

TECHNICAL DATA SHEET

HANDIFOAM CHANNEL FILL DISPOSABLE SYSTEMS

LOW PRESSURE POLYURETHANE FOAM INFORMATION

Description	Low pressure, medium density, two-component pour-in-place (PIP) polyurethane foam system		
PIP	Pour-in-place designation refers to slow tack-free time, more pourable properties		
Applications	Designed to fill cavities, hollow tubing, framing, channels, or casings		
Preparation for use	Cavity must have minimal obstructions and if used in a residential wall cavity have no existing insulation. Before using, determine the structural stability of the cavity walls, certain applications may require clamping or bracing to provide uniform support against foaming pressure.		
Use	Warm/Cool Cylinders to 75-85°F (24-29°C). Follow instructions for set-up found in the operating instructions.		
PPE			
	Recommend using in a well-ventilated area with certified respiratory protection or a powered air purifying respirator (PAPR). Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Read all instructions and SDS prior to use of any product.		
Note	FOR PROFESSIONAL USE ONLY. Always check the local building code before use. Cured foam is inert and non-toxic.		
Product Storage	Store in a dry area. Do not expose the kits or cylinders to open flame or temperatures above 90°F (32°C). Excessive heat can cause premature aging of components resulting in a shorter shelf-life.		
Temperature	For best results, chemical temperature must be between 75-85°F (24-29°C). Warm/Cool cylinders for a minimum of 1 day prior to use. Cured foam is resistant to heat and cold, -200°F to 240°F (-129°C to 116°C).		
Disposal	Refer to SDS (Section 13) for instructions. Always dispose of empty cylinders in accordance to applicable local/regional/national/international regulations.		
Shelf-life	12 months		
Compatibility	Cured low pressure polyurethane foam is chemically inert and non-reactive in approved applications, and will not harm electrical wire insulations, Romex [®] , 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.		

FECHNICAL DATA	STANDARD	RESULTS	
Density Core	ASTM D1622	2.5 lbs/ft³ (40.1 kg/m³)	
K-factor	ASTM C518	0.1665 BTU·inch/ft2·h·∘F	
R-Value Aged 90 days 140°F (60°C)	ASTM C518	6.0 @ 1-inch thickness	
Compressive Strength	ASTM D1621	36 lbf/in² (248.2 kPa)	
Dimensional Stability	ASTM D2126	+/- 5%	
Gel Time		50-90 seconds	
Tack-Free/Expansion Time	Tack-Free/Expansion Time	65-125 seconds	
Closed-Cell Content	ASTM D2856	>90%	
Cuttable		60-90 minutes	
Perm Rating-Method A 1 Inch Thickness	ASTM E96	1.11	
VOC Content	EPA Method 24	VOC (Minus exempted Compounds) — 6 g/l	
Fire Rating- Tested at 6" thickness With 3/16" steel tubes/channels.	ASTM E84	Flame Spread Index 0 Smoke Developed 45	
Fungi Resistance	ASTM G31	No Growth	

APPROVALS/STANDARDS/CLASSIFICATIONS

ASTM E84	Testing is specific for application. Testing was conducted at foam thickness of 6 inches and surrounding metal channel was 3/16" thick.
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

Chemical Storage Temperature	Optimum 75-85°F (24-29°C) but not <60°F (16°C) or >90°F (32°C)
Outside Application Temperature	40-100°F (4-38°C)
Process Core Chemical Temperature	75-85°F (24-29°C)
Surface Temperature (Substrate)	40-100°F (4-38°C)
Cured Foam	-200°F to +240°F (-129°C to +116°C)

YIELD1

	Weight¹ (including packaging)	Density 2.5	Density 3.0	Density 3.5
2-12 P12044	41 lbs	12 ft ³ (.34 m ³)	10 ft ³ (.28 m ³)	8.5 ft ³ (.24 m ³)
2-35 P12046	115.7 lbs	35 ft ³ (.99 m ³)	29 ft ³ (.82 m ³)	25 ft ³ (.71 m ³)

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 (www.handifoam.com). 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 Building Solutions Group 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 Building Solutions Group of all liability with respect to the materials or the use thereof. For additional information and location of your nearest distributor, call ICP Building Solutions Group 330.753.4585.

LIMITED WARRANTY and LIMITATION OF DAMAGES: ICP Building Solutions Group warrants only that the product shall meet ICP Building Solutions Group's specifications for the product when shipped by ICP Building Solutions Group. 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 Building Solutions Group 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.

