POLYCOAT PRODUCTS
A Division of American Polymers Corp.

TECHNICAL DATA SHEET

POLYEURO® MPL-85 ALUMINUM

Two Component Modified Polyurea Protective Coating

Product Description

Polyeuro® MPL-85 Aluminum is a two component, 1:1, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surface.

Features

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

Typical Uses

- Abrasion Resistance Over Wood, Metal and Concrete.
- Chemical Resistance for Styrofoam Flotation
- Secondary-Containment Coating- Which Provides a Chemical Resistant Membrane Over Concrete and Steel in Approved Tank Farms
- Water and Chemical Resistance for Concrete Block and Poured Walls
- Waterproofing for Urethane Foam Roofing

Packaging

10-gallon kit	One 5 gallon pail of Side-A and one 5 gallon pail of Side-B
100-gallon kit	One 50 gallon drum of Side-A and one 50 gallon drum of Side-B

Color

Aluminum

Due to its aromatic composition, Polyeuro® MPL-85 Aluminum will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MPL-85 Aluminum may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

Coverage

Polyeuro® MPL-85 Aluminum 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.

Mixing

Polyeuro® MPL-85 Aluminum may not be diluted under any circumstances. Thoroughly mix Polyeuro® MPL-85 Aluminum Side-B with air driven power equipment until a homogeneous mixture and color is obtained.

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.

Technical Data

Mix Ratio by Volume	1A : 1B
Pot Life @ 150-160°F	3 - 5 seconds
Tack Free Time (150 mils)	20 -40 seconds
Recoat Time	0 - 12 hours
Viscosity at 77-80°F (25°C), Brookfield **Side-A** **Side-B**	 600 ± 100 cps 750 ± 100 cps
Density (Side-A & Side-B Combined)	9.22 lbs/gal
Flash Point	> 200°F (93.3°C)
Hardness, ASTM D2240	85 ± 5 Shore A
Tensile Strength, ASTM D412*	2500 ± 200 psi 17.71 ± 1.37 MPa
Elongation, ASTM D412*	300 ± 20%
Tear Strength, ASTM D624*	225 ± 25 pli 39.35 ± 4.4 kNm
Service Temperature	-40°F to 250°F -40°C to 121°C

*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, 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 properties are approximate.

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® MPL-85 Aluminum should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Side-A and Side-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F (65°C). Adequate pressure and temperature should be maintained at all times.

Polyeuro® MPL-85 Aluminum should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

Storage

Polyeuro® MPL-85 Aluminum 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

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.