EU@bostik.com

1.4. Emergency telephone number

Emergency Telephone

No information available

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 3-(Triethoxysilyl) propylamine & 2-Butanone, oxime. May produce an allergic reaction. EUH210 - Safety data sheet available on request.

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

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Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing Small amounts of ethanol (CAS 64-17-5) are formed by hydrolysis and released upon curing

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT) This mixture contains no substance considered to be very persistent nor 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
Titanium dioxide	236-675-5	13463-67-7	0.1- <1	Carc. 2 (H351i)		01-2119489379- 17-XXXX
2-Butanone, oxime	202-496-6	96-29-7	0.1- <1	Acute Tox. 4 (H312) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Carc. 2 (H351)		01-2119539477- 28-XXXX
3-(Triethoxysilyl) propylamine	213-048-4	919-30-2	0.1- <1	Skin Corr. 1B (H314) Skin Sens. 1 (H317) Acute Tox. 4 (H302)		01-2119480479- 24-XXXX

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. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
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.

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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	l effects, both acute and delayed	
Symptoms	No information available.	
4.3. Indication of any immediate m	edical attention and special treatment needed	
Note to doctors	Treat symptomatically.	
SECTION 5: Firefighting me	asures	
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 t	he 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 dioxide (CO2).	
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.
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 cont	tainment and cleaning up
6.3. Methods and material for contribution for contribution for containment	tainment and cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
	Use a non-combustible material like vermiculite, sand or earth to soak up the product
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 containment Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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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, inc	cluding 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

Only European Community Occupational Exposure Limits will be shown in this document. Please refer to regional SDS for further information.

Chemical name	European Union
Methyl alcohol	TWA: 200 ppm
67-56-1	TWA: 260 mg/m ³
	*

Derived No Effect Level (DNEL) No information available

Derived No Effect Level (DNEL)			
Titanium dioxide (13463-67-7)			
Туре		Derived No Effect Level (DNEL)	Safety factor
worker Long term Local health effects	Inhalation	10 mg/m³	

3-(Triethoxysilyl) propylamine (919-30-2)			
Туре	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Systemic health effects	Inhalation	59 mg/m³	
worker Short term Systemic health effects	Inhalation	59 mg/m³	
worker Long term Systemic health effects	Dermal	8.3 mg/kg bw/d	
worker Short term	Dermal	8.3 mg/kg bw/d	

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Systemic health effects			

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

3-(Triethoxysilyl) propylamine (919-30-2)			
Туре	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Inhalation	17 mg/m³	
Consumer Short term Systemic health effects	Inhalation	17.4 mg/m³	
Consumer Long term Systemic health effects	Dermal	5 mg/kg bw/d	
Consumer Short term Systemic health effects	Dermal	5 mg/kg bw/d	

Predicted No Effect Concentration No information available. (PNEC)

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

3-(Triethoxysilyl) propylamine (919-30-2)		
Environmental compartment	Predicted No Effect Concentration (PNEC)	
Freshwater	0.33 mg/l	
Marine water	0.033 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 protective gloves. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The breakthrough time of the gloves depends on the material and the thickness as well as the temperature.
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.

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Recommended filter type: Brown. White.

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 Appearance Colour Odour Odour threshold	Solid Paste White Characteristic No information available	
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive		Remarks • Method
limits Vapour pressure Vapour density Relative density Water solubility Solubility(ies) Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties Oxidising properties	100 No data available No data available Immiscible in water No data available No data available	hPa
9.2. Other information Solid content (%) VOC Content (%) Density	No information available 0 g/L 1.24 g/cm ³	European directive n°2010/75/UE

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 Sensitivity to static discharge	None.
10.3. Possibility of hazardous read	tions

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Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid		
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 None under normal use conditions.

products

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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	>10000 mg/kg (Rattus)	LD50 > 10000 mg/Kg	>5 mg/l
2-Butanone, oxime 96-29-7	=930 mg/kg (Rattus)	1000 - 1800 mg/kg (Oryctolagus cuniculus)	>4.83 mg/L (Rattus) 4 h
3-(Triethoxysilyl) propylamine 919-30-2	LD50 = 1490 mg/kg (Rat, female) EPA OTS 798.1175	LD50 = 4075 mg/kg (Oryctolagus cuniculus) EPA OTS 798.1100	LC50 >144 mg/L (6h) Rat (Vapour)

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.

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

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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.

Based on available data, the classification criteria are not met.

Carcinogenicity	Based on available data, the classification criteria are not met.		
	Chemical name	European Union	
	Titanium dioxide 13463-67-7	Carc. 2	
	2-Butanone, oxime 96-29-7	Carc. 2	

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component Information			
Titanium dioxide (13463-67-7)			
Method		Species	Results
Oral		Rat	Not Carcinogenic
Inhalation Xu et al (2010), carcinogenic activity of nanoscale TiO2 administered by an intrapulmonary spraying (IPS) - initiation-promotion protocol in rat lung		Rat	Carcinogenic
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 criter	ia are not met.

SECTION '	12: Ecological	l information
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12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Titanium dioxide 13463-67-7	LC50 (96h) >10000 mg/l (Cyprinodon variegatus) OECD 203	-	-	-		
2-Butanone, oxime 96-29-7	EC50: =83mg/L (72h, Desmodesmus subspicatus)	LC50: =760mg/L (96h, Poecilia reticulata) LC50: 777 - 914mg/L (96h, Pimephales promelas) LC50: 320 - 1000mg/L	mg/L 5 min	EC50: =750mg/L (48h, Daphnia magna)		

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		(96h, Leuciscus idus)			
3-(Triethoxysilyl) propylamine 919-30-2	EC50 (72h) >1000 mg/L Green algae (desmodesmus subspicatus) (OECD TG 201)	TĠ 203)	-	EC50 (48h) =331 mg/L Daphnia magna (OECD TG 202)	

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
2-Butanone, oxime 96-29-7	0.65	5.8
3-(Triethoxysilyl) propylamine 919-30-2	1.7	3.4

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. .

Chemical name	PBT and vPvB assessment
Titanium dioxide	The substance is not PBT / vPvB
13463-67-7	PBT assessment does not apply
2-Butanone, oxime	The substance is not PBT / vPvB
96-29-7	
3-(Triethoxysilyl) propylamine	The substance is not PBT / vPvB
919-30-2	

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

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product was used.

SECTION 14: Transport information

Land transport (ADR/RID) 14.1 UN number 14.2 Proper Shipping Name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special Provisions	Not regulated Not regulated Not regulated Not applicable 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 Not applicable		

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 does not contain candidate substances of very high concern at a concentration >=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)

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

Persistent Organic Pollutants Not applicable

National regulations

France

Germany____

Ordinance on Industrial Safety and Health - Germany - BetrSichV No flammable liquids in accordance with BetrSichV

Water hazard class (WGK) slightly hazardous to water (WGK 1)

TRGS - 510 Storage Class Storage Class 13 : Non-combustible solids

Netherlands

List of Carcinogenic, mutagenic and reproductive toxin substances in accordance with Inspectorate SZW (Netherlands)

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

H302 - Harmful if swallowed

- H312 Harmful in contact with skin
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage

H351 - Suspected of causing cancer

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
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
EWC	European Waste Catalogue

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Key literature references and sources for dataNo information availablePrepared ByProduct Safety & Regulatory AffairsRevision Date:30-Sep-2020Indication of changesRevision noteSDS sections updated, 3, 4, 5, 6, 7, 8, 12, 13, 16.Training AdviceWhen working with hazardous materials, regular training of operators is required by lawFurther informationNo 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