

**PFM90037**



## ***Gaps & Cracks Foam***

### ***Product Description***

Gaps & Cracks Insulating Foam expands to fill gaps and cracks smaller than 1 inch. Forming a water-resistant and long-lasting bond to most surfaces, the foam creates a barrier that insulates, reduces drafts and repels water. Gaps and cracks are a source of energy loss as heated or cooled air from inside the home leaks outside. Gaps & Cracks Foam expands to fill spaces where conventional insulation is difficult to install and the gaps are too large for caulk to fill. Gaps & Cracks Insulating Foam delivers up to an R-5 insulation value per inch of cured foam. Thus saving energy. Gap & Cracks Foam's closed-cell technology repels water, helping prevent rot and mold.



**PFM90037**

### ***Model Numbers***

**PFM90037 12 OZ POLY EXP INSUL FOAM**

### ***Product Features***

- Expands to fill gaps and cracks smaller than 1 inch
- Indoor and outdoor use
- Bonds to most popular construction materials such as wood, glass, metal, masonry and most plastics
- Delivers up to an R-5 insulation value per inch of cured foam
- Repels water – Helps prevent mold and rot
- Saves Energy – Reduces drafts
- Blocks rodents and insects
- Yields 25% more<sup>1</sup> than other leading 12oz cans

### ***Basics Uses***

Application areas include gaps around wall pipe, air-duct and drain pipe penetrations; the perimeter of electrical boxes, utility panels, doors and windows; sill plates, exterior<sup>2</sup> cracks and anywhere energy loss may occur in the home due to a gap or insufficient insulation.

<sup>1</sup> Yields evaluated in accordance with ASTM C1563-03, Standard Test Method for Measuring the Yield for Aerosol Foam Sealants (Method A)

<sup>2</sup> If used outdoors, foam should be painted



# Gaps & Cracks Foam

## Typical Product Data

Property	Value <sup>3</sup>
Foam Color	Straw
Application Temperature Range	32°F to 86°F (0°C to 30°C)
Maximum Service Temperature	-76°F to 212°F (-60°C to 100°C)
R-Value	Up to 5 per inch
Closed Cell Content	Up to 60%
Tack Free Time (73°F, 50% RH)	<10 minutes
Capable of being cut in less than one hour	(1" bead @ RT)
Full Cure (dependent on ambient temperature & humidity)	24 hours
Density	1.25 - 1.56 lbs./cu. ft.

## Theoretical Yields

	1/4" Bead	3/8" Bead	1/2" Bead	Volume (ft. <sup>3</sup> )
12 oz	1,243 ft (378m)	553 ft (168m)	311 ft (94m)	0.42 – 0.53 cubic feet

## Specifications

UL Classified

File #R20556 Caulking and Sealants

Classified caulking and sealants surface burning characteristics applied to inorganic reinforced cement board.<sup>4</sup>

Flame Spread: 15

Smoke Developed: 20

## Warranty and Codes

This PROFLO product carries a 1-year limited warranty.

<sup>3</sup> Average value. Actual value may vary. Typical product data values should not be used as specifications.

<sup>4</sup> Tested as applied in three 3/4 in. diameter beads 5 in. on center covering 12.5% of exposed test sample area



# MATERIAL SAFETY DATA SHEET

Version: 1.2  
01/08/2014

## Gaps and Cracks Insulating Foam POLYURETHANE FOAM SEALANT

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Manufacturer Name:** Momentive Performance Materials - Daytona  
703 South Street  
New Smyrna Beach FL 32168

**Revised:** 01/08/2014

**Prepared by** Product Safety Team  
**CHEMTREC** 1-800-424-9300  
**MSDS Contact** 1-888-443-9466  
**Information** 4information@momentive.com

**Chemical Family/Use:** Adhesive

**Formula:** Mixture

#### HMIS

Health: 2 Flammability: 4 Reactivity: 3

#### NFPA

Health: 2 Flammability: 4 Reactivity: 3

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

DANGER! Flammable. Contents under pressure. Harmful if inhaled, absorbed through skin, or swallowed. Irritating to eyes and respiratory system.

**Form:** Aerosols      **Color:** Pale yellow

#### POTENTIAL HEALTH EFFECTS

#### SKIN

This product contains ingredients which may produce an allergic skin reaction. It should be treated as a skin sensitizer.

Liquid adhesive; bonds skin and eyes in seconds. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

#### INHALATION

Harmful if inhaled. May cause respiratory irritation. Drowsiness, dizziness, disorientation, vertigo. Danger of serious damage to health by prolonged exposure.

#### EYES

Liquid adhesive; bonds eyes in seconds. Causes irritation.

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### MEDICAL CONDITIONS AGGRAVATED

Allergies. Applies in uncured state. Central nervous system disorders. Skin disorders and allergies.

### SUBCHRONIC (TARGET ORGAN )

Respiratory System; Skin; Central nervous system.; Immune system; Eye

### CHRONIC EFFECTS / CARCINOGENICITY

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

### ROUTES OF EXPOSURE

Dermal; Eye

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>PRODUCT COMPOSITION</u>	<u>CAS-No.</u>	<u>WGT. %</u>
<b><u>A. HAZARDOUS</u></b>		
4,4'-methylenediphenyl diisocyanate;	101-68-8	10 - 30 %
diphenylmethane-4,4'-diisocyanate		
Isocyanic acid,	9016-87-9	10 - 30 %
polymethylenepolyphenylene ester		
Chloroalkanes	61788-76-9	10 - 30 %
dimethyl ether	115-10-6	5 - 10 %
propane	74-98-6	1 - 5 %
butane	106-97-8	1 - 5 %
Isobutane	75-28-5	1 - 5 %
2,2'-Dimorpholinodiethylether	6425-39-4	1 - 5 %

## 4. FIRST AID MEASURES

### INGESTION

Do NOT induce vomiting. Call a physician or poison control center immediately.

### SKIN

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked

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## Gaps and Cracks Insulating Foam POLYURETHANE FOAM SEALANT

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through and flush skin with water.

### INHALATION

"If inhaled, move victim to fresh air and seek medical attention."

### EYES

Get medical attention immediately. Immediately flush with plenty of water or eyewash solution for up to 10 minutes.

## 5. FIRE-FIGHTING MEASURES

**FLASH POINT:** 0 °C; 32 °F  
**FLAMMABLE LIMITS LEL:** 1.5 %(V).  
**FLAMMABLE LIMITS UEL:** 11 %(V).

### SENSITIVITY TO STATIC DISCHARGE

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use., Avoid contact with skin and eyes., Avoid breathing vapor., Use only with adequate ventilation., Store away from heat and light., Private clothes and working clothes should be kept separately.

### EXTINGUISHING MEDIA

Water, Foam., Carbon dioxide

### SPECIAL FIRE FIGHTING PROCEDURES

Polymerization may take place during a fire due to elevated temperature where closed containers could violently rupture.

,Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

,Use water spray to keep fire-exposed containers cool.

## 6. ACCIDENTAL RELEASE MEASURES

### ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Wear appropriate personal protective equipment. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.

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### 7. HANDLING AND STORAGE

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Use only in well-ventilated areas. Avoid contact with skin and eyes. Keep out of reach of children. Curing releases vapors which may be harmful. Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Avoid inhalation of vapors and spray mists.

#### STORAGE

Contents may develop pressure upon prolonged exposure to heat. Store in closed original container at temperatures between 5°C and 25°C.

#### FURTHER INFORMATION ON STORAGE CONDITIONS

Contents may develop pressure upon prolonged exposure to heat.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines

<u>Component</u>	<u>CAS-No.</u>	<u>Source</u>	<u>Value</u>
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	101-68-8	ACGIH, TWA	0.005 ppm
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	101-68-8	OSHA Z1, Ceiling	0.02 ppm; 0.2 mg/m <sup>3</sup>
propane	74-98-6	ACGIH, TWA	2,500 ppm
propane	74-98-6	OSHA Z1, PEL	1,000 ppm; 1,800 mg/m <sup>3</sup>
propane	74-98-6	ACGIH, TWA	1,000 ppm
butane	106-97-8	ACGIH, TWA	1,000 ppm
isobutane	75-28-5	ACGIH, TWA	1,000 ppm

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>BOILING POINT (°C):</b>	Not determined.
<b>FREEZING POINT:</b>	Not determined.
<b>PHYSICAL STATE:</b>	Aerosols
<b>Color:</b>	Pale yellow
<b>DENSITY:</b>	1.02 g/cm <sup>3</sup>
<b>pH:</b>	Not determined.
<b>SOLUBILITY IN WATER (20 C):</b>	Insoluble Reactive.
<b>VOC EXCL. H<sub>2</sub>O &amp; EXEMPTS (G/L):</b>	134 g/l

### 10. STABILITY AND REACTIVITY

#### STABILITY

Material is stable under normal conditions.

#### INCOMPATIBLE MATERIALS

Oxidizing agents. Acids. Bases. Amines. Water. Aluminum. copper Alcohols. Other metals or alloys. Metals.

#### CONDITIONS TO AVOID

High Temperatures Shocks and physical damage. Do not expose to temperatures exceeding 50°C/122°F. Heat, sparks, flames. Heat may cause the containers to explode.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE ORAL

Methylenediphenyl diisocyanate Isomers; LD50; Species: Rat; > 5,000 mg/kg;

4,4'-methylenediphenyl Diisocyanate; LD50; Species: Rat; > 5,000 mg/kg;

#### ACUTE DERMAL

Methylenediphenyl diisocyanate Isomers; LD50; Species: Rabbit; > 5,000 mg/kg;

4,4'-methylenediphenyl Diisocyanate; LD50; Species: Rabbit; > 5,000 mg/kg;

#### ACUTE INHALATION

Methylenediphenyl diisocyanate Isomers; LC50; Species: Rat; 490 mg/l;

4,4'-methylenediphenyl Diisocyanate; LC50; Species: Rat; 178 mg/l;

#### SENSITIZATION

May cause sensitization by inhalation and skin contact.

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### SKIN IRRITATION.

Irritation of eyes and mucous membranes.

### EYE IRRITATION

Irritant.

## 12. ECOLOGICAL INFORMATION

### Toxicity to other organisms

EC50

Species: Daphnia magna

Result: > 1,000 mg/l

Test substance: Methylenediphenyl diisocyanate Isomers

### Toxicity to other organisms

EC50

Species: Daphnia magna

Result: > 1,000 mg/l

Test substance: 4,4'-methylenediphenyl Diisocyanate

### Elimination information (persistence and degradability)

#### Biodegradation

The product is not expected to be biodegradable.

## 13. DISPOSAL CONSIDERATIONS

### DISPOSAL METHODS

Before disposing of containers, relieve container of any remaining foam pressure, Disposal should be made in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT SHIPPING NAME:** AEROSOLS  
**DOT HAZARD CLASS:** 2.1  
**DOT LABEL (S):** 2.1  
**UN/NA NUMBER:** UN1950  
**PACKING GROUP:**



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### CALIFORNIA PROPOSITION 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### 16. OTHER INFORMATION

#### OTHER

C = ceiling limit      NEGL = negligible  
EST = estimated      NF = none found  
NA = not applicable      UNKN = unknown  
NE = none established      REC = recommended  
ND = none determined      V = recommended by vendor  
SKN = skin      TS = trade secret  
R = recommended      MST = mist  
NT = not tested      STEL = short term exposure limit  
ppm = parts per million      ppb = parts per billion

By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2).  
, These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.