

## DESCRIPTION

Z-3 MAX is a two component, 100% polyurea elastomer system designed for use with two component high pressure spray equipment. Z-3 MAX provides a flexible but extremely tough monolithic membrane with excellent water and chemical resistance. Features a robust application window with ability to spray at low temperatures and high humidity. Used as a protective membrane on steel, wood, concrete, EPS, fiberglass and more.

## TYPICAL APPLICATIONS

- Outdoor application sites where humidity or low temperature conditions exist.
- Z-3 MAX over geotextile is one of the fastest ways to install dependable secondary containment around tank fields or drilling well heads for world leading oil-spill prevention.
- Floor and wall protection in industries such as food processing, food storage, veterinary, production area and laboratories.
- Elastomeric coating designed to weatherproof polyurethane foam roofing systems.

## KEY FEATURES

- Spray-on application creates a monolithic, seamless lining that conforms to any shape and size.
- Can withstand vehicle forklift traffic and heavy loads with proper thickness build.
- Stable from -40° to 230° F (-40° to 110° C).
- Elastomeric properties (up to 500% elongation) allow for application to surfaces subject to vibration, expansion, contraction, flexing, abrasion and impact.



Z-3 Max Over Geo-Textile



Z-3 Max Over Concrete



Z-3 Max Over 3 lb. Roofing Foam

## TYPICAL PHYSICAL PROPERTIES

### (For components)

	COMPONENT A	COMPONENT B
Solids by weight and volume	100%	100%
Viscosity at 77°F (25°C)	450 cps	350 cps
Mixing ratio by weight	109	100
Mixing ratio by volume	1	1
Shelf Life - Unopened Containers	12 months	12 months

### (For cured material)

	TEST METHOD	RESULTS
Shore D hardness	ASTM D-2240	50 ± 5
Tensile strength	ASTM D-412	2800 – 3200 psi
Elongation	ASTM D-412	400 – 500 %
Tear, Die C	ASTM D-624	500 – 600 pli
Impact Resistance	ASTM D-256	160 lbs
Mandrel Bend, 180°, 1 inch mandrel	ASTM D-522	Pass
Taber Abrasion Resistance (mg of loss/1000 cycles) -CS17 Wheel; 1000 grams weight	ASTM D-4060	11
Air Permeability (L/Square meter @ 75 pa)	ASTM E-2178	≤ 0.002
Water Vapor Transmission -Rate of Transmission (grains/hr/sqft)	ASTM E-96	0.53
-Permeance (perm, in - lb)	ASTM E-96	1.63
Coefficient of Friction on Steel: -Static	ASTM D-1894	.7
-Kinetic	ASTM D-1894	.5

## 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
Substrate Surface	-20° – 120°F	-29° – 49°C
Gel time at equipment temperature	7 – 9 seconds	
Recoat	Max 4 hrs	

## MIXING

Z-3 MAX may not be diluted under any circumstances.

Mix Z-3 MAX 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-3 MAX Side-A (Isocyanate) requires no mixing.

## COVERAGE

Due to its fast set nature Z-3 MAX 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 ft<sup>2</sup>/ 3 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.

## STORAGE

Z-3 MAX components should be stored in sealed containers at 60 – 90° F (15 – 32° C) in a dry area. Avoid exposure to freezing temperatures. Store on wooden pallets to avoid direct contact with the ground.

## PACKAGING

A set of Z-3 MAX 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

Colors - Black, Industrial Tan, Industrial Grey, Industrial Brown, Graphite, Spice Brown, Red, Indigo Blue, Emerald Green or unpigmented (natural). Custom colors are also available by special order. This is an Aromatic product, colors may change with UV exposure. Use of a UV Topcoat provides tough, light stable, protection from color change and dulling of the surface and allows custom color matching.

## 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.

## TECHNICAL SUPPORT

We have a dedicated technical support team offering knowledgeable support for everything from preventative maintenance, equipment calibration and servicing through to coating and foam application advice. If you have any questions regarding the use of this product please call us toll free at 1-800-901-0088 or email us [info@pinnaclewest.net](mailto:info@pinnaclewest.net).

## LIMITED WARRANTY

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