

TECHNICAL DATA SHEET

POLYEURO® MPL-80

Two Component Modified Polyurea Protective Coating

Product Description

Polyeuro® MPL-80 is a two component, 1:1, 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 Shrinkage
- Low Temperature Flexibility
- Quick Drying
- Seamless
- · Tough and Elastomeric

Typical Uses

- Boat Linings
- Cargo Holds
- Cargo Liners
- Containment Areas
- Encapsulation of Fiberglass Bodies and Polystyrene
- HorseTrailers
- Industrial Floors
- Truck-Bed Surfaces
- Utility Vehicles
- Walkways
- Waterproof Decking

Packaging

10-gallon kit	5 gallons (18.9 liters) Side-A and 5
	gallons (18.9 liters) Side-B.

100-gallon kit 50 gallons (189 liters) Side-A and 50

gallons (189 liters) Side-B.

Neutral, Grey, Black. Custom colors are available upon request.

Polyeuro MPL-80 may not be diluted under any circum-stances. Thoroughly mix Polyeuro MPL-80 Side-B Base material with air driven power equipment until a homoge- neous mixture and color is obtained.

Side-B base material must be thoroughly agitated until a homogenous mixture is obtained. Do not allow air to be incorporated into the product. Total suspension must be achieved. Side-A Isocyanate requires no mixing

Coverage

Polyeuro MPL-80 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)	
Mix Ratio by Volume	1A:1B
Pot Life @ 150°F (65.5°C), 50% R.H.	3-5-Seconds
Tack-Free Time (150 mils thickness)	20-40 Seconds
Recoat Time	0 - 12 hours
Viscosity at 150-160°F (65.5-71°C) Side-A Side-B	120 ± 20 cps 60 ± 20 cps
Density (Side-A & Side-B Combined)	9.0 lbs/gal
Flash Point	> 200°F (93.3°C)
Hardness, ASTM D2240	80 ± 5 Shore A
Tensile Strength, ASTM D412*	2000 ± 300 psi 13.79 ± 2.07 MPa
Elongation, ASTM D412*	300% ± 25%
Tear Strength, ASTM D624*	300 ± 50 pli 52.45 ± 8.8 kNm
Service Temperature (Dry)	-20°F to 250°F -28.89°C to 121°C
*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum,	

Surface Preparation

properties are approximate.

In general, coating performance and adhesion are directly proportional to surface preparation. All surfaces must be free of oil, grease, dirt and other contaminants.

with Gusmer GX7-400 mechanical purge gun @ 150-160°F (65°C to 71°C). Different machine and parameter will change these properties. User should perform their own independent testing as

PICK-UP TRUCK

Sanding and scuffing of the original paint finish is required to obtain a permanent bond of the spray-on liner to the pick-

After the vehicle is masked with paper and the surface has been thoroughly cleaned, sand the surface using 40 grit sanding discs on an autobody disc arbor.

In areas which cannot be accessed by power tools, surface preparation can be completed by hand using 80 or 100 grit sandpaper or a coarse scuffing pad such as Scotchbrite.

Take care that all edges at tape lines are well scuffed and

After sanding and scuffing the surface must be clean and dust free.

CONCRETE

Remove all contaminants such as oil, grease, dirt, form oil residue, wax, laitance or any other chemical product prior to proceeding with surface preparation. The surface should be free of voids, pot holes or bug holes, loose or weak concrete and the necessary surface profile must be achieved and have open textured surface by blast cleaning or equivalent mechanical means as listed below to ensure proper adhesion and good surface appearance.

Abrasive blast using brush blast technique or better to achieve a desired surface texture (CSP 4-5 per ICRI Guidelines).



Vacuum to remove dust, etc., prior to application of primer.

Use fiberglass (C-Veil Glass) or a geotextile cloth to bridge cracks over the primed surface.

Primer is always recommended to take care of voids, pot holes or bug holes etc.

Application

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

Polyeuro® MPL-80 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Hydra Cat, Gusmer or other equivalent machine may be used.

Both Side-A and Side-B materials should be sprayed at temperatures above 150°F (65°C). Adequate pressure and temperature should be maintained at all times.

Storage

Polyeuro® MPL-80 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors 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

Due to its aromatic composition, Polyeuro® MPL-80 will tend to yellow or darken in color after exposure to UV light. Polyeuro MPL-80 may be topcoated with an aliphatic polyurethane coating, such as Polycoat's Polyglaze® 100, AL-50, or Staingard® 7000 polyaspartic, for a color-fast glossy finish.

Do not open until ready to use.

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

Warning

This product contains Isocyanates and Curative Material.

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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