Safety Data Sheet

Bostik Fire Bond Foam Seal+

Issued: 19/02/2018

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

1.1. Product identifier

Trade name: Bostik Fire Bond Foam Seal+

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

Recommended uses: 1-component polyurethane foam.

1.3. Details of the supplier of the safety data sheet

Supplier

Company:	Bostik AB
Address:	Strandbadsvägen 22
Zip code:	251 09
City:	Helsingborg
Country:	SWEDEN
E-mail:	info.se@bostik.com
Phone:	+46 42 19 50 00
Homepage:	www.bostik.com
Contact person:	Name: - Environment dep., Phone: +46 42 19 50 00

1.4. Emergency Telephone Number

+46 8 331231 (Swedish Poisons Informations Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification:	Aerosol 1;H222 Aerosol 1;H229 Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Resp. Sens. 1;H334 STOT SE 3;H335 Carc. 2;H351 Lact.;H362 STOT RE 2;H373 Aquatic Chronic 4;H413
CLP Classification - other information:	Classification according to Regulation (EC) No 1272/2008.
Most serious harmful effects:	Extremely flammable aerosol. Pressurised container: May burst if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause harm to breast-fed children. May cause damage to organs through prolonged or repeated exposure. May cause long lasting harmful effects to aquatic life. Further information on potential health effects and symptoms of Section 11.

2.2. Label elements

Pictograms

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Signal word: Danger

Contains

Substance: Diphenylmetanediisocyanate, homologous and isomers; AlkaneS, C14-17, chloro

H-phrases

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

P-phrases

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P308+313	IF exposed or concerned: Get medical advice/attention.
P410+412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F.
P501	Dispose of contents / container residues submitted to: licensed waste disposal site.

Supplemental information

EUH204	Contains isocyanates. May produce an allergic reaction.

* Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. Please use the attached protective gloves! Maximum period of use: 5 minute. Throw away after use, do not re-use.

2.3. Other hazards

This mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative / vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS number	EC No	REACH Reg. No.	Concentration	Notes	CLP-classification

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Tris(2-chloro-1-methylethyl) phosphate	13674-84-5	237-158-7	01-2119486772-26-XXXX	10 - 20%		Acute Tox. 4;H302
Diphenylmetane diisocyanate, homologous and isomers	32055-14-4	500-079-6	01-2119457024-46-XXXX	10 - 15%		Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Acute Tox. 4;H332 Resp. Sens. 1;H334 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373
Dimethyl ether	115-10-6	204-065-8	01-2119472128-37	5 - 15%		Flam. Gas 1;H220 Press. Gas Comp. gas;H280
isobutane	75-28-5	200-857-2	01-2119485395-27	1 - 10%		Flam. Gas 1;H220 Press. Gas Comp. gas;H280
propane	74-98-6	200-827-9	01-2119486944-21	1 - 10%		Flam. Gas 1;H220 Press. Gas Comp. gas;H280
AlkaneS, C14-17, chloro	85535-85-9	287-477-0	01-2119519269-33	1 -< 10%		Lact.;H362 Aquatic Acute 1;H400 Aquatic Chronic 1;H410

Please see section 16 for the full text of H-phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Fresh air and rest. Keep the respiratory tract clear. Seek medical advice in case of persistent discomfort.

Ingestion: If swallowed, do not induce vomiting, seek medical advice immediately and show this container or label. Thoroughly rinse the mouth with water. Never give anything by mouth to an unconscious person.

Skin contact: Wash skin thoroughly with soap and water. Do not use solvents. Remove contaminated clothing. Seek medical advice in case of persistent discomfort.

Eye contact: Rinse immediately with plenty of water. Remove any contact lenses and rinse with water for at least 15 minutes (keep the eyelids open). Contact physician if irritation persists.

Burns: Not applicable.

General: When obtaining medical advice, show the safety data sheet or label.

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

Irritant effects, Cough, drowsiness, dizziness, nausea, vomiting, Narcotic effects

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

Treat symptoms.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Extinguish with powder, carbon dioxide, foam or fine water mist.

Unsuitable extinguishing media: Do not use a direct water jet.

5.2. Special hazards arising from the substance or mixture

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Hazardous fumes are formed in fire conditions. Hydrogen chloride (HCl) Carbon monoxide (CO) and carbon dioxide (CO2). Nitrogen oxides (NOx). Bursting aerosols can be forcibly projected from a fire.

5.3. Advice for fire-fighters

Do not allow extinguishing water or spillage to run out into the sewage system. Breathing apparatus should be used in fire fighting.

Other Information: Cool containers exposed to flames with water until well after the fire is out.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid contact with skin and eyes. Use suitable protective clothes, protective gloves and protective goggles. Provide good ventilation. Keep the emission separate from sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry.

For emergency responders: No action shall be taken that involves personal risk or without appropriate training. The surrounding area must be removed. Keep unnecessary and undeclared workers away. Do not touch or walk through chemicals. Use suitable protective equipment. Show this safety data sheet if possible.

6.2. Environmental precautions

Prevent discharges into sewers, streams and soils. As a result of chemical flocculation, the product may be eliminated from water.

6.3. Methods and material for containment and cleaning up

Soak up with sawdust, sand or other inert absorption material and collect into enclosed containers.

6.4. Reference to other sections

See Section 8 for personal protective equipment and section 13 for waste disposal.

Other Information: In the event of major emissions, contact the relevant authorities.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Contains substances for which hygienic threshold values are stipulated. Avoid contact with skin, eyes or clothing. After contact with skin, wash immediately with water and soap. See Section 8 for personal protective equipment. Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. Good working hygiene must always be observed when handling product. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke during work.

Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Keep out of reach of children.

7.2. Conditions for safe storage, including any incompatibilities

Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Keep cool and dry and well clear of ignition sources. Keep in a cool, well-ventilated place. Store isolated from oxidizing materials. Store at temperatures below 50 ºC. Aerosols can explode when heated to temperatures over 50 ºC. Not to be stored in direct sunlight.

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7.3. Specific end use(s)

See Product Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Substance name	Time period	ppm	mg/m3	fiber/cm3	Comments	Remarks
Diphenylmetan ediisocyanate, homologous and isomers	8h		0.02			SEN
Diphenylmetan ediisocyanate, homologous and isomers	15m		0.07			SEN
Dimethyl ether	8h	400	766			
Dimethyl ether	15m	500	958			

SEN = Capable of causing respiratory sensitisation

8.2. Exposure controls

Exposure controls: Personal precautions: Avoid skin contact with product, wipe up the pollution / spill as soon as incurred. Provide training for employees to prevent exposure. Use personal protective equipment as in Section 8.

Appropriate engineering controls: Technical measures: Ensure good general ventilation standards. use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below limits. Personal Precautions: Avoid skin contact with the product, wipe up the pollution / spills as soon as they arise. Wear gloves (tested to EN374) if hand contamination, wash away the impurities of the skin immediately. Wear suitable Coveralls protect against skin exposure. Provide basic training for employees to prevent / minimize exposures.

Personal protective equipment, eye/face protection: Eye protection is recommended when there is a risk of direct contact or splashes Eye protection must conform to EN 166.

Personal protective equipment, skin protection: Wear appropriate clothing to prevent any possibility of skin contact.

Personal protective equipment, hand protection: Use protective gloves that are resistant to chemicals. Gloves must conform to EN 374. Protection gloves by nitrile. Breakthrough time:> 480 min

Personal protective equipment, respiratory protection: Respirator with combined filter or breathing apparatus may be necessary. (A-P2).

Environmental exposure controls: Prevent discharges into the sewage system, watercourses or ground. Ensure compliance with local regulations for emissions.

Heating hazards: Aerosols can explode when heated to temperatures over 50 ºC.

Other Information: Good working hygiene must always be observed when handling product. When using do not eat, drink or smoke. Wash your hands thoroughly after handling and before eating or smoking.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Parameter	Value/unit
State	Aerosol
Colour	Colourless to yellow.
Odour	Characteristic
Solubility	No data
Explosive properties	No data
Oxidising properties	No data

Parameter	Value/unit	Remarks
pH (solution for use)	No data	
pH (concentrate)	No data	
Melting point	No data	
Freezing point	No data	
Initial boiling point and boiling range	No data	
Flash Point	No data	
Evaporation rate	No data	
Flammability (solid, gas)	No data	
Flammability limits	No data	
Explosion limits	No data	
Vapour pressure	No data	
Vapour density	No data	
Relative density	No data	
Partition coefficient n-octonol/water	No data	
Auto-ignition temperature	No data	
Decomposition temperature	No data	
Viscosity	No data	
Odour threshold	No data	

9.2 Other information

Parameter	Value/unit	Remarks
Density	0,99 g/cm³	(20°C)

SECTION 10: Stability and reactivity

10.1. Reactivity

In case of proper use the intended polymerisation reaction takes place.

10.2. Chemical stability

Stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Pressurized container: Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Forms explosive mixtures with air.

10.4. Conditions to avoid

Do not expose to heat (e.g. sunlight). Store isolated from oxidizing materials.

10.5. Incompatible materials

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Oxidizing substance.

10.6. Hazardous decomposition products

No dangerous decomposition products during appropriate storage and handling.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Tris(2-chloro-1-methylethyl) phosphate

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		500 - 2000mg/kg			

Diphenylmetanediisocyanate, homologous and isomers

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 10000mg/kg		OECD 401	

AlkaneS, C14-17, chloro

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000mg/kg			

Product information
ATEmix (oral) >2000 mg/kg.

Acute toxicity - dermal

Tris(2-chloro-1-methylethyl) phosphate

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000mg/kg			

Diphenylmetanediisocyanate, homologous and isomers

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		> 9400mg/kg		OECD 402	

Product information
ATEmix (dermal) >2000 mg/kg.

Acute toxicity - inhalation

Tris(2-chloro-1-methylethyl) phosphate

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC0	4h	> 7mg/l			

Diphenylmetanediisocyanate, homologous and isomers

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50	4h	0.31g/m³		OECD 403	
Rat	NOAEL		0.0002g/m³			
Rat	LOAEL		0.001g/m³			

propane

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Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	15 min	> 1443mg/l			literature

isobutane

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Mouse	LC50	2h	1237mg/l			literature

Product information
ATEmix (inhalation-mist): >5 mg/L 4h.

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

Respiratory sensitisation or skin sensitisation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

Germ cell mutagenicity: Based on existing data, the classification criteria are deemed not to have been met.

Carcinogenic properties: Suspected of causing cancer.

Reproductive toxicity: May cause harm to breast-fed children.

Single STOT exposure: May cause respiratory irritation.

Repeated STOT exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on existing data, the classification criteria are deemed not to have been met.

SECTION 12: Ecological information

12.1. Toxicity

Bostik Fire Bond Foam Seal+

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
	Daphnia magna	48h	48hEC50	> 1000mg/l			

Tris(2-chloro-1-methylethyl) phosphate

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
	Pimephales promelas	96h	96hLC50	51mg/l			
	Daphnia magna	48h	48hEC50	131mg/l			
Bacteria		3h	EC50	784mg/l			
Algae		72h	72hIC50	82mg/l			

Diphenylmetanediisocyanate, homologous and isomers

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
	Danio rerio	96h	96hLC50	> 1000mg/l			
	Daphnia magna	24h	48hEC50	> 1000mg/l		OECD 202	
	Scenedesmus subspicatus	72h	72hEC50	> 1640mg/l		OECD 201	

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	Daphnia magna	21d	21dNOEC	> 10mg/l		OECD 202	

AlkaneS, C14-17, chloro

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish		96h	96hLC50	> 5000mg/l		IUCLID	
Algae		96h	96hEC50	> 3.2mg/l			
	Daphnia magna	48h	48hEC50	0.006mg/l			
	Daphnia magna	21d	21dNOEC	0.01mg/l			

12.2. Persistence and degradability

Not determined.

12.3. Bioaccumulative potential

Bioaccumulation improbable.

12.4. Mobility in soil

Hardens to a firm, non-mobile mass.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

None known.

Other Information

Prevent discharges into the sewage system, watercourses or ground.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Refuse, spillages and packaging waste are treated as dangerous waste.
The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Category of waste: 16 05 04* gases in pressure containers (including halons) containing hazardous substances
15 01 10* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN-No.: 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2

14.4. Packing group:

14.5. Environmental hazards: The product should not be labelled as an environmental hazard (symbol: fish and tree).

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Hazard label(s):	2.1		
Hazard identification number:		**Tunnel restriction code:**	(D)
Other Information:	Classification Code: 5F		

Inland water ways transport (ADN)

14.1. UN-No.:	1950	**14.4. Packing group:**	
14.2. UN proper shipping name:	AEROSOLS	**14.5. Environmental hazards:**	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	2		
Hazard label(s):	2.1		
Transport in tank vessels:	Classification Code: 5F		

Sea transport (IMDG)

14.1. UN-No.:	1950	**14.4. Packing group:**	
14.2. UN proper shipping name:	AEROSOLS	**14.5. Environmental hazards:**	The product is not a Marine Pollutant (MP).
14.3. Transport hazard class(es):	2.1	**Environmental Hazardous Substance Name(s):**	
Hazard label(s):			
EmS:	F-D, S-U	**IMDG Code segregation group:**	

Air transport (ICAO-TI / IATA-DGR)

14.1. UN-No.:	1950	**14.4. Packing group:**	
14.2. UN proper shipping name:	AEROSOLS, FLAMMABLE	**14.5. Environmental hazards:**	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	2.1		
Hazard label(s):	2.1		

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

SECTION 15: Regulatory information

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

Special Provisions: Safety, health and environmental regulations / legislation specific for the substance or mixture. EU Regulation (EC) No 1907/2006 (REACH).

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.

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

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59.
The product does not contain SVHC substances.

This product contains one or more substance(s) subject to restriction (Regulation (EC) No.

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1907/2006 (REACH), Annex XVII).
Diphenylmetanediisocyanate, homologous and isomers [32055-14-4]. Restrictions on use:56

EU-REACH (1907/2006) - Annex XIV - List of substances subject to authorisation:None of the components are listed.

Authorisations / limitations: Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.

Observe local regulations.

15.2. Chemical Safety Assessment

Other Information: For this product, no Chemical Safety Assessment in accordance with Directive (EC) 1907/2006 (REACH) has been carried out.

SECTION 16: Other information

Other Information: * NOTE: This rule (552/2009) applies to products sold to the general public / consumers. Products that contain Diphenylmethanediisocyanatr (MDI) and used for professional and industrial use of rules for personal protective equipment as SDS for each product.

Vendor notes: Version 1.
The information in this SDS is based on our current knowledge and on current EU and national laws. The product should not be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the user who has full responsibility to comply with the requirements of current legislation. The information in this SDS is meant as a description of safety requirements for the product and not a guarantee of product properties.

Date: 19/02/2018

List of relevant H-statements

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure, may explode if heated.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Document language: GB

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