

# **TECHNICAL DATA SHEET**

## HANDIFOAM® STRAW FOAM SEALANT

#### LOW PRESSURE POLYURETHANE FOAM SEALANT INFORMATION



Description	Low pressure, one-component, polyurethane foam sealant
OCF	One Component Foam
Applications	Used to fill and seal around gaps and penetrations in the building envelope to stop air infiltration. Application areas: cracks, crevices, beneath base plates, mud sills, corner joints, exterior cracks, around utility panels, pipes and duct penetrations, etc.
Preparation for use	Substrate must be clean, dry, free of loose particles, and free of dust, grease and mold release agents.
Use	Optimal product temperature is 65-80°F (18-27°C). Attach the straw, shake well, invert the container, and begin dispensing. By activating the adapter lever carefully, the extrusion rate can be regulated.
PPE	Recommend using only in a well-ventilated area. Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Read all instructions and safety information prior to use. Consult the product's SDS (available at www.HandiFoam.com).
Note	FOR PROFESSIONAL USE ONLY. Always check the local building code before use. Cured low pressure polyurethane foam is non-toxic and inert.
Product Storage	Store upright in a dry area. Do not expose the product to open flame or temperatures above 122°F (50°C). Excessive heat can cause premature aging of components resulting in a shorter shelf-life.
Temperature	For best results, chemical temperature must be between 65-80 $^{\circ}$ F (18-27 $^{\circ}$ C). Cured foam is resistant to heat and cold, -200 $^{\circ}$ F to 240 $^{\circ}$ F (-129 $^{\circ}$ C to 116 $^{\circ}$ C).
Disposal	Refer to SDS (Section 13) for instructions. Do not incinerate containers. Relieve containers of any remaining pressure and foam before discarding. Always wear PPE during the disposal process and make sure discarded foam is fully cured.
Shelf-life	18 months (expiration date located on the bottom of the container)
Compatibility	Cured low pressure polyurethane foam is chemically inert and non-reactive in approved applications, and will not harm electrical wire insulations, Romex <sup>®</sup> , rubber, PVC, polyethylene (i.e. PEX) or other plastics. The product is not resistant to UV rays, if left exposed the product should be coated or painted.

TECHNICAL DATA	STANDARD	RESULTS
Density	ASTM D1622	1.10 lbs/ft³ (17.6 kg/m³)
K-factor	ASTM C518	0.213 BTU·inch/ft²·h·°F
R-Value	ASTM C518	4.70 per inch
Air Barrier Properties		
@1.57 psf (75 Pa)	ASTM E2178	<0.00028 cfm/ft2 (<0.0014 L/s/m2)
Compressive Strength  Parallel to rise	ASTM D1621	8.17 psi (56.2 kPa)
<b>Tensile Strength</b> Parallel to rise	ASTM D1623	12 psi (83 kPa)
Dimensional Stability	ASTM D2126	+/- 5%
Tack-Free	Tack-Free	Approx. 5 minutes
Closed-Cell Content	ASTM D6226	70%
Cuttable		1 hour

#### **TECHNICAL DATA** (continued)

<b>Fire Rating-</b> Caulking & Sealant Tested 3 beads @ 3/4" Thickness on Inorganic Reinforced Cement Board	CAN/ULC S102	Flame Spread Index 25 Smoke Developed 50
Fire Rating- Caulking & Sealant Tested 3 beads @ 3/4" Thickness on Inorganic Reinforced Cement Board	ASTM E84/UL 723	Flame Spread Index 25 Smoke Developed 50
Fungi Resistance	ASTM G21	No Growth

#### APPROVALS/STANDARDS/CLASSIFICATIONS

<b>ASTM E84/UL 723</b>	UL Classified File #R13919		
CAN/ULC S102	ULC Classified File #R13919		
ССМС	CCMC #13626-L		
NFPA 30B	Level 2 Aerosol		
VOC Content (calculated)	165 g/L or 16%		
ULe GREENGUARD	Gold Certification		
BABAA, BAA & TAA	HandiFoam® products are proudly manufactured in compliance with the Build America, Buy America Act (BABAA), Buy American Act (BAA), and Trade Agreement Act (TAA) to deliver trusted, code-compliant performance.		



#### **TEMPERATURE**

Product Storage	<122°F (50°C)
Application (substrate)	0-100°F (-18-38°C)
Chemical	65-80°F (18-27°C)
<b>Cured Foam</b>	<sup>-</sup> 200°F to <sup>+</sup> 240°F ( <sup>-</sup> 129°C to <sup>+</sup> 116°C)

### YIELD<sup>1</sup> Linear Feet (Meters)

	1/4" (6.3 mm)	3/8" (9.5mm)	½" (12.7mm)	Volume	
12oz (340g) P30002	1996 ft (608 m)	887 ft (270 m)	499 ft (152 m)	0.68 ft <sup>3</sup> (19 L)	
20oz (567g) P30101	3317 ft (1011 m)	1474 ft (449 m)	829 ft (253 m)	1.13 ft <sup>3</sup> (31 L)	
24oz (680g) P30107	3992 ft (1217 m)	1957 ft (596 m)	998 ft (304 m)	1.36 ft <sup>3</sup> (39 L)	
29oz (820g) P30152	4814 ft (1467 m)	2139 ft (652 m)	1203 ft (367 m)	1.64 ft <sup>3</sup> (46 L)	

<sup>&</sup>lt;sup>1</sup> Yield is based on density. We state our core density when describing the foam. We use theoretical calculations for comparative purposes so the results will vary depending on ambient conditions and use in particular applications.

**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. Yields shown are optimum and will vary slightly depending on ambient conditions and application. This information supersedes all previously published data. The customer is responsible for deciding whether products and associated TDS information are appropriate for customer's use.

#### WARNING

ICP low pressure one-component polyurethane foam sealants and adhesives (OCF), low pressure spray polyurethane foams and foam adhesives (SPF), and low pressure pour-in-place polyurethane foams (PIP) are composed of diisocyanate, hydrofluorocarbon, hydrocarbon, hydrofluoroolefin or hydrochlorofluoroolefin blowing agent, and a polyol blend. The urethane foam produced from these ingredients will support combustion and may present a fire hazard if exposed to a fire or excessive heat about 240°F (116°C). Read all instructions, ICP Product Stewardship Guidelines and SDS (Section 8) prior to use of any product. ICP polyurethane products are for professional use only.

Before using any OCF, SPF or PIP product, read the SDS and instructions carefully before use (<a href="www.handifoam.com">www.handifoam.com</a>). OCF Products: wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Recommend using in a well-ventilated area. Avoid breathing vapors. SPF/PIP Products: wear protective glasses with side shields or goggles unless using a full-face respirator, nitrile gloves, and clothing that protects against dermal exposure. Recommend dispensing product in a well-ventilated area and with certified respiratory protection or a powered air purifying respirator (PAPR); however, well ventilated exterior applications may not need respiratory protection. It is the responsibility of the employer to complete a PPE evaluation and/or exposure assessment to determine if respiratory protection is required. Personal Protective Equipment can be purchased through ICP by ordering the Polyset® Contractor Safety Kit (F65251). The Contractor Safety Kit includes nitrile gloves, contractor safety glasses, and a size Medium NIOSH-approved negative pressure half mask respirator.

Refer to each product's TDS for specifications, testing results, and other attributes. The customer is ultimately responsible for deciding whether products and associated TDS information are appropriate for customer's use. For professional use only. Building practices unrelated to materials can lead to potential mold issues. Material suppliers cannot provide assurance that mold will not develop in any specific system. Product uses a non-flammable compressed gas. Keep away from heat. Smoking and open flames, including hot work, should be prohibited in the vicinity of a foaming operation. Avoid contact with skin and eyes. May cause sensitization by inhalation and/or direct skin contact. Persons previously sensitized to Isocyanates may develop a cross-sensitization reaction to other isocyanates. Avoid prolonged or repeated breathing of vapor. 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 ICP of all liability with respect to the materials or the use thereof. For additional information and location of your nearest distributor, call ICP 330.753.4585

LIMITED WARRANTY and LIMITATION OF DAMAGES: ICP warrants only that the product shall meet ICP specifications for the product when shipped by ICP. NO OTHER EXPRESSED OR IMPLIED WARRANTIES APPLY AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OUTSIDE THE U.S. AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. Buyer and users assume all risks of use, handling and storage of the product. Failure to strictly adhere to any recommended procedures shall release ICP from all liability. The user of the product is responsible to determine suitability of the product for the particular use. The exclusive remedy as to any breach of warranty, negligence or other claim is limited to the replacement of the product. Liability for any indirect, incidental or consequential damage or loss is specifically excluded.



