

## DESCRIPTION

Z-3 HYBRID is a two component, hybrid polyurethane / polyurea elastomer system designed for use with two component high pressure spray equipment. Z-3 HYBRID provides a flexible but extremely tough monolithic membrane with excellent water and chemical resistance. This system is especially suitable for spray on truck bedliners but can also be used as a protective membrane on steel, wood, concrete, EPS, fiberglass and more.

## 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 applied in humid conditions up to 70% relative humidity with temperature 10 degrees above dew point.
- Excellent corrosion resistance.



Z-3 HYBRID Truck Bedliner



Z-3 HYBRID Over Concrete



Z-3 HYBRID Over Steel

## 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	6 months

### (For cured material)

	TEST METHOD	RESULTS
Shore D hardness	ASTM D-2240	55 ± 5
Tensile strength	ASTM D-412	2400 – 2600 psi
Elongation	ASTM D-412	155 – 200 %
Tear, Die C	ASTM D-624	300 – 350 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	10 – 15

## 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 – 4 seconds	
Tack free time	5 – 7 seconds	
Recoat	Max 4 hrs	

## MIXING

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

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

## COVERAGE

Due to its fast set nature Z-3 HYBRID 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 HYBRID 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 HYBRID 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, even metallic colors.

### 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).

### ON-SITE TRAINING

Our on-site training programs provide the necessary equipment and application training, including the health and safety aspects, needed to apply a wide variety of products. The goal of our programs are to give the skills required to be a professional and productive installer.

### LIMITED WARRANTY

Pinnacle West Enterprises Inc. warrants its products to be free of manufacturing defects and that they will meet Pinnacle West Enterprises Inc. current published physical properties when properly installed according to Pinnacle West Enterprises Inc. guide specifications and product data sheets over a sound, properly prepared substrate. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Pinnacle West Enterprises Inc. of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Pinnacle West Enterprises Inc. shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Pinnacle West Enterprises Inc. shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Pinnacle West Enterprises Inc. reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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