

DESCRIPTION

SPI ENVELO-SEAL™ 1.5 - 30.0 lb density is a two- component, rigid, closed cell polyurethane system for sprayed-in-place applications. This foam is low viscosity and is specifically designed for spray operations to produce a rigid goam for tooling, molds, pipelines, roofs, foundations, fish holds, and other commercial/industrial surfaces. This product has excellent processing characteristics. Good dimensional stability and adhesion to substrate.

FEATURES

- Liquid components can be shipped non-hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- 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.
- Consider safe for burial and landfill disposal.
- Compliant with USDA/FDA requirements for incidental food contact.

CONTAINER SIZES

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.

TYPICAL PHYSICAL PROPERTIES

Properties for 3.5 lb. density	
Color:	"A" Amber "B" Light Yellow
Viscosity @ 77°F (25°C)	"A" 195 ± 50 cps. "B" 700 ± 50 cps.
Mixing Ratio (volume)	1:1
Core Density	3.5
R Value	5.00 initial
Shelf Life: Stored in original unopened containers between 60° - 90°F (15° - 32°C)	"A" side 1 year "B" side 6 months
Density:	2.5 lbs./cu. ft.

REACTIVITY PROFILE @ 77°F (25°C)

Cream Time	1.5 - 2.0 sec.
Rise Time	3.0 - 3.5 sec.
Tack Free Time	3.5 - 4.0 sec.
Cure Time	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.

PRODUCT LIMITATIONS

This product is for professional use only.

This product must be stored at temperatures between 60 - 90°F (15° - 32°C)

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

Apply product when surface and air temperatures are above 40°F (5°C) and the surface temperature is at least 5°F (3°C) above dew point and rising.

Open drums with caution to prevent loss of blowing agent and potential personal chemical contamination.

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 125° - 150°F (52° - 60°C).

Hose temperature should be 145° - 155°F (60° - 65°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 135°F (57°C).

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

PER PASS LIMITATIONS

For optimal physical properties, foam made with ENVELO-SEAL™ 2.0 - 30.0, pass thickness should be limited to 1.5" 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

Standard 1:1 ratio, heated, plural-component equipment developing a minimum of 1200 psi (8 mpa) dynamic pressure with heating capabilities to 150°F (66°C) will adequately spray this product. These include Graco 20/35, 20/35 Pro, H-2000, H-3500, HV-20/35, Reactor A-20, E-20, E-30, E-XP1, E-XP2, H-25, H-40, H-XP2, H-XP3, SPI 18/18 and SPI Gusmer 25/25. Gun models include Fusion AP, MP, Gap Pro, D Gun, Gusmer D7, GX-7 DI, GX-7-400, GX-8 Pro, SPI D-7, Fusion CS, and Model D gun.

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**

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

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