


LOW PRESSURE POLYURETHANE FOAM INFORMATION

Description	Low pressure, one-component polyurethane roofing adhesive
Applications	Specifically designed to adhere a variety of concrete and clay roof tiles to various compatible substrates in both new and re-roofing applications.
Preparation for use	Substrate must be clean, dry, firm, free of loose particles or sharp edges that may interfere with the placement and complete contact of material being installed. Protect surfaces not to be foamed. Read SDS, Operating Instructions, and Product Stewardship Guidelines. For additional information go to www.icpadhesives.com
Use	Warm/Cool chemical to 65-95°F (18-35°C). Follow instructions for set-up found in the operating instructions. SPF Roofing Adhesives are combustible and will burn if exposed to open flame. High-intensity heat sources such as welding or cutting torches must not be used in contact with or in close proximity to Polyset RTA-1 or any polyurethane foam.
PPE	 <p>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.icpadhesives.com).</p>
Note	FOR PROFESSIONAL OR INDUSTRIAL USE ONLY. Always check the local building code before use.
Temperature	Please see chart located on page 2.
Product Storage	Store in a dry area. Chemical storage temperature is 45-95°F (7-35°C). Excessive heat can cause premature aging of components resulting in a shorter shelf-life. Do not allow material to freeze.
Disposal	Refer to SDS (Section 13) for instructions. Always dispose of empty cylinders in accordance with applicable local/regional/national/international regulations.
Shelf-life	12 months
Compatibility	Will adhere to any granulated mineral surfaced roll roofing meeting ASTM D6380. Will also adhere to modified bitumen and select polymer-based products. These types of products are usually more critical when determining uplift resistance values, due to the effect of the polymer modifiers contributing to the softening of the top surface when exposed to elevated temperatures. Please verify compatibility of roof covering product with product manufacturer, ICP Adhesives Approved Underlayment List or applicable product approval in effect with the authority having jurisdiction for the project location.
Limitations	Not recommended for products surfaced with polypropylene or silicone-based surfaces or tile surfaces that contain silicone or other surface/dipping coating products used for the prevention of mold and mildew growth. Not recommended for application when ambient or substrate temperatures are below 50°F (10°C). Should be applied over an underlayment/cap sheet installed in compliance with the underlayment fastening tables published in our evaluation/compliance reports, the FRSA/TRI Concrete and Clay Roof Tile Installation Manual, or Roofing Application Standard (RAS) 120 depending on authority having jurisdiction for your location shall be placed in accordance with our "Paddy Placement Details" as mentioned in our installation instructions.

TECHNICAL DATA	STANDARD	RESULTS
Density	ASTM D1622	1.95 lbs/ft ³ (31.23 kg/m ³)
Compressive Strength	ASTM D1621	7.8 psi (103.4 kPa)
Tensile Strength	ASTM D1623	15 psi Parallel to rise
Water Absorption	ASTM D2842	4.6 lbs/ft ² (73.7 kg/m ²)
Moisture Vapor Transmission	ASTM E96	1.94 Perm-in
Dimensional Stability	ASTM D2126	At 70°C (158°F) +0.89%
Closed Cell Content	ASTM D2856	54.1%

PROPERTIES

Rise Time	2-16 seconds (Dependent on ambient temperature)
Mixing Nozzle Working Time	30-60 seconds
Gel Time	15-140 seconds
Set-up Time (Tack Free)	1-5 minutes
Cure Time	24 hours
VOC Compliant	Contains 0% VOC Minus Exempted Materials

¹Times may be affected by temperature and weather conditions.

APPROVALS/STANDARDS/CLASSIFICATIONS

Miami Dade NOA - 16-0315.03
Florida Product Approval - FBC Approved - FL6276-R5



TEMPERATURE GUIDELINES

Chemical Storage Temperature	45-95°F (7-35°C)
Outside Application Temperature/Ambient	>50°F (>10°C)
Process Core Chemical Temperature	65-95°F (18-35°C)

YIELD¹

Item	Weight (including packaging)	Coverage (medium 30-gram paddy)
62480749308	2.25 lbs / can	30 tiles (per can)
62480880202	30 lbs	722 tiles

¹Based on low profile tiles.

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 ICP Adhesives & Sealants, Inc. of all liability with respect to the materials or the use thereof. For additional information and location of your nearest distributor, call ICP Adhesives & Sealants 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. The Customer is responsible for deciding whether products and associated TDS information are appropriate for customer's use.

ICP low pressure one-component polyurethane foam sealants and adhesives (OCF), low pressure spray polyurethane foams (SPF), and low pressure pour-in-place polyurethane foams (PIP) are composed of a diisocyanate, hydrofluorocarbon or hydrocarbon blowing agent, and polyol. For polyurethane foam sealants/adhesives: 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. Read the SDS and instructions carefully before use (www.icpadhesives.com). For spray polyurethane foams and pour-in-place polyurethane foams: wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure. Use only in a well-ventilated area and with certified respiratory protection or a powered air purifying respirator (PAPR). Additional information on ventilation can be found in the Product Stewardship Guide (www.icpadhesives.com). Read the SDS (www.icpadhesives.com) and instructions carefully before use. 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). 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. Refer to the products' SDS, ICP Adhesives & Sealants' Product Stewardship Guidelines, and operating instructions for guidance on the safe and proper application of the product (www.icpadhesives.com). 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.

WARNINGS: Follow safety precautions and wear protective equipment as recommended. 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. We recommend that the product is used in a well-ventilated area and with 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 safety glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure 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. Do not induce vomiting. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration. 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 and LIMITATION OF DAMAGES: ICP Adhesives & Sealants, Inc. warrants only that the product shall meet ICP Adhesives & Sealants, Inc. specifications for the product when shipped by ICP Adhesives & Sealants, Inc. 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 Adhesives & Sealants, Inc. 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.