PolySpray

A low temperature cured lining system for vessels, structures, masonry and pipes that require structural enhancement and flexibility.

The PolySpray Lining System is a 100% solids spray applied aromatic structural polyurea lining system that has extraordinary toughness and flexibility. In addition, it can be applied in thicknesses from 20 to 500 mils (0.5 to 15 mm) or greater in multiple passes per application and returned to service in several hours.

Fast recommissioning time at minimum cure temperature of 20°F (-7°C).

No VOCs and low odor

Fully trained application specialists.

Compatible with a variety of substrates.

Seamless, flexible and waterproof

Full contract support services, if required.

Designed and manufactured in an ISO 9001 accredited facility.

Color	Beige, Semi Gloss; other colors available
Mix Ratio	1:1
Pot Life 68°F (20°C)	None
Drying Times 37°F (3°C)	Touch - 30 Seconds Gel Time - 3 Seconds Useable - 3 Minutes
Wet Film Thickness	20 - 500 mils (0.5 - 15 mm)
Dry Film Thickness	20 - 500 mils (0.5 - 15 mm)
% Volume Solids	100
Theoretical Coverage	16 mils/1gal/1ft² (1 mm/1 liter/1 m²)
Flash Point	Above 212°F (100° C)
Storage Life	Twelve months when stored in original sealed containers, between 50-77° F (10-25° C)

SUGGESTED USE

Designed for use in immersion exposure as a seamless water-proof liner for large diameter pipe and tanks conveying process water, fresh and salt water. Ideally suited for use in facilities used for the handling, transport and storage of process water and abrasive slurries to include:

Steel Water Tanks
Concrete Water Tanks
Secondary Containments
Concrete Reservoirs
Industrial Piping
Storm Drains
Sanitary Sewer Piping
Natural Gas
Cooling Water Piping
Power Plants
Manholes
Building & Bridge Structures
Brine Tanks

INSTALLATION ADVANTAGES OF POLYUREA

Snap Cure 3-8 Seconds

Can be sprayed on a slope or vertical up to 275 mils (7 mm) with no sags or runs

Foot traffic can resume within minutes on horizontal surfaces

Outstanding corrosion resistances increased structural strength

POLYSPRAY LINING SYSTEM

Atmospheric Conditions During Applications

Polyurea is relatively insensitive to:
• Moisture
• Temperature

Weather Variations

• High humidity
• High temperatures
• Low temperatures

Little Effect On Adhesion

• If the substrate is clean and profiled
• No wet-frozen flash rust or other contaminates on substrate

Surface Conditions

Surface must be clean, dry and in sound condition. Remove all oil, dust, grease, dirt, loose rust and other foreign material to ensure adequate adhesion

Minimum recommended surface preparation:

Steel:

Atmospheric:	SSPC-SP10/NACE 2, 2 mil profile
Immersion:	SSPC-SP10/NACE 2, 3 mil profile

Concrete & Masonry:

Sandblast or shot blast to remove all laitance and achieve a profile equal to 80-100 grit sandpaper. Refer to SSPC SP13/NACE 6 or ICRI Guide 03732.

Application Conditions:

Temperature		
	Material	150º F minimum to 175º F maximum
	Air & Surface	-20º F Minimum to 120º F maximum
Relative Humidity	80 percent	
Surface must be dry		

Hardness ASTM D2240	Shore D 60

Abrasion Resistance

Method: ASTM D4060 CS17	
Result:1000g 500 cycles	6.3 mg loss
1000g 1000 cycles	19 mg loss

Tensile Strength

Method: ASTM D638	
Result: (PSI)	3291
Elongation at Yield (%)	403
Tensile Modulus	
100% Modulus (PSI)	1659
300% Modulus (PSI)	2775
Young's Modulus (PSI)	18531

Flexural Modulus (PSI)

ASTM D790	48,000

Adhesion Testing

ASTM D4541	
Coating to Concrete Bond Strength (PSI)	500 (concrete failed)
Coating to Metal Bond Strength (PSI)	1750
Coating to Wood Bond Strength (PSI)	500 (wood failed)

Water Absorption

ASTM D570 (%)	1.52

Tear Resistance

ASTM D1004 (Lbs Force)	59.35

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