



FROTH-PAK™ Foam Sealant

1. PRODUCT NAME

FROTH-PAK™ Foam Sealant

2. MANUFACTURER

The Dow Chemical Company
Dow Building Solutions
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Midland, MI 48674
1-866-583-BLUE (2583)
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Dow Building Solutions
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Calgary, AB T2P 5H1
1-866-583-BLUE (2583) (English)
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dowbuildingsolutions.com

3. PRODUCT DESCRIPTION

FROTH-PAK™ Foam Sealant is a two-component, quick-cure polyurethane foam that fills cavities, penetrations and cracks. FROTH-PAK™ Foam Sealant is a chemically cured foam, significantly reducing curing time. It dispenses, expands and becomes tack-free in seconds. The product will skin over in 30–40 seconds and will cure in minutes.*

Basic Use

FROTH-PAK™ Foam Sealant can be used in interior or exterior commercial, residential, agricultural, industrial and institutional settings.** If used in an exterior setting, a coating must be applied for ultraviolet (UV) protection.

Typical commercial applications include spray polyurethane foam roof repair and sealing roof perimeters and parapet walls. Residential uses include:

- Roof and wall junctions
- Wall and attic penetrations
- Electrical, mechanical and plumbing penetrations
- Other gaps, cracks or crevices in the building envelope

Sizes

FROTH-PAK™ Foam Sealant is typically sold as a complete kit that includes pressurized “A” and “B” cylinders, plus dispensing gun/hose assembly and accessories. FROTH-PAK™ Foam Sealant is also available in refillable, returnable tanks for applications requiring a large amount of foam, such as poultry houses. See Table 1 for size and yield information.

4. TECHNICAL DATA

Applicable Standards

ASTM International

- C518 – Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- C273 – Standard Test Method for Shear Properties of Sandwich Core Materials
- D1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- D1622 – Standard Test Method for Apparent Density of Rigid Cellular Plastics
- D1623 – Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics
- D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging
- D2842 – Standard Test Method for Water Absorption of Rigid Cellular Plastics
- E96 – Standard Test Methods for Water Vapor Transmission of Materials
- C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation

Physical Properties

FROTH-PAK™ Foam Sealant exhibits the typical properties and characteristics indicated in Table 2 when tested as represented.

Fire Information

FROTH-PAK™ foam is combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C).

Code Compliances

FROTH-PAK™ Foam Sealant complies with the following codes:

- CCMC 13447-L
- Underwriters Laboratories, Inc. (UL) Classified, see Classification Certificate R13655

Contact your Dow sales representative or local authorities for code requirements and related acceptances.

TABLE 1: SIZES AND THEORETICAL YIELDS FOR FROTH-PAK™ FOAM SEALANT

Product	Theoretical Yield, ⁽¹⁾ Board ft (m ³)
Kits	
FROTH-PAK™ 12	12 (0.03)
FROTH-PAK™ 120	120 (0.28)
FROTH-PAK™ 200	200 (0.46)
FROTH-PAK™ 620	620 (1.46)
Refillable Cylinders	
FROTH-PAK™ 17 (gal)	2060 (4.85)
FROTH-PAK™ 27 (gal)	3240 (7.65)
FROTH-PAK™ 60 (gal)	6860 (16.2)
FROTH-PAK™ 120 (gal)	15430 (36.4)
FROTH-PAK™ 350 (gal)	43890 (103.6)

⁽¹⁾ The theoretical yield has become an industry standard for identifying certain sizes of two-component kits. Theoretical yield calculations are performed in perfect laboratory conditions, without taking into account the loss of blowing agent or the variations in application methods and types.

* Actual cure time will depend on temperature, foam thickness, the specific nozzle used, etc.

** For rim/band joist applications, use FROTH-PAK™ Foam Insulation (available in U.S. only) to meet building code specifications.

5. INSTALLATION

Complete operating instructions are provided with each FROTH-PAK™ Foam Sealant purchase. Read all information and cautions before application. Note: Avoid overfilling restricted spaces. Chemicals exert force during reaction, and expansion of foam may result in substrate deformation.

Safety and Conditions of Use

- Read the instructions and (Material) Safety Data Sheet ((M)SDS) carefully before use.
- FROTH-PAK™ spray polyurethane foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Do not breathe vapor or spray. Use only in well-ventilated

areas. Supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a P100 particulate filter may be required to maintain exposure levels below ACGIH, OSHA, WEEL or other applicable limits. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure, air-supplying respirator (air line or self-contained breathing apparatus).

- Isocyanate is irritating to the eyes, skin and respiratory system, and may cause sensitization by inhalation or skin contact.
- FROTH-PAK™ foam will adhere to most surfaces and skin. Do not get foam on skin.

Wear protective clothing (including long sleeves), gloves, and goggles. Cured foam must be mechanically removed or allowed to wear off in time.

- The contents are under pressure.
- FROTH-PAK™ foam should not be used around heaters, furnaces, fireplaces, recessed lighting fixtures or other applications where the foam may come in contact with heat-conducting surfaces. Cured FROTH-PAK™ foam is combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C).
- Re-entry allowed after only 1 hour*

TABLE 2: TYPICAL PHYSICAL PROPERTIES OF FROTH-PAK™ FOAM SEALANT

These properties are typical but do not constitute specifications.

Property and Test Method	Value ⁽¹⁾
Flame Spread/Smoke Developed, ⁽²⁾ ASTM E84/UL 723 @ 4" wide by 2" thick	25/105
Nominal Density, ASTM D1622, lb/ft ³	1.75
Thermal Resistance ⁽³⁾ per inch, ASTM C518, ft ² •h•°F/Btu, R-value, min.	
Initial	6.6
Aged LTTR measured at 2" thick	5.5
Aged LTTR measured at 1" thick	5.3
Water Vapor Permeance, ASTM E96, perm @ 1" thick	3.13
Water Absorption, ASTM D2842, % by volume	5.44
Air Permeability, ASTM E2178 air leakage at 1" thick, l/min @ 75 Pa	0
Air Permeability, ASTM E283 air leakage at 0.5" thick, ft ³ /min•ft ² @ 75 Pa	0
Dimensional Stability, ASTM D2126, % volume change	
158°F/100% RH @ 1 wk	0.70
158°F/100% RH @ 2 wks	-0.06
-40°F/amb RH @ 1 wk	0.02
-40°F/amb RH @ 2 wks	0.36
Compressive Strength, ASTM D1621, lb/in ² , parallel	23.4
Flexural Strength, ASTM C203, lb/in ² , parallel	22.7
Tensile Strength, ASTM D1623, lb/in ² , parallel	36
Shear Strength, ASTM C273, lb/in ² , parallel	12.7
Maximum Service Temperature, °F	240

⁽¹⁾ Values may differ for FROTH-PAK™ 12 and specialty kits. Contact a Dow representative for more information.

⁽²⁾ This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

⁽³⁾ R means resistance to heat flow. The higher the R-value, the greater the insulating power.

Visit dowbuildingsolutions.com or contact a local Dow representative for more specific instructions.

6. AVAILABILITY

FROTH-PAK™ Foam Insulation is distributed through an extensive network. For more information, call:

1-800-232-2436 (English)
1-800-565-1255 (French)

7. WARRANTY

Not applicable.

8. MAINTENANCE

Not applicable.

9. TECHNICAL SERVICES

Dow can provide technical information to help address questions when using FROTH-PAK™ Foam Sealant. Technical personnel are available to assist.

For technical assistance, call:
1-866-583-BLUE (2583) (English)
1-800-363-6210 (French)

10. FILING SYSTEMS

dowbuildingsolutions.com

In the U.S.

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Dow Chemical Canada ULC

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Calgary, AB T2P 5H1

Technical Information

1-866-583-2583 (English)
1-800-363-6210 (French)

Sales Information

1-800-232-2436 (English)
1-800-565-1255 (French)

www.dowbuildingsolutions.com

www.sprayfoamatdow.com

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Dow Polyurethane Foam Insulation and Sealants

CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F. For more information, consult Material Safety Data Sheets, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400.

When air sealing buildings, ensure that combustion appliances, such as furnaces, water heaters, wood burning stoves, gas stoves and gas dryers are properly vented to the outside. See website: <http://www.epa.gov/iaq/homes/hip-ventilation.html>. In Canada visit: <http://archive.nrc-cnrc.gc.ca/eng/ibp/irc/bsi/83-house-ventilation.html>.

FROTH-PAK™ Spray Polyurethane Foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Read the instructions and Material Safety Data Sheets carefully before use. Wear protective clothing (including long sleeves), gloves, goggles or safety glasses, and proper respiratory protection.

Do not breathe vapor or mist. Use only with adequate ventilation. It is recommended that applicators and those working in the spray area wear respiratory protection. Increased ventilation significantly reduces the potential for isocyanate exposure; however, supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a particulate filter may still be required to maintain exposure levels below ACGIH, OSHA, WEEL or other applicable limits. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure, air-supplying respirator (air line or self-contained breathing apparatus). Spraying large amounts of foam indoors may require the use of a positive pressure, air-supplying respirator. Contents under pressure.

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplier including Dow can give assurance that mold will not develop in any specific system.

* See full ventilation guidelines at dowbuildingsolutions.com.