



# EPL-1.5™

## SELF LEVELING POLYUREA ELASTOMER

### Synergy Series

Preliminary  
Revised 02.27.12

#### 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 with 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. EPL-1.5™ is formulated to be processed through a SPI Synergy Series proportioner such as the LPG™ or TI-13D™.

#### FEATURES

- 100% solids. No solvents. No VOCs.
- Extended tack time to allow deep surface penetration.
- Fast-set 1:1 ratio, return to service in less than one hour.
- Compliant with USDA/FDA requirements for incidental food contact.

#### RECOMMENDED USES

- To fill or repair control joints, random cracks, and shallow spalls on horizontal concrete surfaces.
- Earthen containment lining used with or without geotextile fabric.
- Roof systems (metal, concrete wood, etc.)
- Protective elastomer for sprayed-in-place urethane foam.
- EPL-1.5™ can be spray-applied with or without broadcast aggregate to provide a durable resilient flooring system

#### COLORS

EPL-1.5™ comes in SPI standard colors (Neutral, Medium Grey, Black, and Tan). 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 aliphatic topcoats can be used where long-term color stability and increased longevity in full sun exposure are of critical importance.

#### CURING SCHEDULE \* 77°F (25°C)

|           |                   |
|-----------|-------------------|
| Gel       | 1 1/2 min. approx |
| Tack Free | ± 5 - 10 min.     |
| Post Cure | 24 hours          |
| Recoat    | Up to 24 hours    |

\*Complete polymerization to achieve final strength can take up to several weeks, depending on a variety of conditions.

#### COVERAGE RATES: Linear Feet Per Gallon

| Width  | Depth |      |      |     |     |
|--------|-------|------|------|-----|-----|
|        | 1     | 1.25 | 1.5  | 2   | 2.5 |
| INCHES |       |      |      |     |     |
| 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' |

| WET PROPERTIES @77°F (25°C)                        |                            |
|----------------------------------------------------|----------------------------|
| Solids by Volume                                   | 100%                       |
| Solids by Weight                                   | 100%                       |
| Volatile Organic Compounds                         | 0 lbs/gal (0g/l)           |
| Theoretical Coverage DFT                           | 100 sq. ft. @ 16 mils/gal  |
| Weight per Gallon                                  | 8.60 lbs. (3.90 kg)        |
| Viscosity (cps) @ 77° F (25 °C)                    | A: 590 ± 50<br>B: 530 ± 50 |
| Mix Ratio                                          | 1 "A": 1 "B"               |
| Shelf Life Unopened Containers @ 60-90°F (15-32°C) | 6 Months                   |

#### \*\*CURED FILM PROPERTIES SPRAYED WITH HIGH PRESSURE HEATED PROPORTIONER

|                                   |                       |
|-----------------------------------|-----------------------|
| Tensile Strength ASTM D 638       | >2600 psi (18.07 mpa) |
| Elongation @ 77°F (25°C)          | >450%                 |
| Hardness (Shore A) ASTM D 2240-81 | ±85 (0s)              |
| Hardness (Shore D) ASTM D 2240-81 | ±35 (0s)              |

Test samples were sprayed through SPI Twinshot at 3300 psi. Primaries/Hose Heat 170°F (77°C) Graco MP gun

#### \*\*CURED FILM PROPERTIES SPRAYED WITH LOW PRESSURE UNHEATED PROPORTIONER

|                                   |                       |
|-----------------------------------|-----------------------|
| Tensile Strength ASTM D 638       | >1500 psi (10.43 mpa) |
| Elongation @ 77°F (25°C)          | >440%                 |
| Hardness (Shore A) ASTM D 2240-81 | ±75 (0s)              |
| Hardness (Shore D) ASTM D 2240-81 | ±30 (0s)              |

Test samples were sprayed through LPG™ Proportioner with SPI Lock N'Load™ gun at 400-600 psi using the SPI nucleation kit

#### \*\*CURED FILM PROPERTIES POURED WITH LOW PRESSURE UNHEATED PROPORTIONER

|                                   |                       |
|-----------------------------------|-----------------------|
| Tensile Strength ASTM D 638       | >1500 psi (10.43 mpa) |
| Elongation @ 77°F (25°C)          | >430%                 |
| Hardness (Shore A) ASTM D 2240-81 | ±85 (0s)              |

Test samples were processed through LPG™ Proportioner with SPI Lock N'Load™ gun at 200-300 psi

\*\*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.

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

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



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Product & Equipment Technical Assistance  
24 hours – 7 days a week (800) 627-0773

## 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, subject to type and/or condition of the substrate. Consult technical service personnel for specific primer recommendations and substrate preparation procedures.

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

It is recommended that EPL-1.5™ be sprayed in multi-directional (north-south/east-west) passes to ensure uniform thickness.

Follow the instructions attached to "A" and "B" containers.

## MIXING AND THINNING

Thoroughly agitate the "B" components of this product prior to application. Use a SPI folding blade mixer, or equivalent equipment approved by SPI. Install mixer through the extra 2" bung hole provided on all "B" drums. Care must be taken not to cross contaminate the individual components with the mixing equipment. Thinning is not required. Using any thinner may adversely affect product performance. The polyol "B" component must be thoroughly power mixed each day, prior to use. Contact a SPI technician regarding proper mixing equipment.

## GENERAL SAFETY, TOXICITY & HEALTH DATA

Material 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

- Apply EPL-1.5™ when surface and air temperatures are above 40°F (5°C) and rising, and above 7°F (3°C) above dew point.

- This product is for professional use only.
- 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 EPL-1.5™. 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.

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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.

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The data presented herein is not intended for non-professional applicators or those persons who do not 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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