

Z-2 IRONLINE2 PART POLYUREA HYBRID

DESCRIPTION

Z-2 IRONLINE is a 1:1 ratio, two-component, 100% solids (no VOCs, no solvents), exothermic, rapid curing, elastomeric hybrid polyurea lining system. The lining thickness varies based on application, typically minimum of 1/16" (62.5 mils; 1.6mm) up to unlimited thickness. It can be sprayed up to 98% humidity and a dew point temperature difference of 15° or more with no blistering. Z-2 IRONLINE is easy on spray equipment with no fast gelling at the spray gun tip.

TYPICAL APPLICATIONS

- This system is especially suitable for spray on truck bedliners.
- Secondary containment as a monolithic, impermeable lining for industrial plant, agriculture, and petrochemical applications.
- Floor and wall protection in industries such as food processing, food storage, veterinary, production area and laboratories.
- Material delivery systems where a seamless flexible system is essential.

KEY FEATURES

- Robust application window with ability to spray at low temperatures and high humidity.
- High tensile strength and tear strength properties.
- Stable from -40° to 175° F (-40° to 80° C).
- It can be sprayed up to 98% humidity and a dew point temperature difference of 15° or more with no blistering.
- Excellent corrosion resistance.









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Z-2 IRONLINE

2 PART POLYUREA HYBRID

(For components)	COMPONENT A	COMPONENT B
Solids by weight and volume	100%	100%
Viscosity at 77°F (25°C)	500 - 800 cps	700 - 1100 cps
Mixing ratio by weight	104	100
Mixing ratio by volume	1	1
Shelf Life - Unopened Containers	12 months	12 months

(For cured material)		TEST METHOD	RESULTS
Hardness (Shore D)		ASTM D-2240	55±5
Tensile Strength (psi)**		ASTM D-412	2400 – 2700
Secant Modulus @ 100% elongation		ASTM D-412	1250
Secant Modulus @ 200% elongation		ASTM D-412	1850
Tear Resistance (pli)** Die C		ASTM D-624	400 - 500
Elongation (%)**		ASTM D-412	80 - 90
Impact Resistance (lbs)		ASTM D-256	160
Density (lb/ft3)		ASTM D-1622	69 - 70
Compressive Strength (psi)		ASTM D-695	800
Taber Abrasion Resistance (mg of loss	s/1000 cycles)	ASTM D-4060	140
CS17 Wheel; 1000 grams we	eight		
Mandrel Bend, 180°, 1 inch mandrel		ASTM D-522	Pass
Coefficient of Friction on Steel:	-Static	ASTM D-1894	.6
	-Kinetic	ASTM D-1894	.55
Water Absorption (%)		ASTM D-570	≤1.6
Dielectric Strength (volts/mil)		ASTM D-149	300
Volume Resistancy (ohm/inches)		ASTM D-257	6 X 10 (12)
Dielectric Constant (MHz)		ASTM D-150	5.4
Dissipation Factor (MHz)		ASTM D-150	0.058
Cathodic Disbonding		ASTM G-8	Pass

PROCESS SPECIFICATIONS

Equipment pre-heater temperature		
Component A	160°F	71°C
Component B	150°F	65°C
Hose temperature	160°F	71°C
Spray pressure	2000 PSI	138 Bar
Gel time at equipment temperature	3 seconds	
Tack free time	4 seconds	
Recoat	Max 4 hrs	

MIXING

Z-2 IRONLINE may not be diluted under any circumstances.

Mix Z-2 IRONLINE Side-B (Polyol) Base material with a mechanical drum mixer until a homogeneous mixture and color is obtained. Do not allow air to be incorporated into the product. Total suspension must be achieved.

Z-2 IRONLINE Side-A (Isocyanate) requires no mixing.



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COVERAGE

Due to its fast set nature Z-2 IRONLINE may be applied at any rate to achieve desired thickness. Theoretical coverage per gallon is 1600 sq. ft. at 1 mil. Practical coverage @ 100 mils = $50 \text{ ft}^2/3 \text{ gal}$.

Dry film thickness range varies based on application, typically a minimum of 1/16" (62.5 mils; 1.5mm) up to unlimited thickness.

HANDLING PROCEDURES

During Processing, both A & B drums should be fitted with desiccant dryer system. Keep containers closed, when possible, to exclude any atmospheric moisture. Blanket both components with dry nitrogen when storing drums that have been opened.

PACKAGING

A set of Z-2 IRONLINE consists of one (1) 55 gallon (208 L) drum of 'A' component and one (1) 55 gallon (208 L) drum of 'B' component. Net weight per set is 910 pounds (412.7 kg).

COLOR OPTIONS

Only available in black.

STORAGE

Z-2 IRONLINE components should be stored in sealed containers at $60 - 90^{\circ}$ F ($15 - 32^{\circ}$ C) in a dry area. Avoid exposure to freezing temperatures. Store on wooden pallets to avoid direct contact with the ground.

PRECAUTIONS

Protect from exposure to moisture. Water will cause the "A" component (ISO) to generate carbon dioxide with resulting high pressure in closed containers.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your Pinnacle representative or visit our website for current technical data and instructions.

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