

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

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

1.1. Product identifier

Trade name: Bostik Fire Bond PRO 2K Fogskum

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

Recommended uses: 2-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

112 - ask for Poison Information Center - Sweden

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Aerosol 1;H222 Aerosol 1;H229 Acute Tox. 4;H302 Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Resp. Sens. 1;H334 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373

Most serious harmful effects: Extremely flammable aerosol. Pressurised container: May burst if heated. Harmful if swallowed. 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 damage to organs through prolonged or repeated exposure.

2.2. Label elements

Pictograms



Signal word: Danger

Contains

Substance: Tris(2-chloro-1-methylethyl) phosphate; Diphenylmethanediisocyanate, homologous and

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

isomers; ethanediol, ethylene glycol

H-phrases

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
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.
H373	May cause damage to organs through prolonged or repeated exposure.

P-phrases

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.
P501	Dispose of contents/container residues submitted to: licensed waste disposal site.
P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

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

Once activated, the 2K aerosol must be emptied within 5 minutes. If aerosol can not be emptied, there is a risk that the temperature within the aerosol will exceed 50 °C and the aerosol itself may burst.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS number	EC No	REACH Reg. No.	Concentration	Notes	CLP-classification
Tris(2-chloro-1-methylethyl) phosphate	13674-84-5	237-158-7	01-2119486772-26-XXXX	5 -< 20%		Acute Tox. 4;H302
Diphenylmethane diisocyanate, homologous and isomers	9016-87-9	-	-	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

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

ethanediol, ethylene glycol	107-21-1	203-473-3	01-2119456816- 28	1 -< 10%		Acute Tox. 4;H302 STOT RE 2;H373
propane	74-98-6	200-827-9	01-2119486944- 21	0 - 5%		Flam. Gas 1;H220 Press. Gas Comp. gas;H280

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:	Move the exposed person to fresh air at once. When unconscious, loosen tight clothing and position in secured sideposition. Consult a doctor if symptoms should occur.
Ingestion:	Immediately consult a doctor.
Skin contact:	Remove contaminated clothing. Dry the skin. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
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:	Flush with water until the pain stops and continue flushing for another 30 minutes.
General:	Show this Material Safety Datasheet to the doctor.

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

Risk of allergic reaction, with breathing difficulties of asthma type. Contact with the skin may cause irritation and allergic contact eczema.

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 that could spread the fire.

5.2. Special hazards arising from the substance or mixture

Bursting aerosols can be forcibly projected from a fire.
Hazardous fumes are formed in fire conditions.
Nitrogen oxides (NOx).
Hydrogen chloride (HCl)
Hydrogen cyanide (HCN)

5.3. Advice for fire-fighters

Wear a self contained breathing apparatus. Avoid breathing fire vapours.
Do not allow extinguishing water or spillage to run out into the sewage system.

Other Information:	By combustion toxic gases are formed. Containers close to fire should be removed immediately or cooled with water.
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SECTION 6: Accidental release measures

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Use suitable protective clothes, protective gloves and protective goggles. Use only in well-ventilated areas. Always keep away from sources of ignition.

6.2. Environmental precautions

Avoid discharge into drains, water or soil.

6.3. Methods and material for containment and cleaning up

Collect mechanically. Soak up with sawdust, sand or other inert absorption material and collect into enclosed containers. In the event of major emissions, contact the relevant authorities.

6.4. Reference to other sections

See section 13 for waste disposal. See Sections 7 and 8 for prevention.

Other Information: Isocyanates can be rendered harmless by a water solution containing 5% ammonia and 10% isopropanol.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from sources of ignition. Static electricity and formation of sparks must be prevented. Use suitable protective gloves and protective clothes if there is risk of direct contact or splashing. See section 8 for type of protective equipment. Do not eat, drink or smoke during work. Wash hands before breaks, before using restroom facilities, and at the end of work. Use appropriate hand lotion to prevent defatting and cracking of skin. Take off contaminated clothing and wash before reuse.

Once activated, the 2K aerosol must be emptied within 5 minutes. If aerosol can not be emptied, there is a risk that the temperature within the aerosol will exceed 50 °C and the aerosol itself may burst.

7.2. Conditions for safe storage, including any incompatibilities

Keep cool and dry and well clear of ignition sources. Store isolated from oxidizing materials. Keep in original container. Store at temperatures below 50 °C. Aerosols can explode when heated to temperatures over 50 °C. Not to be stored in direct sunlight.

7.3. Specific end use(s)

The product should be used only for the purposes specified to the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit: Contains no substances subject to reporting requirements
Observe local regulations.

Other Information: Observe local regulations.

8.2. Exposure controls

Exposure controls: Good working hygiene must always be observed when handling product.

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: Use approved safety goggles or face shield. Eye protection must conform to EN 166.

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

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. Nitrile rubber - NBR: Thickness >= 0,7 mm; breakthrough time >= 480 min.

Personal protective equipment, respiratory protection: In case of insufficient ventilation, wear respiratory protective equipment. Respirator with combined filter or breathing apparatus may be necessary. (A-P2).

Environmental exposure controls: Ensure compliance with local regulations for emissions.

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

Other Information: Provide shower facilities near the work place. Isolate contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Aerosol
Colour	Reddish.
Odour	Uncured product in white spirit.
Solubility	No data
Explosive properties	No data
Oxidising properties	No data

Parameter	Value/unit	Remarks
pH (solution for use)	No data	
pH (concentrate)		
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-octanol/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	1,02 g/ml	(20°C)

SECTION 10: Stability and reactivity

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

10.1. Reactivity

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

10.2. Chemical stability

On contact with moisture the product cures forming an insoluble rubber.

10.3. Possibility of hazardous reactions

Reacts violently with amines and alcohol. In closed vessel penetrating water may cause gas formations, pressure increase or bursting the vessel.

10.4. Conditions to avoid

Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not 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.

10.5. Incompatible materials

Oxidising agent.

10.6. Hazardous decomposition products

None known.

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		> 1000mg/kg		OECD 401	

ethanediol, ethylene glycol

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		7712mg/kg			
Human	LDLo		~ 1600mg/kg			

ATEmix (oral) 1900 -<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	

ethanediol, ethylene glycol

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Mouse	LD50		> 3500mg/kg			

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

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	LC50 (dust/mist)	4h	0.31mg/l		OECD 403	

isobutane

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

ethanediol, ethylene glycol

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	6h	> 2.5mg/l			

propane

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

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

Single STOT exposure: May cause respiratory irritation.

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

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

SECTION 12: Ecological information

12.1. Toxicity

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	3hEC50	784mg/l			
Algae		72h	72hIC50	82mg/l			

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

Diphenylmetanediisocyanate, homologous and isomers

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
	Danio rerio	96h	96hLC50	> 1000mg/l		OECD 203	
Bacteria		3h	3hEC50	> 100mg/l		OECD 209	
	Daphnia magna	21d	21dNOEC	> 10mg/l		OECD 202	
	Daphnia magna	24h	24hEC50	> 1000mg/l		OECD 202	

ethanediol, ethylene glycol

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
	Pimephales promelas	96h	96hLC50	72860mg/l			
	Selenastrum capricornutum	96h	96hEC50	6500 - 13000mg/l			
	Daphnia magna	48h	48hEC50	> 100mg/l		OECD 202	

12.2. Persistence and degradability

Not determined.

12.3. Bioaccumulative potential

Accumulation in organisms is not expected.

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

No information available.

Other Information

Avoid discharge into drains, water or soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.

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

Category of waste: 16 05 04* gases in pressure containers (including halons) containing hazardous substances

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN-No.: 1950
14.2. UN proper shipping name: AEROSOLS

14.4. Packing group:
14.5. Environmental hazards:

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

14.3. Transport hazard class(es): 5F

Hazard label(s): 2.1

Hazard identification number:

Tunnel restriction code: 2(D)

Inland water ways transport (ADN)

14.1. UN-No.: UN 1950

14.2. UN proper shipping name: Aerosol, flammable

14.3. Transport hazard class(es):

Hazard label(s):

Transport in tank vessels:

14.4. Packing group:

14.5. Environmental hazards:

Sea transport (IMDG)

14.1. UN-No.: 1950

14.2. UN proper shipping name: Aerosol, flammable

14.3. Transport hazard class(es): 2.1

Hazard label(s):

EmS: F-D, S-U

14.4. Packing group: Aerosol

14.5. Environmental hazards:

Environmental Hazardous Substance Name(s):

IMDG Code segregation group:

Air transport (ICAO-TI / IATA-DGR)

14.1. UN-No.: 1950

14.2. UN proper shipping name: Aerosol, flammable

14.3. Transport hazard class(es): 2.1

Hazard label(s):

14.4. Packing group: Aerosol

14.5. Environmental hazards:

14.6. Special precautions for user

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

Not applicable.

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).

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.

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

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction: None of the components are listed.

Authorisations / limitations:

People under the age of 18 must not be exposed this product. Council directive 94/33/EC. 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.

Safety Data Sheet

Bostik Fire Bond PRO 2K Fogskum

Replaces date: 15/05/2015

Revision date: 01/06/2018

SECTION 16: Other information

References to literature and data sources:

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

Training advice:

Anyone working with isocyanate products must undergo special training and a specific medical examination.

Vendor notes:

Version 3.
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:

01/06/2018

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.
H373	May cause damage to organs through prolonged or repeated exposure.

Document language:

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