



**Product Description**

Polyeuro® LP-12 is a two component, 1:2, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

**Features**

- Abrasion and Impact Resistant
- Chemical Resistance
- High Build
- Low Pressure Application
- Low Temperature Flexibility
- Quick Drying
- Seamless
- Tough and Elastomeric

**Typical Uses**

- Boat Linings
- Cargo Holds
- Cargo Liners
- Encapsulation of Fiberglass Bodies/Horse Trailers
- Mold Castings
- Truck Bed Surfaces
- Utility Vehicles
- Waterproof Decking

**Packaging**

<b>15-gallon kit</b>	5 gallons (18.9 liters) Side-A and 10 gallons (37.8 liters) Side-B
<b>150-gallon kit</b>	50 gallons (189 liters) Side-A and 100 gallons (378 liters) Side-B

**Colors**

Clear/Neutral or Black. Custom colors are available upon request. Color packs, when used, must be added to Side-B.

Due to its aromatic composition, Polyeuro® LP-12 will tend to yellow or darken in color after exposure to UV light. Polyeuro® LP-12 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

**Coverage**

Polyeuro LP-12 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil (0.254 microns) thickness is one gallon per 1600 sqft (3.78 liters per 149 sqm).

Estimating Formula: (1600 sqft per gal /Dry Mil Thickness) x Solids Content = Application Rate per gallon.

**Surface Preparation**

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion

**Technical Data (Based on Draw Down Film)**

<b>Mix Ratio by Volume</b>	1A : 2B
<b>Pot Life @ 75°F (24°C)</b>	12-16-Seconds
<b>Tack Free Time (150 mils thickness)</b>	40-60 Seconds
<b>Recoat Time</b>	6 - 12 hours
<b>Viscosity at 150-160°F (66.5-71°C)</b>	
<b>Side-A</b>	700-900 cps
<b>Side-B</b>	700-900 cps
<b>Density (Side-A &amp; Side-B Combined)</b>	9.2 lbs/gal
<b>Flash Point</b>	> 200°F (93.3°C)
<b>Hardness, ASTM D2240</b>	91-93 Shore A
<b>Tensile Strength, ASTM D412*</b>	1300 ± 200 psi 8.96 ± 1.37 MPa
<b>Elongation, ASTM D412*</b>	200% ± 50%
<b>Tear Resistance, ASTM D412*</b>	175 ± 25 pli 30.6 ± 4.37 kNm
<b>Service Temperature Dry</b>	-20°F to 200°F 30°C - 93°C

NOTE: Above physicals are from lab drawn films. Actual spray physicals may vary.

and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

**NEW AND OLD CONCRETE**

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

**CONCRETE SURFACE PREPARATION REFERENCE**

- ASTM D4258 - Standard practice for cleaning concrete
- ASTM D4259 - Standard practice for abrading concrete
- ASTM D4260 - Standard practice for etching concrete
- ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
- ICRI 03732 - Concrete surface preparation

**WOOD**

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent,

prime the entire surface intended for coating.

#### **STEEL (ATMOSPHERIC AND IMMERSION EXPOSURE)**

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

#### **ALUMINUM**

Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

#### **BRASS AND COPPER**

Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

#### **GALVANIZED SURFACES**

Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

#### **FIBERGLASS REINFORCED PLASTIC**

The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

#### **PLASTIC FOAMS**

Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

#### **TEXTILES, CANVAS, FABRICS**

Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

#### **STAINLESS STEEL**

Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

#### **NEW AND OLD CAST IRON**

Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning

to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

#### **ALL OTHER SURFACES**

An adhesion test is recommended prior to starting the project.

#### **Mixing**

Polyeuro LP-12 may not be diluted under any circumstances. Thoroughly mix Polyeuro LP-12 Side-B with air driven power equipment until a homogeneous mixture and color is obtained.

#### **Application**

Both Side-A and Side-B materials should be preconditioned to 75-80°F (24-27°C) before application.

Recommended surface temperature must be at least 5°F (3°C) above the dew point.

Polyeuro LP-12 should be applied using plural component, low pressure spray mixing equipment. The simple spray equipment can have a single motor driving two separate fixed ratio proportioning pumps. Side-A and Side-B are pumped separately to a static mixing tube for air assisted or airless spray. It is recommended to use a x 24 element mixing wand/Static spiral mixer for proper mixing. Contact Polycoat Products for further information.

#### **Storage**

Polyeuro LP-12 has a shelf life of six (6) months from date of manufacture in original, factory-sealed containers at a temperature between 60-95°F (15-35°C).

Side-A and Side-B drums are recommended to be stored above 60°F (15°C). Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground. If stored for a long period of time, rotate Side-A and Side-B drums regularly.

#### **Limitations**

Do not open until ready to use.

Both Side-A and Side-B containers must be fitted with a desiccant device during use.

#### **Warning**

**This product contains Isocyanates and Curative Material.**

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