Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
This SDS is for generic information purposes and does not reflect required country specific information for OEL

PU FOAM AS 2C B2HH
Supercedes Date: No information available

Revision Date 16-Sep-2016
Version 1

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

1.1. Product Identifier

Product Name PU FOAM AS 2C B2HH
Pure substance/mixture Mixture

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

Recommended use Building and construction work.
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)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Aerosols	Category 1 - (H222)

Unknown acute toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity
Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment

2.2. Label Elements

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

Contains Isocyanic acid, polymethylenepolyphenylene ester

Signal Word
DANGER

Hazard statements
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
H222 - Extremely flammable aerosol
H229 - Pressurised container: May burst if heated
EUH204 - Contains isocyanates. May produce an allergic reaction

Precautionary Statements - EU (§28, 1272/2008)
P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P271 - Use only outdoors or in a well-ventilated area
P210 - Keep away from open flames/hot surfaces. - No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Do not pierce or burn, even after use
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant

Special provisions concerning the labelling of certain mixtures
This product requires tactile warnings if supplied to the general public

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

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

This product is a mixture. Health hazard information is based on its components.

3.2 Mixtures

Chemical Name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Isocyanic acid, polymethylenepolyphenylene ester	-	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)	Exempt
2-Propanol, 1-chloro-, phosphate (3:1)	237-158-7	13674-84-5	10 - <20	Acute Tox. 4 (H302)	01-2119480419-30-XXXX
Ethylene glycol	203-473-3	107-21-1	5 - <10	STOT RE 2 (H373) Acute Tox. 4 (H302)	01-2119456816-28-XXXX
Dimethyl ether	204-065-8	115-10-6	5 - <10	Flam. Gas 1 (H220) Press. Gas	01-2119472128-37-XXXX

Full text of H- and EUH-phrases: see section 16
Note: ^ indicates not classifed, 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 Immediate medical attention is required. In case of accident or being unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a doctor. Artificial respiration and/or oxygen may be necessary.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In case of contact with liquefied gas, thaw frosted parts with lukewarm water. If skin irritation persists, call a doctor. Wash contaminated clothing before reuse.

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. Call a doctor.

Ingestion Call a doctor immediately. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Remove all sources of ignition. Use personal protective equipment as required.

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

Symptoms May cause skin and eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Headache.

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

Note to doctors May cause sensitisation of susceptible persons. Treat symptomatically. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media
Use: Carbon dioxide (CO2), Water spray (fog), Foam.

Unsuitable Extinguishing Media
Full water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire and/or explosion do not breathe fumes. May cause sensitisation by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapours. May form explosive mixtures with air.

Hazardous Combustion Products Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen chloride. Hydrogen cyanide.

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
Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Remove all possible sources of ignition in the surrounding area. Evacuate personnel to safe areas.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Use personal protective equipment as required. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

6.4. Reference to other sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 13: DISPOSAL CONSIDERATIONS

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling
Use only in well-ventilated areas. Ensure that enough fresh air is supplied to dilute and remove dusts, fumes or vapours. Between 5 and 15 air changes per hour are recommended, with a through draught. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Pressurized container: Do not pierce or burn, even after use. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not stick pin or any other sharp object into opening on top of can.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Recommended storage temperature. 10 - 35 °C. Observe local regulations / instructions for storage of pressurized containers.

7.3. Specific end use(s)

Other Information
Recommendation(s); Observe technical data sheet

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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

Chemical Name	European Union
Ethylene glycol 107-21-1	TWA: 20 ppm TWA: 52 mg/m^3 STEL: 40 ppm STEL: 104 mg/m^3 S*
Dimethyl ether 115-10-6	TWA: 1000 ppm TWA: 1920 mg/m^3

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Tight sealing safety goggles. Face protection shield.

Hand Protection Recommended Use:. Nitrile rubber. 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 Antistatic footwear. Wear fire/flame resistant/retardant clothing. Suitable protective clothing. Apron.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. In case of inadequate ventilation wear respiratory protection.

Recommended Filter type: 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.

Environmental Exposure Controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Aerosol
Appearance Foam
Colour light Red

Odour	Characteristic
Odour Threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No information available	
Melting point/freezing point	No information available	
Boiling Point	No information available	
Flash Point	< 100 °C / < 212 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper Flammability Limit	53%	
Lower Flammability Limit	1.7%	
Vapour Pressure	500	kPa
Vapour Density	No information available	
Specific Gravity	No information available	
Water Solubility	Insoluble 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	May form explosive mixtures with air	
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	1.03 g/cm³
Bulk Density	No Data Available
VOC content (%)	15.82 %

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.

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

Formaldehyde. Carbon monoxide. Carbon dioxide (CO2).

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Product Information
Harmful by inhalation.

Inhalation	No Data Available.
Eye contact	No Data Available.
Skin Contact	No Data Available.
Ingestion	No Data Available.
Sensitisation	No Data Available.

Skin Corrosion/Irritation	Irritating to skin.
Serious eye damage/eye irritation	Not applicable.
Sensitisation	May cause sensitisation by inhalation. May cause sensitisation by skin contact. May cause sensitisation of susceptible persons.
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, Eyes, Respiratory system, Skin.
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)	3,192.00 mg/kg
ATEmix (dermal)	5,848.00 mg/kg
ATEmix (inhalation-dust/mist)	1.50 mg/l

Unknown acute toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
88.01 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
49.98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Toxicity Data No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isocyanic acid, polymethylenepolyphenylene ester	= 49 g/kg (Rat)	> 9400 mg/kg (Rabbit)	= 490 mg/m³ (Rat) 4 h
2-Propanol, 1-chloro-, phosphate (3:1)	= 1500 mg/kg (Rat)	= 1230 mg/kg (Rabbit)	= 5 mg/L (Rat) 4 h
Ethylene glycol	= 4700 mg/kg (Rat)	= 9530 µL/kg (Rabbit) = 10600 mg/kg (Rat)	-

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity No information available

Component Information
Data obtained on the component(s) include

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Isocyanic acid, polymethylenepolyphenylene ester	-	CL50 (96h) >1000 mg/L Fish (Danio rerio)	-
2-Propanol, 1-chloro-, phosphate (3:1)	EC50 72 h = 45 mg/L (Desmodesmus subspicatus) EC50 96 h = 4 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h = 180 mg/L (Leuciscus idus static) LC50 96 h = 98 mg/L (Pimephales promelas static) LC50 96 h = 56.2 mg/L (Brachydanio rerio static) LC50 96 h = 30 mg/L (Poecilia reticulata static)	EC50 48 h = 63 mg/L (Daphnia magna)
Ethylene glycol	EC50 96 h 6500 - 13000 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h = 40761 mg/L (Oncorhynchus mykiss static) LC50 96 h = 27540 mg/L (Lepomis macrochirus static) LC50 96 h = 41000 mg/L (Oncorhynchus mykiss) LC50 96 h 40000 - 60000 mg/L (Pimephales promelas static) LC50 96 h 14 - 18 mL/L (Oncorhynchus mykiss static) LC50 96 h = 16000 mg/L (Poecilia reticulata static)	EC50 48 h = 46300 mg/L (Daphnia magna)

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

This product does not contain any known or suspected endocrine disruptors.

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
14.3 Hazard Class	2.1
Hazard Labels	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, 2.1
14.5 Environmental Hazard	Not applicable
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
14.3 Hazard Class	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, 2.1
14.5 Marine Pollutant	Not applicable
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
14.3 Hazard Class	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, 2.1
14.5 Environmental Hazard	Not applicable
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

14.3 Hazard Class	2.1
14.4 Packing Group	Not regulated
Description	UN1950, Aerosols, 2.1
14.5 Environmental Hazard	Not applicable
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	Not applicable
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 >=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

National Regulations

France

Occupational Illnesses (R-463-3, France)

Chemical Name	French RG number
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	RG 62
Ethylene glycol 107-21-1	RG 84

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

Water hazard class (WGK) WGK 1

Netherlands

List of Carcinogenic, mutagenic and reproductive toxin substances in accordance with Inspectorate SZW (Netherlands)
Not Listed

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
H373 - May cause damage to organs through prolonged or repeated exposure if inhaled
H302 - Harmful if swallowed
H335 - May cause respiratory irritation
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

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

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 16-Sep-2016

Indication of changes

Revision Note	Not applicable.
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