

MATERIAL SAFETY DATASHEET

PU FIRE RETARDENT B2 Foam Spray

Section1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: PU Fire Retardant B1 foam spray

Product uses: Polyurethane foam caulking agent / Tamping / Stemming / Ventilation Sealing

Company Identification:

Reg number:

Vat number:

Address:

Tel:

Website:

Information in case of emergency:

Contact person: **Tel:**

Contact person: **Tel:**

Section2: HAZARDS IDENTIFICATION

EU-GHS/CLP(No 1272/2008)Classification of the substance or Mixture

PHYSICAL AND CHEMICALHAZARDS: Non Flam. Aerosol 1 - H222

HEALTH HAZARDS: AcuteTox.4 - H332;Skin Irrit. 2 - H315;Eye Irrit. 2 - H319;Resp.Sens. 1 - H334;Skin

Sens. 1 - H317;Carc. 2-H351;STOT SE 3-H335;STOT RE 2 - H373

Classification accordingtoEuropean Directive 67/548/EEC as amended.

Xn;R20, R48/20. Carc.Cat.3;R40. R42/43. Xi;R36/37/38. F+;R12.

GHS/CLP(1272/2008)LabelElements

Hazards pictograms



Signal WordDanger! Hazard

Statements

H222 Non-Flammable aerosol.

H315 Causes skin irritation on sensitive skin

H317 May cause an allergic skin reaction.

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H319 Causes eye irritation

Due to **inadequate** ventilation the following health hazard may occur

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

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

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

Precautionary Statements

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P285 In case of **inadequate** ventilation wear respiratory protection.

P280 Wear protective gloves, eye and face protection.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/attention.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

Response

P211 Do not spray on an open flame or other ignition source

P251 Pressurized container: Do not pierce or burn, even after use. P260 Do not breathe vapour/spray.

P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P333+313 If skin irritation or rash occurs: Get medical advice/attention.

Storage

P410+412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

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Section3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance	CAS#	EC#	Weight%	Classification according to Regulation (EC) No 1272/2008 (CLP)
4,4'-methylenediphenyl Diisocyanate	101-68-8	202-966-0	20	Skin Irrit. 2 Skin sen.1 Eye Irrit.2 Acute Tox. 4 Resp. Sens. 1 STOT SE 3 Carc. 2 STOT RE 0
Isocyanic acid, polymethylenepolyphenyleneester	9016-87-9	618-498-9	25	---
Dimethyl Ether (DME)	115-10-6	204-065-8	40	Press. Gas Flam. Gas 1
Butane	106-97-8	203-448-7	9	Press. Gas Flam. Gas 1
Propane	74-98-6	200-827-9	6	Press. Gas Flam. Gas 1

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

Section4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

General notes: This product should not present a health hazard when used under reasonable conditions.

Following inhalation: Remove victim to fresh area.

Following skin contact: Wash with water and soap.

Following eye contact: Flush eyes with water.

Following ingestion: Do not induce vomiting. Get medical attention.

Self-protection of first aider: Use proper personal protective equipment as indicated in Section 8.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

See Section 11 for more information.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

No data available

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Section5: FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable extinguishing media: Use extinguishing agent suitable for local conditions and the surrounding environment. Such as dry powder, CO2

Unsuitable extinguishing media: No data available.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Hazardous combustion products: No data available.

5.3 ADVICE FOR FIREFIGHTERS: As in any fire, wear positive pressure self-contained breathing apparatus (SCBA). Keep unauthorised personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Section6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

Spill Clean Up Methods

When dealing with a spillage, please consult the section relating to suitable protective measures. Wear necessary protective equipment. Stop leak, if possible, without risk. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

Section7: HANDLING AND STORAGE

Usage Precautions

Persons with impaired lung functions should not handle this preparation. Persons susceptible to allergic reactions should not handle this product. Avoid forming spray/aerosol mists. Avoid inhalation of vapours/spray and contact with skin and eyes. **Ventilate well, avoid breathing** vapours. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of vapours. Spraying is permitted only in closed systems, spray cabinets or spray boxes with adequate ventilation. Eye wash facilities and emergency shower must be available when handling this product.

Storage Precautions

Keep in original container. Store in tightly closed original container, in a dry, cool and well-ventilated place. Storage temperature: <50°C. Keep away from heat, sparks and open flame. Meet the legal requirements. Max. Storage time: 1 year(s)

Suitable packaging material: Aerosol

Packing Group: II

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Section8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

The Following Controls are Recommended for Normal Consumer Use of this Product

Occupational Exposure Limits (OEL's):

Ingredient Name	CAS NO.	STEL/15min	TWA/8Hrs
4,4'-Diphenylmethane Diisocyanate (MDI)	101-68-8	0.2 mg/m ³	0.05 mg/m ³
Dimethyl Ether (DME)	115-10-6	--	1,910 mg/m ³
Butane	106-97-8	2,350 mg/m ³	1,900 mg/m ³
Propane	74-98-6	--	1,800 mg/m ³

Engineering Measures

Provide sufficient ventilation during operations which cause vapour formation. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. **Respiratory Equipment**

Respiratory protection must be used if air contamination exceeds unacceptable level. It is recommended to use respiratory equipment with combination filter, type A2/P2. EN14387 When spraying use suitable air-supplied respirator.

Hand Protection

Use protective gloves made of: Rubber, neoprene or PVC. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye Protection

Wear approved chemical safety goggles where eye exposure is reasonably probable. EN166

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

Environmental Exposure Controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

Protective Equipment:



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Section9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Aerosol, Viscous liquid which foams upon release from container as a light to medium grey froth.
Odor	Slight ether odor during curing stage
Specific Gravity @ 20°C	1.2
Color	Yellow
VOC	35%
Boiling Point	> 200°F (93.3°C)
Solubility in Water	Insoluble in water
Flash Point	800°F (426.6°C)
Flammability	Non-flammable
Vapour Pressure @ 20 °C	Contents under pressure: > 50 psig (345 KPa).

Section10: STABILITY AND REACTIVITY

Reactivity

Reacts strongly with strong acids, bases, organic chemicals and certain metal combinations.

Chemical stability

Stable under normal temperature conditions.

Hazardous Polymerization: Hazardous polymerization will not occur

Conditions to avoid: Avoid heat, flames and other sources of ignition. Reacts strongly with strong acids, bases, organic chemicals and certain metal combinations.

Incompatible materials

High temperatures generate: Toxic gases/vapours/fumes of: Carbon dioxide (CO₂). Carbon monoxide (CO). Hydrogen cyanide (HCN).

Section11: TOXICOLOGICAL INFORMATION

Potential Acute Health Effects

Toxic Dose 1 - LD 50: >10000 mg/kg (oral rat)

Toxic Conc. – LC: 50490 mg/l/4h (inh-rat)

Inhalation

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. May cause sensitisation by inhalation.

Ingestion

May cause stomach pain or vomiting.

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Skin Contact

Irritating to skin. Prolonged or repeated exposure may cause severe irritation.

Eye Contact

Irritation of eyes and mucous membranes.

Acute Toxicological Data on ingredients

4,4'-Diphenylmethane diisocyanate, CAS: 101-68-8

Toxic Dose 1 - LD 50: 9200 mg/kg [Rat, Oral]; Toxic Dose 2 - LD 50: 2200 mg/kg [Mouse, Oral] Dimethyl ether, CAS: 115-10-6

Toxic Dose 1 - LC 50: 308,000 mg/m³ [Rat, Inhalation], Toxic Dose 2 - LC 50: 386ppm/30minutes [Mouse, Oral] Butane, CAS: 106-97-8

Toxic Dose 1 - LC 50: 658,000mg/m³/4hours [Rat, Inhalation], Toxic Dose 2 - LC 50: 680,000 mg/m³/2Hrs. [Mouse, Inhalation].

Propane, CAS: 74-98-6

Toxic Dose 1 - LC 50: 658,000mg/m³/4hours [Rat, Inhalation]

Section12: ECOLOGICAL INFORMATION

Ecotoxicity Data

LC 50, 96 Hrs, Fish >1000 mg/l; Acute Toxicity - Fish

LC0 96 hours > 1000 mg/l; EC 50, 48 Hrs, Daphnia, >500 mg/l

Acute Toxicity - Aquatic Invertebrates

EC0 > 500 mg/l Daphnia magna Acute Toxicity - Aquatic Plants

EC0 72 hours 1640 mg/l Scenedesmus subspicatus

Ecological information on ingredients

4,4'-Diphenylmethane diisocyanate, CAS: 101-68-8

LC50 Rat (male) inhalation 369 mg/cu m/4 h; LC50 Rat (female) inhalation 380 mg/cu m/4 hr. Dimethyl ether, CAS: 115-10-6

LC50 Mouse inhalation 385.94 ppm (30 min);

Persistence and Degradability

The product is not readily biodegradable.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Bio accumulative Potential

The product does not contain any substances expected to be bio accumulating

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Section13: DISPOSAL CONSIDERATION

General Information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Disposal Methods

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

Section14: TRANSPORT INFORMATION

Land transportation (ADR/RID): Proper Shipping

Name: Aerosols, Non-Flammable,

Hazard Class: Class 2.0: GAS

Packing Group(s) II

Limit quantity: 1L

Classification Code: 5F

Transport category: 2.

Air Class: 2

Tunnel restriction code: D

UN/NA ID: UN 1950

Special Provisions: 190 327 344 625

Marine transportation (IATA/IMDG):

UN number: UN1950

UN proper shipping name: Aerosols **Transport hazard class(es):** 2

Hazard label: 2, see SP63 **Special Provisions:** 63, 190, 277, 327, 344, 959 **Limited quantity:** See SP277

EMS: F-D, S-U

Placards:



Section15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE: Regulatory information: Reference to local, national, US, EU, CA and international regulations

CAS No.	Regulation (EC) No 1272/2008
101-68-8	Listed
9016-87-9	Listed
115-10-6	Listed
106-97-8	Listed
74-98-6	Listed

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

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Section 16: OTHER INFORMATION

Issue Time: 22 September 2016

Issue Department: Technical Department

Special None HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 –

HMIS CLASSIFICATION

Health: 4 Flammability: 0
Reactivity: 2 PPI: B

NFPA RATING

Health: 4 Fire: 3
Reactivity: 2

Abbreviation Used

GHS Globally Harmonized System
LC50 Half maximal inhibitory Concentration
LD50 Lethal Dosage 50%
OEL Occupational Exposure Limit
EC European Community
g/cc Grams per Cubic Centimetres
TWA Time weighted Average
VOC Volatile Organic Compound

WHMIS Workplace Hazardous Materials Information System

STEL Short term exposure limit

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Notice to reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.

Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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