

Part A – Pipeliner 5000 11-70 PW Iso, Part # 60260

Part B – Pipeliner 5000 11-70 PW Resin, Part # 60265

#### DESCRIPTION:

Pipeliner 5000 11-70 PW is a two-component, 1:1 ratio, rapid curing, elastomeric structural lining system developed for high build applications of 30 – 500 mil cross sections. Specifically designed for potable water applications, Pipeliner 5000 has passed the rigorous testing requirements of the NSF/ANSI 61 Section 5 (2012) potable water standard and is Truesdail Laboratories listed. This hybrid system is sprayed with high pressure plural component spray equipment and can also be sprayed with a cartridge gun for repairs. Thickness of the lining will vary depending on the application, typically from a minimum of 30 mils up to unlimited thickness.

#### TYPICAL USES:

- Excellent lining for potable water tanks, aqueducts, pipelines and water treatment facilities
- Excellent industrial lining for tough application spray conditions such as:
  - Wall protection in industries such as food processing, food storage, veterinary, production area and laboratories
- Spray-on application creates a monolithic, seamless lining that conforms to any shape and size
- Elastomeric properties allow for application to surfaces subject to: vibration, contraction, movement, flexing, abrasion and impact.

#### FEATURES & BENEFITS:

- Complies with NSF/ANSI 61 Section 5 (2012) potable water standard
- High build cross sections
- Can be sprayed in large pipelines: 9" diameter and greater
- Robust application window with ability to spray at low temperatures and high humidity
- High physical properties including tensile, tear, and compressive properties
- Excellent leveling properties
- Excellent impact resistance
- Excellent chemical resistance and corrosion resistance
- Bonds to virtually all substrates of any dimension, including metals, woods, concrete and fiberglass
- 100% solids, zero VOCs, no solvents



Meets:  
NSF/ANSI 61-5 (2012)

CHEMICAL PROPERTIES*:	Test	Isocyanate	Resin
Specific Gravity (grams/cc)	ASTM D-792	1.21	1.16
Viscosity, cps		800 – 1200	400 – 800
Solids by Volume/Weight		100%	100%
Volatile Organic Compounds		0 lbs/gal	0 lbs/gal
Mix Ratio, parts per volume		1	1
Gel Time, seconds		3 – 5	
Tack Free, seconds		5 – 7	
Recoat, max		≤4 hrs	
Full Cure Time		24 hrs	
Theoretical Coverage		1600 sqft @ 1 mil	
Odor		mild	amine
Freezing Point		40°F	n/a
Color		amber	blue
Shelf Life - Unopened Containers		12 months	6 months

\*Properties were tested at 80°F (26.7°C).

#### TYPICAL PHYSICAL PROPERTIES:

Test	Result
Hardness (Shore D)	ASTM D-2240 65±5
Tensile Strength (psi)**	ASTM D-412 3200 – 3500
Tear Resistance (pli)** Die C	ASTM D-624 600 – 700
Elongation (%)**	ASTM D-412 50 – 60
Impact Resistance (in/lbs)	ASTM D-256 160

**PIPELINER™ 5000 11-70 PW****TYPICAL PHYSICAL PROPERTIES** *(continued):*

	<b>Test</b>	<b>Result</b>
Density (lb/ft <sup>3</sup> )	ASTM D-1622	69 – 70
Compressive Strength (psi)	ASTM D-695	800
Taber Abrasion Resistance (mg of loss/1000 cycles) CS17 Wheel; 1000 grams weight	ASTM D-4060	50 – 60
Mandrel Bend, 180°, 3 inch mandrel	ASTM D-522	Pass
Water Absorption (%)	ASTM D-570	≤1
Glass Transition - T <sub>g</sub> (°C)	ASTM D-7028	5°F (-15°C)
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

\*\*Properties were checked on lining, 1/8" (125 mil), (3.18 mm) thick stock.

**PROCESSING CHARACTERISTICS:** The system settings required to achieve quality spray sealant application will vary depending on environmental and substrate conditions. The following recommended parameters will help ensure optimum lining quality.

<b>Equipment Used</b>	<b>Process Pressure</b>	<b>Spray Gun</b>	<b>Mix Module</b>
Graco Reactor E-XP2	2300 psi (static)	Fusion - Air Purge or Mechanical Purge	AR2929 or greater

**Process Temperatures and Relative Humidity**

<b>Iso Component</b>	<b>Resin Component</b>	<b>Hoses</b>
140°–160°F (60°–71°C)	140°–150°F (60°–66°C)	140°–160°F (60°–71°C)

**DRY FILM THICKNESS:** Varies based on application, typically a minimum of 1/16" (30 mil; 1.5mm) up to unlimited thickness

**NOT RECOMMENDED FOR:** Application to high density polyethylene or thermo plastics

**CHEMICAL RESISTANCE:** Pipeliner 5000 provides good resistance to many commercial and industrial chemicals such as acids, alkalies, oils and cleaning chemicals. For specific applications and information, please consult a Rhino® representative.

**SUBSTRATES:** Bonds to virtually all substrates of any dimension, including metals, wood, concrete and fiberglass

**HOW SUPPLIED:** Net weight per set is 950 pounds (431 kgs). A set of Pipeliner 5000 11-70 PW consists of one (1) 55 gallon (208 L) drum of 'A' component and one (1) 55 gallon (208 L) drum of 'B' component.

**STORAGE:** Pipeliner 5000 components should be stored in sealed containers at 60 – 90°F (15 – 32°C) in a dry area.

**SAFETY PRECAUTIONS: Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS)**

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product SDS and Safety Manual for detailed information and handling guidelines.

**For Your Protection:** The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors.

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