

## DESCRIPTION

**SPI ENVELO-SEAL™ 2.0 - 30.0 lb density are two-component, rigid, closed cell polyurethane systems for sprayed-in-place applications. These foams are low viscosity and is specifically designed for spray operations to produce a rigid foam for tooling, molds, pipelines, roofs, foundations, fish holds, and other commercial/industrial surfaces. These products have excellent processing characteristics. Good dimensional stability and adhesion to substrates.**

## FEATURES

- No dangerous heavy metal catalysts.
- No ozone depleting products (ODP).
- No bromine or other halogenated components.
- No formaldehyde components.
- Mildew, bacteria, and fungus resistant.
- Contains renewable resource components.
- Considered safe for burial and landfill disposal.
- Compliant with USDA/FDA requirements for incidental food contact.

## REACTIVITY PROFILE @ 145°F (62°C)

<b>Cream Time</b>	1.5 - 2.0 sec.
<b>Rise Time</b>	3.0 - 4.0 sec.
<b>Tack Free Time</b>	3.0 - 5.0 sec.
<b>Cure Time @ 77°F (25°C)</b>	4 hours

The samples for tests were sprayed with Gusmer 20/35 @ 1200 psi dynamic pressure primary and hose heat @ 145°F (62°C). Gap Pro gun with 00 chamber.

## DID YOU KNOW??

**SPI manufactures a complete portfolio of rigid spray and pour polyurethane foam components in densities ranging from .5 to 45 lbs per cu. ft.**

### INCLUDING

- » CLASS 1 FLAME AND SMOKE
- » IGNITION BARRIER RATED
- » ROOFING & STRUCTURAL
- » CONCRETE LIFTING/SLAB JACKING FOAMS
- » COAST GUARD COMPLIANT FLOTATION
- » TOOLING, MOLDING, and TAXIDERMY
- » FAST SHIPPING AVAILABLE FROM OUR MANUFACTURING FACILITIES IN ANCHORAGE, CHICAGO, DALLAS & SEATTLE



All of the above foams and **SPI ENVELO-SEAL** can also be sprayed with the SPI portable low pressure LPG proportioner.

<< Click for video

## TYPICAL PHYSICAL PROPERTIES

Properties for 3.0 lb. density	
<b>R-Value ASTM C518</b>	+ 4.00
<b>Core Density (nominal pcf) ASTM D1622</b>	2.9 - 3.1 frc
<b>Compressive Strength</b>	35 - 40 psi
<b>1" In Place Density</b>	3.5 - 4.0 pcf
<b>1" In Place Compressive Strength</b>	45 - 50 psi

## PARAMETERS & LIMITATIONS

SPI ENVELO-SEAL™ is for professional use only.

SPI ENVELO-SEAL™ "A" and "B" components have a 12 month shelf life when stored in unopened containers at 60 - 90°F (15 - 32°C).

SPI ENVELO-SEAL™ must be stored at temperatures between 60 - 90°F (15° - 32°C).

Minimum material/container temperature for spray application is 70°F (21°C).

This product has not been tested for flame spread or smoke development. Not to be installed within two inches (2") of heat emitting devices, where temperature is in excess of two hundred degrees 200°F (93°C).

Pre-heater temperature should be a minimum of 140° - 155°F (60° - 68°C).

Hose temperature should be 140° - 155°F (60° - 68°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 125°F (52°C).

Substrate temperature should be a minimum of 50°F (10°C).



## PACKAGING

This product sold in standard 100 gallon drum and 500 gallon tote sets. Available in other container sizes, contact sales representative for further information. Non-standard containers may require a longer lead time.

## PER PASS LIMITATIONS

For optimal physical properties, foam made with ENVELO-SEAL™ 2.0 - 30.0, pass thickness should be limited to 6" per pass. If subsequent passes are needed, applicators should wait 10 minutes or longer, between passes to allow reaction heat to dissipate. The exotherm reaction can cause temporary substrate thermal expansion. If the substrate then contracts when the reaction heat dissipates, substrate deformation can occur.

## PROCESSING EQUIPMENT

### MACHINES:

<b>GRACO</b> (Gusmer, Glass-craft)	<ul style="list-style-type: none"><li>Reactor HXP3</li><li>Reactor HXP2</li><li>Reactor EXP2</li><li>H25</li></ul>	<ul style="list-style-type: none"><li>20/35</li><li>20/35 Pro</li><li>H3500</li><li>HV-20/35</li></ul>
<b>PMC</b>	<ul style="list-style-type: none"><li>*PH-25</li><li>*PH-40</li><li>*GH-25</li><li>*GH-40</li></ul>	<ul style="list-style-type: none"><li>PHX-2</li><li>PHX-25</li><li>PHX-40</li></ul>
<b>SPRAY FOAM EQUIP &amp; MFG</b>	<ul style="list-style-type: none"><li>*5/12K</li><li>6/12K</li></ul>	
*2,000 psi machines		
<b>GUNS:</b>		
<b>GRACO</b> (Gusmer, Glass-craft)	<ul style="list-style-type: none"><li>Fusion MP</li><li>GAP Pro</li><li>GX7-DI</li><li>GX-8 Pro</li></ul>	<ul style="list-style-type: none"><li>P2</li><li>P2 Elite</li><li>P2 Elite "C"</li></ul>
<b>SPRAY FOAM EQUIP &amp; MFG</b>	<ul style="list-style-type: none"><li>Boss</li></ul>	

- Standard 1:1 ratio, heated, plural-component equipment developing a minimum of 1100 psi (7.6 mpa) dynamic pressure.

## GENERAL SAFETY, TOXICITY, & HEALTH

Safety Data Sheets are available for this coating material. Any individual who may come in contact with these products should read and understand the S.D.S. **CHEMTREC EMERGENCY NUMBER 1-800-424-9300 INT'L 1703-527-3887.**

**WARNING:** Contact with skin or inhalation of vapors may cause an allergic reaction. Causes eye damage/irritation. Avoid eye contact with liquid or spray mist. Hypersensitive persons should wear protective clothes, gloves and use protective cream on face, hands and other exposed areas.

**EYE PROTECTION:** Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. Causes serious eye irritation. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **IF eye irritation persists:** Get medical advice/attention.

**SKIN PROTECTION:** Personal protective equipment for the body should be selected based on the task being performed; the risks involved, and should be approved by an industrial hygiene specialist before handling this product. Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing. Causes skin irritation and may cause allergic skin reaction. **IF ON SKIN:** Wash with plenty of soap and water. **IF SKIN irritation or rash occurs:** Get medical advice/attention. Wash contaminated clothing before reuse.

**RESPIRATORY PROTECTION:** Respiratory protection is **MANDATORY!** The vapors must not exceed the TLV (0.02 parts per million). Harmful if inhaled and may cause allergy or asthma symptoms. Use a respirator approved for isocyanates and organic vapors. If you are not sure, or not able to monitor levels, or if you are spraying in an enclosed/indoor area, use MSHA/NIOSH approved supplied air respirator. Consider the application and environmental concentrations when deciding if additional protective measures are necessary. May cause allergy or asthma symptoms or breathing difficulties if inhaled. **IF INHALED:** If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. **IF experiencing respiratory symptoms:** call a **POISON CENTER** or doctor/physician.

**INGESTION:** Do not take internally. It is believed that ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue. Harmful if swallowed. **IF SWALLOWED:** Rinse mouth. Do not induce vomiting. Call a **POISON CENTER** or a doctor/physician **IF you feel unwell.**

**FIRE HAZARD:** Fires involving "A" or "B" components may be extinguished with dry extinguishing media, carbon dioxide, and foam. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. If in a fire or heated, a pressure increase will occur and the container may rupture. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet, and protective clothing should be worn.

## WARRANTY & DISCLAIMER

Specialty Products, Inc. has no role in the manufacture of the finished polymer other than to supply its two components. It is vital that the person applying this product understands the product, and is fully trained and certified in the use of plural-component equipment. Specialty Products, Inc., an Alaska corporation, warrants only that the two components of this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product are dependent upon the proper mixture and application of the components by the applicator. There are no warranties that extend beyond the description on the face of this instrument. Failure to apply the product within the parameters stated on this document shall void the warranty. SPECIALTY PRODUCTS, INC. MAKES NO WARRANTY OF MERCHANTABILITY OF THE PRODUCT OR OF FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE. Specialty Products, Inc. makes no warranty as to the quality of any product modified, supplemented, tinted, or altered in any way after it leaves the manufacturing plant. Specialty Products, Inc. does not warrant that this product is suitable for use as a liner for potable water containers. Use of this product in a potable water container could be hazardous to health if it is improperly processed or applied. The liability of Specialty Products, Inc. for any nonconformity of the product to its technical specifications shall be limited to replacement of the product. The sole exclusive remedy of buyer, which is to have Specialty Products, Inc. replace any nonconforming product at no cost to buyer, is conditioned upon buyer notifying Specialty Products, Inc. or its distributor in writing of such defect within thirty days of the discovery of such defect. Specialty Products, Inc. shall not be liable for any direct, incidental, or consequential damages resulting from any breach of warranty. The data presented herein is intended for professional applicators or those persons who purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer. The aforementioned data on this product is to be used as a guide and is subject to change without notice. The information herein is believed to be reliable, but unknown risks may be present. Specialty Products, Inc. makes no warranties, expressed or implied, including patent warranties or warranties of merchantability or fitness of use, with respect to products or information set forth herein. Nothing contained herein shall constitute permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent. Accordingly, the buyer assumes all risks whatsoever as to the use of these materials and buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the purchase price of the materials. Failure to adhere to any recommended procedures shall relieve Specialty Products, Inc. of all liability with respect to the materials and the use thereof.



**SPI The Single Source Solution Since 1974**  
**Serving the Plural-Component Industry**

**Product & Equipment Technical Assistance**  
**24 hours - 7 days a week 800 627 0773**



**SPI Website**

**CONTACT US**

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