

# TECHNICAL DATA SHEET



## Sound Barrier Two-Component Polyurethane Spray Foam

**Handi-Foam® Sound Barrier Two-Component Polyurethane Foam** is a multiple purpose open cell, low density polyurethane froth foam designed within the international guidelines for protection of the ozone layer, and with respect to the Montreal Protocol, 1987 and other environmental guidelines, utilizing a non-flammable, non-ozone depleting blowing agent to assure in the safety of the end user and the environment. The pre-pressurized, two-component froth foam systems are dispensed through the state-of-the-art Handi-Gun® two-component dispensing unit, providing unsurpassed quality and flexibility in end use performance.

### Application Areas

Spray foam onto any clean, dry surface in any direction to insulate, fill and seal various size voids, deaden sound or reduce vibration. It is specifically designed to spray onto flat or irregular surfaces and to fill large cavities. Standard free-rise density for Handi-Foam Sound Barrier Spray Foam is 0.75 +/- 0.25 lbs/ft<sup>3</sup> (see page 2 for complete technical data and system availability). This product is not recommended for "flash and batt" (i.e. "hybrid") applications.

### Properties

Two-component low density open cell froth foam systems expand rapidly upon chemical reaction of A component and B component. The foam will cure to a semi-rigid open cell foam upon reaction of the A component (a polymeric isocyanate) and B component (a polyol blend containing certain additives).

Handi-Foam Sound Barrier Spray Foam fully expands and dries tack-free within 30-45 seconds, and fully cures within 1 hour.

Handi-Foam Sound Barrier Spray Foam adheres to almost all building materials with the exception of surfaces such as polyethylene, Teflon®, silicone, oils and greases, mold release agents and similar materials.

Optimum application temperature is 80°F (26.7°C) but may be sprayed onto colder or warmer substrates, with slight effects on the foam characteristics. Cured foam is resistant to heat and cold, -200 to +240°F (-129 to +115°C), and to aging, but not UV rays (i.e. sunlight) unless painted, covered or coated. Cured PU foam is chemically inert and non-reactive in approved applications, and will not harm electrical wire insulations, Romex®, rubber, PVC, polyethylene (i.e. PEX), CPVC or other plastic. It is approved for use around wires, plumbing penetrations, etc., and contains no formaldehyde.

Handi-Foam Sound Barrier Spray Foam systems require no outside mechanical or electrical power source and are available in sizes to meet specific job application requirements. When sprayed, the foam will create a seamless, continuous seal to insulate and protect against dust, air infiltration and pests.

### Preparation For Use

Substrate must be clean, dry, firm, free of loose particles and free of dust, grease and mold release agents. Protect surfaces not to be foamed.

Shake kits well *before* using (applicable to non-refillable systems).

### Application / Use

After following instructions for set-up, systems are ready to use. Materials are dispensed through the hoses and mixed in the disposable nozzle.

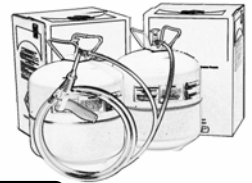
With a nozzle attached to the two-component froth foam dispensing unit, dispense foam by squeezing the trigger of the unit. To interrupt or stop the foaming process, release the trigger. Once the foaming process has stopped, the dispensing unit must be reactivated within 30 seconds or a new nozzle **must** be installed. Fresh foam may be applied in several stages to reduce overfilling of void or damage to non-rigid, confined cavities. Cured foam can only be removed mechanically.

**Important Note:** Use only in well-ventilated areas or with certified respiratory protection. Wear impervious gloves, protective eyewear and suitable work clothes when using. Read all instructions and safety information (MSDS) prior to use of any product. The product contains no formaldehyde. Cured foam is non-toxic.

**KEEP OUT OF REACH OF CHILDREN.**

### Product Storage

Store in cool dry area. Do not expose to open flame or temperatures above 120°F (49°C). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Handi-Foam is reusable by following product instructions. **For optimum results, chemical temperature must be between 75-85°F (24-29°C).**



**Fomo Products, Inc.**  
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## Technical Data

<b>DENSITY</b> ASTM D-1622	0.75 +/- 0.25 lb/ft <sup>3</sup> (12 kg/m <sup>3</sup> )
<b>K-FACTOR</b> ASTM C-518 - aged 28 day value	0.27 BTU-inch / ft <sup>2</sup> -h-°F
<b>R-VALUE</b>	3.7 +/- 0.2 inch
<b>DIMENSIONAL STABILITY</b> ASTM D-2126 HEAT AGE: +158°F (70°C) HUMID AGE: +158°F (70°C), 100% RH COLD AGE: -4°F (-20°C)	< 5% change under all tested conditions
<b>OPEN CELL CONTENT</b> ASTM D-2856	Approx. 95%
<b>WATER VAPOR TRANSMISSION</b> ASTM E-96	Approx. 16 Perms @ 3" thick Approx. 31 Perms @ 1" thick
<b>AIR PERMEABILITY</b> ASTM E-283	Approx. 0.0080 L/S-m <sup>2</sup> @ 75 Pa for 3.25" thick Approx. 0.0049 L/S-m <sup>2</sup> @ 75 Pa for 5.25" thick
<b>TACK-FREE / EXPANSION TIME</b>	30 - 45 seconds
<b>CUTTABLE</b>	APPROX. 3-5 MIN.
<b>SOUND TRANSMISSION NOISE REDUCTION COEFFICIENT</b>	STC 35 NRC 70
<b>FULLY CURED</b>	APPROX. 1 HOUR
<b>FIRE RATING</b> ASTM E-84 Class 2	Flame Spread Index <75 Smoke Developed <450

## Approvals / Standards

Handi-Foam Sound Barrier Spray Foam conforms to the requirements of ASTM E-84 as a "Class 2" material:

Flame Spread less than 75  
Smoke Developed less than 450

Dispensing gun is patented under U.S. patent #6,345,776. Other foreign and domestic patents may be pending.

ODP (Ozone Depletion Potential): Contains non-ozone depleting, non-flammable HFC propellant.

## Theoretical Yield\*

<u>NON-REFILLABLE</u>	<u>BOARD FEET YIELD</u>	<u>Cubic Yield</u>
<b>II-250</b> <i>ITEM No. P10697</i>	250 bd ft	20.8 ft. <sup>3</sup> (588 liters)
<b>II-450</b> <i>ITEM No. P10714</i>	450 bd ft	37.5 ft. <sup>3</sup> (1061 liters)
<b>II-1350</b> <i>ITEM No. P10747</i>	1350 bd ft	112.5 ft. <sup>3</sup> (3184 liters)

\* Yields are based on theoretical calculations, for comparative purposes, and will vary depending on ambient conditions and particular application. Model number of the non-refillable kits generally reflect board feet volume of cured foam obtained.

**Always read all operating, application and safety instructions before using any products.** Use in conformance with all local, state and federal regulations and safety requirements. Failure to strictly adhere to any recommended procedures and reasonable safety precautions shall release Fomo Products, Inc. of all liability with respect to the materials or the use thereof. For additional information and location of your nearest distributor, call Fomo Products, Inc. 1 330.753.4585 or 1 800.321.5585.

**NOTE:** Physical properties shown are typical and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions and may vary upon use, temperature and ambient conditions. Right to change physical properties as a result of technical progress is reserved. This information supersedes all previously published data. Yields shown are based on theoretical calculations and will vary depending on ambient conditions and particular application. Read all product directions and safety information before use. Consult local building codes for specific requirements regarding the use of cellular plastics or urethane products in construction.

**WARNINGS:** Follow safety precautions and wear protective equipment as recommended. Consult Material Safety Data Sheet (MSDS) for specific information. Prolonged inhalation exposure may cause respiratory irritation/sensitization and/or reduce pulmonary function in susceptible individuals. Onset may be delayed. Pre-existing respiratory conditions may be aggravated. Use only with adequate ventilation or certified respiratory protection. NIOSH approved positive pressure supplied air respirator is recommended if exposure guidelines may be exceeded. Contents may be very sticky and irritating to skin and eyes, therefore wear protective eyewear, impervious gloves, and suitable work clothing when operating. If liquid chemical comes in contact with skin, first wipe thoroughly with dry cloth, then rinse affected area with water. Wash with soap and water afterwards, and apply hand lotion if desired. If liquid comes in contact with eyes, immediately flush with large volume of clean water for at least 15 minutes and get medical help at once. If liquid is swallowed, get immediate medical attention. Products manufactured or produced from these chemicals are organic and, therefore, combustible. Each user of any product should carefully determine whether there is a potential fire hazard associated with such product in a specific usage. **KEEP OUT OF REACH OF CHILDREN.**

**LIMITED WARRANTY:** The Manufacturer warrants only that the product shall meet its specifications: THIS WARRANTY IS IN LIEU OF ALL WRITTEN OR UNWRITTEN, EXPRESSED OR IMPLIED WARRANTIES AND THE MANUFACTURER EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. The buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the replacement of the material. Failure to strictly adhere to any recommended procedures shall release The Manufacturer of all liability with respect to the materials or the use thereof. User of this product must determine suitability for any particular purpose, including, but not limited to, structural requirements, performance specifications and application requirements prior to installation and after product is applied.



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