



# EPL-1.5™

## SELF-LEVELING POLYUREA ELASTOMER

Revised 10.15.13

### DESCRIPTION

EPL-1.5™ is a high strength, self leveling semi-rigid polyurea elastomer. Due to its high tensile strength, tear strength and tensile modulus, EPL-1.5™ is very resistant to deformation while retaining over 400% elongation. This optimal balance of physical properties makes EPL-1.5™ an ideal choice of polymers for filling or repairing construction joints, random cracks, joint faces, and spalls.

### FEATURES

- Relative low cost.
- Fast-set 1:1 ratio, return to service in less than one hour.
- 100% solids. Zero VOCs.
- Contains proprietary additives for superior adhesion to silicacious and ferrous substrates.
- Suitable for heavy vehicle traffic.
- Impact, abrasion, gouge, and tear resistant.
- Resistant to mild acids and bases.
- Hydrolytically stable (suitable for immersion).
- Compliant with USDA/FDA requirements for incidental food contact.
- Environmentally friendly, No VOCs, or metal catalysts, and mildew/fungus resistant.

### RECOMMENDED USES

- To fill or repair control joints, random cracks, and shallow spalls on horizontal concrete surfaces including
- Warehouse floors
- Water and waste water treatment
- Food processing facilities
- Freezers
- Bridge decks
- Parking structures

EPL-1.5™ can be spray applied with or without broadcast aggregate to provide a durable resilient flooring system

### COLORS

EPL-1.5™ is available in SPI Neutral, Medium Grey, Black and Sand. Custom colors will be quoted upon request. It should be noted that EPL 1.5™ is an aromatic polyurea; therefore, as with all aromatics, color change and superficial oxidation will occur.

Aliphatic urethane, polyurea and other suitable topcoats can be used when long-term color stability and increased longevity in full sun exposure are of critical importance.

### WET PROPERTIES @77°F (25°C)

<b>Solids by Volume</b>	100%
<b>Solids by Weight</b>	100%
<b>Volatile Organic Compounds</b>	0 lbs/gal (0g/l)
<b>Theoretical Coverage DFT</b>	100 sq. ft. @ 16 mils/gal
<b>Weight per Gallon</b>	8.60 lbs. (3.90 kg)
<b>Viscosity (cps) @ 77° F (25 °C)</b>	A: 590 ± 50 B: 530 ± 50
<b>Mix Ratio</b>	1 "A": 1 "B"
<b>Shelf Life Unopened Containers @ 60-90°F (15-32°C)</b>	1 Year

### DRY PROPERTIES\*

<b>Tensile Strength ASTM D 412</b>	> 3300 psi ( 22.94 mpa)
<b>Elongation</b>	> 450%
<b>Hardness (Shore A)</b>	93% ± -2
<b>100% Modulus</b>	>650 psi ( 4.52 mpa)
<b>200% Modulus</b>	>1000 psi ( 6.95 mpa)
<b>300% Modulus</b>	>1400 psi ( 9.73 mpa)
<b>Service Temperature</b>	-30°F - +250°F (-34°C - +121°C)
<b>Tear Resistance ASTM D 624</b>	360 PLI ( 63.04 KN/m) ± 50

*\*All cured film properties are approximate since processing parameters, ad-mixture types, and quantities will change physical properties of cured elastomer. All samples for above tests were force cured or aged for more than three weeks. It is recommended that the user perform their own independent testing.*

### CURING SCHEDULE \* 77°F (25°C)

<b>Gel</b>	1 1/2 min. approx
<b>Tack Free</b>	<15 min.
<b>Post Cure</b>	12 hours
<b>Recoat</b>	Up to 48 hours

Complete polymerization to achieve final strength can take up to several days or weeks, depending on a variety of conditions or product type.

Available in 10 gal, 30 gal, 60 gal, 110 gal and 500 gal sets, as well as, 1500 ml cartridges.

### COVERAGE RATES:

Linear Feet Per Gallon					
Width	Depth				
INCHES	1	1.25	1.5	2	2.5
1/8"	154'	123'	103'	77'	61'
3/16"	102'	82'	68'	51'	41'
1/4"	77'	62'	51'	38'	30'
3/8"	51'	41'	34'	25'	20'

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## GENERAL APPLICATION INSTRUCTIONS

Apply EPL-1.5™ only to clean, dry, sound surfaces, free of loose particles or other foreign matter. A primer may be required depending on type and/or condition of the substrate. Consult technical service personnel for specific primer recommendations and substrate preparation procedures.

EPL-1.5™ can be poured through a static mixer or sprayed over a broad range of ambient and substrate temperatures. Contact technical service personnel for specific recommendations, pricing, and availability of spray, pour, and auxiliary equipment.

The polyol "B" component must be thoroughly power mixed each day, prior to use. Contact a SPI technician regarding proper mixing equipment.

## RECOMMENDED EQUIPMENT AND SETTINGS

- Standard 1:1 ratio, heated, plural-component equipment developing a minimum of 1500psi (10.4 mpa) dynamic pressure with heating capabilities to 175° F (79°C) will adequately spray EPL-1.5™. These include Gusmer 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, with a Gap Pro, Gusmer D-7, GX-7-400, SPI D-7, and Model D gun.
- Pre-heater temperature should be at 160°F (71°C).
- Hose temperature should be at 160°F (71°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 145°F (62°C).
- A SPI static mix adapter with airless tip is recommended to enhance physical properties.

## MIXING AND THINNING

The polyol "B" component must be thoroughly power mixed each day, prior to use. Contact a SPI technician regarding proper mixing equipment.

Thinning is not required. Using any thinner may adversely affect product performance.

## GENERAL SAFETY, TOXICITY & HEALTH DATA

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

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

**CLEAN UP:** Use DPM, NMP, Polyclean.

**EYE PROTECTION:** Safety glasses, goggles, or a face shield are recommended.

**SKIN PROTECTION:** Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing.

**RESPIRATORY PROTECTION:** 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 in deciding if additional protective measures are necessary.

**INGESTION:** Do not take internally. It is believed ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue.

## LIMITATIONS

- This product is for professional use only.
- This product must be stored at temperatures between 70°F to 90°F (15°C – 30°C).
- Minimum material, container temperature for spray or pour, application is 70°F (21°C).
- 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.
- Undried air exposed to liquid components will reduce physical properties of the cured coating.

**Note:** The material supplied is two components (Component "A"/Component "B") used to formulate this product. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components.

## 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.

**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.

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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.

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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.

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MSDS "A"



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