

**DESCRIPTION**

**ECO-RISE™ (2.0 lb - 6.0 lb density)** is a two component, closed cell, rigid structural polyurethane foam system. With millions of pounds applied in geotechnical applications over decades, SPI foams can be specifically engineered for your concrete slab lifting, road lifting and/or soil stabilization projects. This product has excellent processing characteristics, dimensional stability, and adhesion to substrate. ECO-RISE™ is formulated using only virgin Polyether polyols enhancing its hydrolytic stability characteristics.

**RECOMMENDED USES**

- Concrete slab, road, and runway lifting
- Stabilize unconsolidated soil
- Cavity/void fill
- Concrete slab stabilization

**OTHER USES**

- Geo-Technical applications
- Ditch damming
- Trench breakers
- Mine and tunnel decommissioning
- Pipe, tank, and well decommissioning
- Pole setting in lieu of concrete

**FEATURES**

- Minimal heat generation during application allows for thick lifts. *Contact SPI Technical Support for recommendations.*
- No toxic 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.
- Zero VOC and solvent free.
- Typical return to service time is minutes not hours.

**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
- » DITCH BREAK 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 **ECO-RISE** can also be poured and sprayed with the SPI portable low pressure LPG proportioner.  
 << [Click for video](#)

**DENSITIES & REACTIVITIES AVAILABLE**

The choice is yours. Choose your density and choose your reactivity.

Densities Available lbs./cu. ft.	Free Rise Core (FRC) ASTM D1622/ D1622M-14	Typical In Place (Confined) *Density (estimated)	Compressive Strength ASTM D1621-00
<b>2.0 lb.</b>	1.9 - 2.2	2.2 - 4.0	27 psi @ 2.2
<b>2.5 lb.</b>	2.4 - 2.7	2.8 - 4.5	34 psi @ 2.8
<b>3.0 lb.</b>	2.9 - 3.2	3.2 - 5.5	38 psi @ 3.2
<b>4.0 lb.</b>	3.9 - 4.2	4.2 - 6.5	75 psi @ 4.2
<b>5.0 lb.</b>	4.9 - 5.2	5.2 - 8.0	102 psi @ 5.2
<b>6.0 lb.</b>	5.9 - 6.2	8.0 - 10.0	200 psi @ 8.0

Reactivities Available @ 150°F (66°C)(sec)	
CREAM (sec)	RISE (sec)
<b>1.0</b>	4.0
<b>1.5</b>	6.0
<b>2.0</b>	8
<b>6.0 - 7.0</b> <b>25.0 (@77°F)</b>	40 - 45 90 - 110
<b>8.0 - 9.0</b> <b>42.0 (@77°F)</b>	60 - 70 150 - 180

WHEN PLACING YOUR ORDER, PLEASE DENOTE THE REQUIRED DENSITY (**RED**) FOLLOWED BY THE REACTIVITY CREAM (**GREEN**).

Ordering Example: ECO-RISE™ **2.5** - lb. **2.0** sec.

Note: Other densities and reactivities available upon request.

\*In Place density and compressive strength is dependent on several variables including lift thickness, processing parameters and surface temperature.

The samples for above tests were sprayed with Graco H-25 @ 1100 psi dynamic pressure, primary and hose heat @ 150°F (66°C). Graco Fusion gun with AR 42/42 chamber.

## TYPICAL "A" & "B" LIQUID PROPERTIES

<b>Mixing ratio, % by volume</b>	"A" 50 "B" 50
<b>Weight per gallon (approx.)</b>	"A" 10.3 lbs. (4.67 kg) "B" 8.8 - 9.0 lbs. (4.0 - 4.08 kg)
<b>Viscosity @ 77°F (25°C)</b>	"A" 195 ± 50 cps "B" 500 - 800 ± 50 cps
<b>Color</b>	"A" Amber "B" Light Yellow
<b>Storage Temperature</b>	60° - 90°F (15° - 32°C)
<b>Shelf Life (unopened)</b>	*12 months

\*When continuously stored and maintained at above temperatures.

## CONTAINER SIZES

This product is sold in standard 100 gallon drum and 500 gallon tote sets. Material containers are translucent, allowing applicators to view fluid levels. Available in other container sizes, contact sales representative for further information. Non-standard containers may require a longer lead time.

## STORAGE & HANDLING

Maintain storage area for materials between 60 - 90°F at all times.

## LIMITATIONS

ECO-RISE™ is for professional use only. User must be proficient in the application of ECO-RISE™ and the use of the high pressure heated plural component equipment used to apply it.

Minimum material/container temperature for 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.

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 temperatures is in excess of two hundred degrees (200°F).

Maximum service temperature; constant 200°F (93°C), intermittent 250°F (121°C).

## PROCESSING EQUIPMENT

### MACHINES:

<b>GRACO (Gusmer, Glass-craft)</b>	<ul style="list-style-type: none"> <li>H-XP2</li> <li>Reactor2 H-XP2</li> <li>H-XP3</li> <li>Reactor2 H-XP3</li> <li>*H25</li> <li>*Reactor2 H-30</li> <li>*H-40</li> <li>*Reactor2 H-40</li> <li>*H-50</li> <li>*Reactor2 H-50</li> <li>20/35</li> <li>20/35 Pro</li> </ul>	<ul style="list-style-type: none"> <li>*E-XP1</li> <li>E-XP2</li> <li>Reactor2 E-XP2</li> <li>E-XP2i</li> <li>*E-30</li> <li>*E-30i</li> <li>*Reactor2 E-30</li> <li>*E-10hp</li> <li>A-XP1</li> <li>*A-25</li> <li>H3500</li> <li>HV 20/35</li> </ul>
<b>PMC</b>	<ul style="list-style-type: none"> <li>PAX-25</li> <li>*PMCA-20</li> <li>*PA-25</li> <li>*PH-2</li> <li>*PH-25</li> </ul>	<ul style="list-style-type: none"> <li>*PH-40</li> <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>*6/6K</li> </ul>	<ul style="list-style-type: none"> <li>6/12K</li> </ul>

\*2,000 psi machines

### GUNS:

<b>GRACO (Gusmer, Glass-craft)</b>	<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>GX7-400</li> <li>P2</li> <li>P2 Elite</li> <li>P2 Elite "C"</li> </ul>
<b>PMC</b>	<ul style="list-style-type: none"> <li>AP-2</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 (8.34 mpa) dynamic pressure with heating capabilities to 150°F (66°C) will adequately process ECO-RISE™.

- Primary heater temperature should be at 130-150°F (71-76°C).
- Hose temperature should be 130° - 150°F (54° - 66°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 110°F (43°C).

**CAUTION:** Extreme care must be taken when removing and reinstalling drum transfer pumps so as NOT to reverse the "A" and "B" components.

## 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 1-703-527-3887.**

**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.

**CONTAMINATION:** Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, CO<sub>2</sub> created pressure can develop. Do not attempt to use contaminated material.

**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.

**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 complying with applicable health and safety standards shall be worn when handling this product. Cover as much of the exposed skin area as possible with appropriate clothing. Refer to safety data sheet (SDS).

**RESPIRATORY PROTECTION:** Harmful if inhaled and may cause allergy or asthma symptoms. Ensure adequate ventilation. If the respirator is the sole means of protection, use a full-face supplied respirator. Use respirators and components tested and approved under appropriate government standards such as OSHA 29CFR 1910.134, NIOSH (US), or CEN (EU). Consider the application and environmental concentrations when deciding if additional protective measures are necessary.

**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.

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## **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. Use of this product in a potable water container could be hazardous to health. The liability of Specialty Products, Inc. for any nonconformity of the product to its technical specifications shall be limited to replacement of

## POLYUREA

SPI has led the polyurea coatings revolution for 25 years. With thousands of formulas developed, we provide our clients with the largest portfolio of polyurea coating options on the market.



## POLYURETHANE FOAM

For over 40 years we have offered the highest quality polyurethane foam to our valued customers. SPI has a complete line of spray and pour polyurethane foam systems, for applications such as spraying insulation, tooling, concrete slab raising, ditch break, or OEM parts.



## MARKETS SERVED

SPI product applications span almost every market - from the world's infrastructure of tunnels and bridges to primary and secondary containment for the oil and gas (energy) market. Many of SPI's products are designed to protect the environment, and extend service life of infrastructure, such as with wastewater or pipeline applications. Because we invent and manufacture our own products, we can work with you on just about any custom formulation.



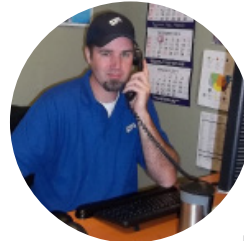
## EQUIPMENT

As a leading equipment distributor SPI stocks a complete line of GRACO® and PMC plural-component, high pressure, proportioners and parts. And, for nearly 2 decades, SPI has also been engineering and offering our own line of auxiliary equipment and proportioners.



## TRAINING

Over the past couple of decades SPI has conducted over 100 classes and trained more than 2,000 industry professionals. Training classes are taught by a NACE certified coatings inspector.



## CUSTOMER SERVICE & TECH SUPPORT

SPI proudly offers superior 24/7/365 technical support for your worldwide project needs, from Polyurea/SPF product application to operating/troubleshooting plural-component spray equipment. Each of our on call technicians offers 20 years individual experience.



SPI Website

### CONTACT US

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