

# TECHNICAL DATA SHEET



## Polyurethane Straw Foam Sealant "40 Series"

**Handi-Foam® Polyurethane Foam Sealant** is a multiple purpose, one-component polyurethane foam designed within the international guidelines for protection of the ozone layer and with respect to the Montreal Protocol, 1987, and other environmental guidelines. "40 Series" refers to the use of HFC 134a propellant/blowing agent, which is non-flammable and non-ozone depleting. This product is designed for easy dispensing through the straw adapter included with each can.

### Application Areas

Apply Handi-Foam onto any clean surface to fill and seal around gaps, beneath base plates, mud sills, corner joints, t-joints, exterior cracks, around utility panels, pipes, penetrations, etc. It is specifically designed to be dispensed as a bead for filling cracks, crevices, and to fill smaller cavities on flat or irregular surfaces.

### Properties

The pre-pressurized, portable one-component foam system, applied in a bead form, expands and cures slowly over several hours to a semi-rigid, closed cell foam upon reaction with moisture, such as ambient humidity.

Handi-Foam One-Component Foam Sealant dries tack-free in approximately 5 minutes, is cuttable in one hour and fully cures within 24 hours depending on moisture and temperature conditions.

Handi-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 chemical temperature is between 65°F and 80°F (18°C to 27°C), but may be applied in cold or hot ambient conditions, as long as the working chemical temperature range is maintained. Cured foam is dimensionally stable, and known to be resistant to temperatures ranging between -200°F to +240°F (-129°C to +115°C).

Handi-Foam is water resistant and will not harm electrical wire insulations, Romex®, rubber, PVC, polyethylene or other plastic (i.e. PEX, CPVC). It is approved for use around wires, plumbing penetrations, etc., and contains no formaldehyde. When cured, polyurethane foam is permanent, chemically inert, non-reactive and stable for an indefinite period of time. Cured foam should be protected against UV rays (i.e. sunlight) by painting or staining to prevent long term discoloration or degradation.

Handi-Foam requires no outside mechanical or electrical power source and is disposable. Handi-Foam systems are available in various container sizes to meet specific job application requirements. When applied, the foam will seal, bond and protect against dust, pests and air infiltration.

### Preparation For Use

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

Shake cans well *before* using.

For best results in cavities larger than 3 inches in diameter, dampen substrate to supplement atmospheric humidity in affecting consistent cure throughout applied foam.

### Application / Use

After following instructions for set-up, cans are ready to use. The foam sealant flow can be metered by means of tilting the one piece straw adapter with the valve pointing downwards. By activating the adapter lever carefully, the extrusion rate can be regulated. Foam application can be interrupted when needed, as outlined in the instructions. Handi-Foam Sealant is especially useful for irregular voids and non linear cracks and crevices, as foam will expand slowly up to 200% during the curing process. Overfilling cavities can result in a prolonged curing process and insufficient air or substrate moisture during cure may cause delayed expansion.

Remove fresh foam over spray with Handi-Cleaner® (P10083) or solvents such as acetone. Cured foam can only be removed mechanically.

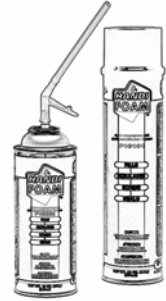
**Important Note:** Use only in well ventilated areas. Wear impervious gloves, eye protection and protective clothing when using. Read all instructions and safety information (MSDS) prior to use of any product. This product contains no formaldehyde. Cured foam is non-toxic. **KEEP OUT OF REACH OF CHILDREN.**

### Special Handling

Contents are under pressure. Do not puncture or incinerate. Do not place in hot water or near radiators, stoves or other sources of heat.

### Product Storage

Store in cool, dry area. Ship and store with valves upright at all times. 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.



**Fomo Products, Inc.**  
A Member of the FLM Group of Companies  
management system registered to ISO 9001:2000



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## Technical Data

	(METRIC SHOWN IN PARENTHESES)
<b>CORE DENSITY-- NOMINAL</b>	1.6 lbs / ft <sup>3</sup> (26 kg/m <sup>3</sup> )
<b>R-VALUE</b>	4-5 per inch, (.03 W/mK) typically
<b>RSI (METRIC R-VALUE)</b>	(0.7-0.8/inch, 0.005-0.006/mm)
<b>AIR BARRIER PROPERTIES</b> ASTM E-283 @ 6.24 psf (300 Pa) @ 1.57 psf (75 Pa), extrapolated	<0.01 cfm/ft <sup>2</sup> (0.05 L/s/m <sup>2</sup> ) <0.0025 cfm/ft <sup>2</sup> (0.0125 L/s/m <sup>2</sup> )
<b>TACK-FREE TIME</b> 70°F (21°C), 40% RH	Approx. 5 min.
<b>CURE TIME</b>	12 - 24 hours
<b>CUTTABLE</b> (1" BEAD AT ROOM CONDITIONS)	< 1 hour

## Approvals / Standards

Handi-Foam "40 series" Straw Foam is approved by the following Classifications, Codes and Standards:

UL Classified - File # R13919 Caulking and Sealants  
ASTM E-84 (8.3%)  
Flame Spread 5  
Smoke Developed 10

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

VOC Content: Contains no VOC's.

## Theoretical Yield\*

Product	Bead Diameter			Volume
	1/4" (6.3 mm)	3/8" (9.5 mm)	1/2" (12.7 mm)	
<b>12 oz.</b> (340 g) P40002	1379 ft. (420 m)	613 ft. (187 m)	345 ft. (105 m)	0.47 ft <sup>3</sup> (13 liters)
<b>24 oz.</b> (680 g) P40101	2750 ft. (838m)	1222 ft. (372m)	687 ft. (209m)	0.94 ft <sup>3</sup> (27 liters)

\*Yields are based on theoretical calculations for comparison purposes, and will vary depending on ambient conditions, actual in-place density and particular application.

**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 the manufacture of all liability with respect to the materials or the use thereof.

**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. This product is organic and therefore may constitute a fire hazard if improperly installed. 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 reduced 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 or a negative pressure half mask with organic vapor cartridge and dust/mist prefilter 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 clothes 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 may present a fire hazard if improperly used. 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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