

BOSTIK PU FOAM ALL SEASONS B3HH
Supersedes Date: 04-Oct-2016

Revision Date 17-Aug-2017
Version 3

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name BOSTIK PU FOAM ALL SEASONS B3HH
Pure substance/mixture Mixture

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

Recommended use Building and construction work. Foam.
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company Name

Bostik BV
De Voerman 8
PO Box 303
5215 MH's-Hertogenbosch, The Netherlands
Tel: +31 736 244 244
Fax: +31 736 244 344

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

1.4. Emergency telephone number

Emergency Telephone No information available

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin Corrosion/Irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Respiratory sensitisation	Category 1 - (H334)
Skin sensitisation	Category 1 - (H317)
Carcinogenicity	Category 2 - (H351)
Effects on or via lactation	yes - (H362)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Chronic aquatic toxicity	Category 4 - (H413)
Aerosols	Category 1 - (H222, H229)

2.2. Label Elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains : Isocyanic acid, polymethylenepolyphenylene ester, Alkanes, C14-17, chloro

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Signal Word
DANGER

Hazard statements

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
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
H413 - May cause long lasting harmful effects to aquatic life

Special provisions concerning the labelling of certain mixtures

EUH204 - Contains isocyanates. May produce an allergic reaction

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

P103 - Read label before use
P102 - Keep out of reach of children
P101 - If medical advice is needed, have product container or label at hand
P280 - Wear protective gloves and eye/face protection
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
P260 - Do not breathe spray
P271 - Use only outdoors or in a well-ventilated area
P251 - Pressurized container: Do not pierce or burn, even after use
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P263 - Avoid contact during pregnancy/while nursing
P312 - Call a POISON CENTER or doctor if you feel unwell
P273 - Avoid release to the environment
P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public
Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product
Persons already sensitised to diisocyanates may develop allergic reactions when using 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 A according to standard EN 14387) is used

2.3. Other Hazards

General Hazards

No information available.

PBT and vPvB assessment

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

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Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

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
Isocyanic acid, polymethylenepolyphenylene ester	618-498-9	9016-87-9	40 - <80	STOT SE 3 (H335) STOT RE 2 (H373) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) Acute Tox. 4 (H332)	STOT SE 3 :: C>=5% Skin Irrit. 2 :: C>=5% Eye Irrit. 2 :: C>=5% Resp. Sens. 1 :: C>=0.1%	Exempt(P)
Alkanes, C14-17, chloro	287-477-0	85535-85-9	20 - 25	Lact. (H362) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH066)		01-2119519269-33-XXXX
Propane	200-827-9	74-98-6	10 - <20	Flam. Gas 1 (H220) Press. Gas		01-2119486944-21-XXXX
Isobutane	200-857-2	75-28-5	10 - <20	Flam. Gas 1 (H220) Press. Gas		01-2119485395-27-XXXX
Dimethyl ether	204-065-8	115-10-6	10 - <20	Flam. Gas 1 (H220) Press. Gas		01-2119472128-37-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 $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Inhalation	Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult.
Skin Contact	In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If

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symptoms persist, call a doctor.

Ingestion

Do NOT induce vomiting. If symptoms persist, call a doctor. Drink plenty of water. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor.

Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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

Keep victim warm and quiet.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing agent suitable for type of surrounding fire. Dry chemical or CO₂. Water spray, fog or regular foam. Move containers from fire area if you can do it without risk. Damaged cylinders should be handled only by specialists.

Unsuitable Extinguishing Media

Strong water jet

5.2. Special hazards arising from the substance or mixture

Some may burn but none ignite readily. Ruptured cylinders may rocket.

Hazardous Combustion Products

Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Hydrogen chloride. Hydrogen cyanide. Formaldehyde.

5.3. Advice for firefighters

Caution! Container under pressure. Heating causes rise in pressure with risk of bursting. Cool container with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions

Remove all possible sources of ignition in the surrounding area. Ensure adequate ventilation, especially in confined areas.

Ventilate the area.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Use water spray to reduce vapours or divert vapour cloud drift. Avoid allowing water runoff to contact spilled material. Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Methods for Containment

If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate.

Methods for cleaning up

Do not direct water at spill or source of leak.

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9.1. Information on basic physical and chemical properties

Physical State	Aerosol
Appearance	Foam
Colour	Light green
Odour	Characteristic
Odour Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling Point	No information available	
Flash Point	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper Flammability Limit	16	
Lower Flammability Limit	3	
Vapour Pressure	550	kPa
Vapour Density	No information available	
Relative Density	No information available	
Water Solubility	Immiscible in water	
Solubility in Other Solvents	No information available	
Partition Coefficient	No information available	
Autoignition Temperature	235 °C / 455 °F	
Decomposition Temperature	No information available	
Explosive Properties	No information available	
Explosive Limits	No information available	
Upper	No information available	
Lower	No information available	
Oxidising Properties	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	

9.2. Other information

Softening Point	No information available
Molecular Weight	No information available
Solvent content (%)	No information available
Solid content (%)	No information available
Density	0.955 g/cm ³
Bulk Density	No Data Available
VOC content (%)	20.50 %

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions.

10.2. Chemical 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.

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10.4. Conditions to avoid

Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

Strong oxidising agents. Acid anhydrides. Strong acids.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Hydrogen chloride. Hydrogen cyanide. Formaldehyde.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Harmful by inhalation.

Inhalation	No Data Available.
Eye contact	No Data Available.
Skin Contact	No Data Available.
Ingestion	No Data Available.
Sensitisation	May cause sensitisation by skin contact. May cause sensitisation by inhalation.

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

Skin Corrosion/Irritation	Irritant effect on the skin.
Serious eye damage/eye irritation	Irritating to eyes.
Sensitisation	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Carcinogenicity	Contains a known or suspected carcinogen.
Reproductive Toxicity	No information available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Target Organ Effects	Heart, Central nervous system.
Aspiration Hazard	No information available.

Numerical measures of toxicity

Acute Toxicity

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

ATEmix (oral)	5,357.00 mg/kg
ATEmix (dermal)	6,458.00 mg/kg
ATEmix (inhalation-dust/mist)	1.50 mg/l

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Component Information

Toxicity Data No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	LD 50 > 10000 mg/kg (Rat)	LD 50 > 9400 mg/kg (Rabbit)	=1.5 mg/m ³ (Rat) 4 h
2-Propanol, 1-chloro-, phosphate (3:1) 13674-84-5	= 1500 mg/kg (Rat)	= 1230 mg/kg (Rabbit)	> 4.6 mg/L (Rat) 4 h
Alkanes, C14-17, chloro 85535-85-9	> 4000 mg/kg (rat)	> 2000 mg/kg (rat)	-

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Cured foam has no C14-C17 chloroalkanes leaching in water for a maximum 20% C14-C17 chloroalkanes in mixture. Study: "Pulverized PU Foam HM23. Leaching study, Limit test" by Dr. Christine Jahns and sponsored by FEICA AISBL, 09.12.2014 May cause long lasting harmful effects to aquatic life

Component Information

Data obtained on the component(s) include

Chemical Name	Algae/aquatic plants	Fish	Crustacea	M-Factor
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	ErC50 (72h) >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201)	CL50 (96h) >1000 mg/L Fish (Danio rerio)	EC50 (24H) >1000 mg/L Daphnia magna	
Alkanes, C14-17, chloro 85535-85-9	-	LC50 48 h > 500 mg/L (Leuciscus idus static)	EC50 (48h) = 0.0059 mg/l (Daphnia magna) OECD 202	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Partition coefficient No information available

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other Adverse Effects

No information available

Endocrine Disruptor Information

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
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Alkanes, C14-17, chloro 85535-85-9	Group III Chemical	
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Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Improper disposal or reuse of this container may be dangerous and illegal.
European Waste Catalogue	08 05 01* waste isocyanates 16 05 04* gases in pressure containers (including halons) containing dangerous substances
OTHER INFORMATION	Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

ADR

14.1 UN/ID no	UN1950
14.2 Proper Shipping Name	Aerosols, Environmentally Hazardous
14.3 Hazard Class	2.1
Hazard Labels	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, 2.1, Environmentally Hazardous
14.5 Environmental Hazard	yes
14.6 Special Provisions	190, 327, 344, 625
Classification Code	5F
Tunnel restriction code	(D)
Limited Quantity (LQ)	1 L

IMDG

14.1 UN/ID no	UN1950
14.2 Proper Shipping Name	Aerosols (Alkanes, C14-17, chloro), Marine Pollutant
14.3 Hazard Class	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols (Alkanes, C14-17, chloro), 2.1, Marine Pollutant
14.5 Marine Pollutant	P
	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
14.6 Special Provisions	63,190, 277, 327, 344, 959
Limited Quantity (LQ)	See SP277
EmS-No	F-D, S-U
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

RID

14.1 UN/ID no	UN1950
14.2 Proper Shipping Name	Aerosols, Environmentally Hazardous
14.3 Hazard Class	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, 2.1, Environmentally Hazardous
14.5 Environmental Hazard	yes
Classification Code	5F
14.6 Special Provisions	None
Limited Quantity (LQ)	1 L

ICAO (air)

14.1 UN/ID no	UN1950
14.2 Proper Shipping Name	Aerosols

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14.3 Hazard Class	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, 2.1
14.5 Environmental Hazard	yes
14.6 Special Provisions	A145, A167

IATA

14.1 UN/ID no	UN1950
14.2 Proper Shipping Name	Aerosols, flammable
14.3 Hazard Class	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, flammable, 2.1
14.5 Environmental Hazard	yes
14.6 Special Provisions	A145, A167, A802
Limited Quantity (LQ)	30 kg G
ERG Code	10L

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)

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59

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).

EU-REACH (1907/2006) - Annex XIV - List of substances subject to Authorization

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

Dangerous substance category per Seveso Directive (2012/18/EU)

P3a - FLAMMABLE AEROSOLS

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Persistent Organic Pollutants

Not applicable

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National Regulations

France

Occupational Illnesses (R-463-3, France)

Chemical Name	French RG number
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	RG 62

Germany

Ordinance on Industrial Safety and Health - Germany - BetrSichV

Flammable liquid (R10), EEC: refer to Annex III No. 1 (fire and explosion hazards) and § 7 paragraph 3

Netherlands

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

Chemical Name	Netherlands
Alkanes, C14-17, chloro 85535-85-9	Can be harmful via breastfeeding

15.2. Chemical safety assessment

No information available

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
H362 - May cause harm to breast-fed children
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H335 - May cause respiratory irritation
H373 - May cause damage to organs through prolonged or repeated exposure if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer if inhaled
H332 - Harmful if inhaled
EUH066 - Repeated exposure may cause skin dryness or cracking

Legend

SVHC: Substances of Very High Concern for Authorisation:

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

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Key literature references and sources for data

Classification and labeling data calculated from data received from raw material suppliers

Prepared By Product Safety & Regulatory Affairs

Revision Date 17-Aug-2017

Indication of changes

Revision Note SDS sections updated: 2, 12, 14.

Training Advice No information available

Additional information No information available

This 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 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