



Product Description

Polyeuro® LP-12 HE is a two component, 1:2, 100% solids, high elongation, 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
- Secondary Containment Lining with or without Geo Textile
- Truck Bed Surfaces
- Utility Vehicles
- Waterproof Decking

Packaging

| | |
|-----------------------|--|
| 15-gallon kit | 5 gallons (18.9 liters) Side-A and 10 gallons (37.8 liters) Side-B |
| 150-gallon kit | 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 HE will tend to yellow or darken in color after exposure to UV light. Polyeuro® LP-12 HE may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

Coverage

Polyeuro LP-12 HE 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.

Technical Data (Based on Draw Down Film)

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|---|-----------------------------------|
| Mix Ratio by Volume | 1A : 2B |
| Pot Life @ 75°F (24°C) | 14-18-Seconds |
| Tack Free Time (150 mils thickness) | 40-60 Seconds |
| Recoat Time | 6 - 12 hours |
| Viscosity at 180°F (27°C) | |
| Side-A | 900-1000 cps |
| Side-B | 700-900 cps |
| Density (Side-A & Side-B Combined) | 9.2 lbs/gal |
| Flash Point | > 200°F (93.3°C) |
| Hardness, ASTM D2240 | 85±5 Shore A |
| Tensile Strength, ASTM D412* | 2800 ± 200 psi 19.3 ± 1.37 MPa |
| Elongation, ASTM D412* | 430% ± 50% |
| Tear Resistance, ASTM D412* | 220 ± 25 pli 30.6 ± 4.37 kNm |
| Service Temperature Dry | -20°F to 200°F 30°C - 93°C |

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

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 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.

Limited Warranty: Please read all information in the General Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. These products are for professional use only and preferably applied by professionals who have prior experience with the Polycoat Products materials or have undergone training in application of Polycoat Products materials. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data, instructions, and project specific recommendations.

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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 HE may not be diluted under any circumstances. Thoroughly mix Polyeuro LP-12 HE 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 HE 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 HE has a shelf life of one year 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.