

Revision date 29-Jul-2019

Supersedes Date: 01-Nov-2017

**BOSTIK EXPANDA PRO FOAM** Revision Number 2

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

#### 1.1. Product Identifier

Product Name BOSTIK EXPANDA PRO FOAM

Pure substance/mixture Mixture

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

Recommended use Sealant.

Uses advised against No information available.

### 1.3. Details of the supplier of the safety data sheet

#### **Company Name**

Bostik New Zealand Limited 19 Eastern Hutt Road Wingate, Lower Hutt, New Zealand

Tel: 04-567 5119 Fax: 04-567 5412

#### 1.4. Emergency telephone number

Emergency Telephone 24 Hr: 0800 243 622

+64 4 917 9888

Poison Centre: 0800 764 766

E-mail address SDS.AP@Bostik.com

# Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Acute toxicity - Oral	Category 4 (6.1D)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 (6.1D)
Skin corrosion/irritation	Category 2 (6.3A)
Serious eye damage/eye irritation	Category 2A (6.4A)
Respiratory sensitization	Category 1A
Skin sensitization	Category 1A
Carcinogenicity	Category 2 (6.7B)
Specific target organ toxicity - Single exposure	Category 3 (f)
Specific target organ toxicity - Repeated exposure	Category 2 (6.9B)
Aerosols	Category 1 (2.1.2A b)

### 2.2. Label Elements



Signal word

Danger

**Hazard statements** 

H319 - Causes serious eye irritation

# **BOSTIK EXPANDA PRO FOAM Revision Number** 2

Revision date 29-Jul-2019

Supersedes Date: 01-Nov-2017

H302 - Harmful if swallowed

H351 - Suspected of causing cancer

H315 - Causes skin irritation

H332 - Harmful if inhaled

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

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

H317 - May cause an allergic skin reaction

H222 - Extremely flammable aerosol

H229 - Pressurized container: May burst if heated

#### Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P284 - In case of inadequate ventilation wear respiratory protection

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

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 - Pressurized container: Do not pierce or burn, even after use

#### Inhalation

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

#### Skir

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P362 - Take off contaminated clothing and wash before reuse

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

#### Eve

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

#### Ingestion

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

# Storage

P405 - Store locked up

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

#### 2.3. Other Hazards

# Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Mixture

#### 3.2 Mixtures

Chemical name	CAS No.	Weight-%
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	20- <40
2-Propanol, 1-chloro-, phosphate (3:1)	13674-84-5	20- <40
4,4'-Methylenediphenyl diisocyanate	101-68-8	20- <40

<sup>\*\*\*</sup> Any remaining ingredients are not hazardous

**BOSTIK EXPANDA PRO FOAM** 

**Revision Number** 2 Supersedes Date: 01-Nov-2017

### Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

General advice Get medical advice/attention. Remove and isolate contaminated clothing and shoes.

Move victim to fresh air. Administer oxygen if breathing is difficult. If breathing is irregular Inhalation

or stopped, administer artificial respiration.

Skin contact In case of contact with liquefied gas, thaw frosted parts with lukewarm water.

Immediately flush with plenty of water. After initial flushing, remove any contact lenses Eye contact

and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If

symptoms persist, call a physician. Call a physician immediately.

Ingestion Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

Rinse mouth. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty

Revision date 29-Jul-2019

of water. Call a physician.

Ensure that medical personnel are aware of the material(s) involved and take Self-protection of the first aider

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 physicians Keep victim warm and quiet.

4.4. Reference to Other Sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Section 11:

TOXICOLOGY INFORMATION.

# 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 No information available.

5.2. Special hazards arising from the substance or mixture

chemical

**Specific hazards arising from the** Some may burn but none ignite readily. Ruptured cylinders may rocket.

**Hazardous combustion** 

products

Carbon monoxide. Carbon dioxide (CO2). Formaldehyde.

5.3. Advice for firefighters

Special protective equipment for

fire-fighters

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

**BOSTIK EXPANDA PRO FOAM** 

Revision Number 2 Supersedes Date: 01-Nov-2017

Personal precautions Remove all possible sources of ignition in the surrounding area. Ensure adequate

ventilation, especially in confined areas.

Other information Ventilate the area.

6.2. Environmental precautions

to contact spilled material. Prevent entry into waterways, sewers, basements or confined

Revision date 29-Jul-2019

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.

6.4. Reference to other sections

Reference to other sections Section 7: HANDLING AND STORAGE

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 Ensure adequate ventilation, especially in confined areas. Protect from sunlight. Do not

expose to temperatures exceeding 50 °C/122 °F. Pressurized container: Do not pierce or

burn, even after use. Use only in well-ventilated areas.

7.2. Conditions for safe storage, including any incompatibilities

General hygiene considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and

clothing is recommended.

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. 50 - 95 °F. Observe local regulations / instructions for storage of pressurized containers. Keep container tightly closed and dry. Product cures with

moisture.

Incompatible materials Water Alcohols Strong bases Strong oxidizing agents Finely powdered metals Acid

anhydrides Strong acids

7.3. Specific end use(s)

Specific Use(s) Sealant.

Other information No information available.

7.4. References to Other Sections

Reference to other sections Section 13: DISPOSAL CONSIDERATIONS. Section 10: STABILITY AND REACTIVITY.

#### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### **Exposure Limits**

Chemical name	New Zealand	Australia	Furonean Union

# **BOSTIK EXPANDA PRO FOAM**

Revision Number 2 Supersedes Date: 01-Nov-2017

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Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	-	0.02 mg/m³ TWA 0.07 mg/m³ STEL	-
4,4'-Methylenediphenyl diisocyanate 101-68-8	TWA: 0.02 mg/m³ STEL: 0.07 mg/m³	0.02 mg/m³ TWA 0.07 mg/m³ STEL	-

Chemical name	ACGIH TLV	NIOSH IDLH	OSHA PEL
4,4'-Methylenediphenyl	TWA: 0.005 ppm	IDLH: 75 mg/m <sup>3</sup>	Ceiling: 0.02 ppm
diisocyanate		Ceiling: 0.020 ppm 10 min	Ceiling: 0.2 mg/m <sup>3</sup>
101-68-8		Ceiling: 0.2 mg/m <sup>3</sup> 10 min	
		TWA: 0.005 ppm	
		TWA: 0.05 mg/m <sup>3</sup>	

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available

(PNEC)

OTHER INFORMATION No information available

8.2. Exposure controls

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

**PPE - Personal Protection Equipment** 

Respiratory protection

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing. No special technical protective measures are

necessary under normal conditions.

Hand protection Wear suitable chemical resistant gloves. The selection of suitable gloves does not only

depend on the material, but also on further marks of quality and various manufacturers. No protective equipment is needed under normal use conditions. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask,

Revision date 29-Jul-2019

or for short periods of work, a combination of professional filter is recommended.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands thoroughly after

handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and

wash before reuse.

**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

Appearance Foam Aerosol
Color Beige
Odor Characteristic

Odor threshold No information available

Property Values Remarks • Method

pH No data available
Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation rate
Flammability (solid, gas)
No data available
No data available
No data available
No data available

Flammability Limit in Air

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableVapor densityNo data available

**BOSTIK EXPANDA PRO FOAM** 

Revision Number 2 Supersedes Date: 01-Nov-2017

Revision date 29-Jul-2019

No data available Relative density No data available Water solubility Solubility(ies) No data available **Partition coefficient** No data available **Autoignition temperature** No data available **Decomposition temperature** No data available No data available Kinematic viscosity No data available **Dynamic viscosity Explosive properties** No information available **Oxidizing properties** No information available

9.2. Other information

Softening Point
Molecular weight
Solvent content (%)
No information available
No information available
No information available
No information available

**Density** 1.04 g/cm<sup>3</sup>

Bulk density

No information available

VOC Content (%)

No information available

# Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

**Reactivity** None under normal use conditions.

10.2. Chemical stability

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

**Hazardous polymerization** Hazardous polymerization may occur.

10.4. Conditions to avoid

Conditions to avoid Heating causes rise in pressure with risk of bursting. Protect from moisture. Product

cures with moisture.

10.5. Incompatible materials

Incompatible materials Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals. Acid

anhydrides. Strong acids.

10.6. Hazardous decomposition products

**Hazardous decomposition** 

products

Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Formaldehyde.

# Section 11: TOXICOLOGY INFORMATION

# 11.1. Information on toxicological effects

**Acute Toxicity** 

Product InformationHarmful by inhalation.InhalationNo data available.Eye contactNo data available.Skin contactNo data available.IngestionNo data available.

**BOSTIK EXPANDA PRO FOAM Revision Number** 2

Revision Number 2 Supersedes Date: 01-Nov-2017

Revision date 29-Jul-2019

amponent Information

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isocyanic acid,	LD 50 > 10000 mg/kg ( Rat )	LD 50 > 9400 mg/kg (Rabbit)	=1.5 mg/L (Rat) 4 h
polymethylenepolyphenylene ester			
9016-87-9			
2-Propanol, 1-chloro-, phosphate	LD50 > 500 - < 2000 mg/kg (male)	LD50 > 2000 mg/kg (Rat) OECD	> 5.05 mg/L (Rat) 4 h
(3:1)	LD50 = 632 mg/kg (female) [Rat]	402	
13674-84-5			
4,4'-Methylenediphenyl	= 31600 mg/kg (Rat)	LD 50 > 9400 mg/kg (Rabbit)	= 1.5 mg/L (Rat) 4 h
diisocyanate	= 9200 mg/kg (Rat)	OECD 402	
101-68-8			

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

Skin corrosion/irritation
Serious eye damage/eye irritation
Sensitization
Germ cell mutagenicity
Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
No information available.

Target organ effects retina, Eyes, Skin, liver, Respiratory system.

**Aspiration hazard** No information available.

**Carcinogenicity** The following substance(s) are classified in Annex VI CLP (1272/2008) as carcinogenic.

Chemical name	IARC	China	Japan
Isocyanic acid,	Group 3	-	-
polymethylenepolyphenylene ester	•		
4,4'-Methylenediphenyl	Group 3	-	<del>-</del>
diisocyanate	·		

IARC (International Agency for

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Research on Cancer)

# Section 12: ECOLOGICAL INFORMATION

# 12.1. Toxicity

### **Ecotoxicity**

### **Product Information**

None known.

### **Component Information**

Data obtained on the component(s) include

Chemical name	Algae/aquatic plants	Fish	Crustacea
Isocyanic acid,	ErC50 (72h) >1640 mg/L Algae	CL50 (96h) >1000 mg/L Fish	EC50 (24H) >1000 mg/L Daphnia
polymethylenepolyphenylene ester	(scenedesmus subspicatus)	(Danio rerio)	magna
9016-87-9	(OECD 201)		
2-Propanol, 1-chloro-, phosphate	EC50 (72 h) = 82 mg/L	LC50 (96 h) = 51 mg/L	EC50 (48 h) = 131 mg/L (Daphnia
(3:1)	(Pseudokirchneriella subcapitata)	(Pimephales promelas)	magna )
13674-84-5	OECD 201		
4,4'-Methylenediphenyl	-	>1000 mg/l (Danio rerio)	-
diisocyanate			
101-68-8			

### 12.2. Persistence and degradability

No information available.

Component Information			
Isocyanic acid, polymethylenepoly	phenylene ester (9016-87-9)		
Method	Exposure time	Value	Results

# **BOSTIK EXPANDA PRO FOAM**

**Revision Number** 2 Supersedes Date: 01-Nov-2017

Revision date 29-Jul-2019

OECD Test No. 302C: Inherent	28 days	0% biodegradation	Not readily biodegradable
Biodegradability: Modified MITI Test	-		
(II)			

4,4'-Methylenediphenyl diisocyanate (101-68-8)			
Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent	28 days	0% biodegradation	Not readily biodegradable
Biodegradability: Modified MITI Test	-	_	
(II)			

### 12.3. Bioaccumulative potential

There is no data for this product.

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Isocyanic acid, polymethylenepolyphenylene ester	-	200
9016-87-9		
2-Propanol, 1-chloro-, phosphate (3:1) 13674-84-5	2.68	4.6
4,4'-Methylenediphenyl diisocyanate	4.51	200
101-68-8		

#### 12.4. 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.

Chemical name	PBT and vPvB assessment
2-Propanol, 1-chloro-, phosphate (3:1)	The substance is not PBT / vPvB
13674-84-5	
4,4'-Methylenediphenyl diisocyanate	The substance is not PBT / vPvB
101-68-8	

#### 12.6. Other adverse effects

No information available.

# 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

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

# Section 14: TRANSPORT INFORMATION

**IMDG** 

UN1950 **UN** number **Proper Shipping Name** Aerosols Transport hazard class(es) 2.1 Marine Pollutant Np F-D, S-U EmS-No.

**Special Provisions** 63,190, 277, 327, 344, 381, 959

**Limited Quantity (LQ)** See SP277

Description UN1950, Aerosols, 2.1

**BOSTIK EXPANDA PRO FOAM** 

Revision Number 2 Supersedes Date: 01-Nov-2017

Revision date 29-Jul-2019

**IATA** 

UN number UN1950

Proper Shipping Name Aerosols, flammable, containing substances in Division 6.1, Packing Group III

Transport hazard class(es) 2.1
Subsidiary hazard class 6.1
ERG Code 10P
Limited Quantity (LQ) 30 kg G

Special Provisions A145, A167, A802

**Description** UN1950, Aerosols, flammable, containing substances in Division 6.1, Packing Group III,

2.1 (6.1)

**ADR** 

UN Number UN1950
Proper Shipping Name Aerosols
Transport hazard class(es) 2
Labels 2.2 + 6.1

**Description** UN1950, Aerosols, 2 (6.1), (D)

Limited Quantity (LQ) 120 mL

**Special Provisions** 190, 327, 344, 625

Classification Code 5T Tunnel Restriction Code (D)

# Section 15: REGULATORY INFORMATION

National Regulations

ERMA Group HSR002517

# Section 16: OTHER INFORMATION

### Key or legend to abbreviations and acronyms used in the safety data sheet

No information available

#### **Key Literature References and Sources for Data**

No information available

Prepared By Product Safety & Regulatory Affairs

Revision date 29-Jul-2019

Revision note Not applicable.

Training Advice No information available

#### Disclaimer

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**End of Safety Data Sheet**