

# **PipeLiner 5000 PW**

## **Data Sheet**

Part A – PipeLiner 5000 PW Iso, Part # 60260 Part B – PipeLiner 5000 PW Resin, Part # 60265

### **DESCRIPTION:**

PipeLiner 5000 PW is a two-component, 1:1 ratio, rapid curing, elastomeric structural lining system developed for high build applications. Specifically designed for potable water applications, PipeLiner 5000 PW has passed the rigorous testing requirements of the NSF/ANSI 61 Section 5 for pipes with a minimum diameter of 10" or larger, and tanks 20k gallons or larger 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.

#### **TYPICAL USES:**

- Excellent lining for potable water tanks, aqueducts 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
- High build cross sections
- 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 with proper surface preparation, including metals, woods, concrete, fiberglass and geotextiles
- 100% solids, zero VOCs, no solvents



HEMICAL 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		72 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).			

YPICAL 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
Density (lb/ft3)	ASTM D-1622	69 – 70

#### PIPELINER™ 5000 PW

TYPICAL PHYSICAL PROPERTIES (continued):	Test	Result	
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 - Tg (°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	

<sup>\*\*</sup>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.

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

Process Temperatures and Relative Humidity

Iso Component	Resin Component	Hoses
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" (60 mil; 1.5mm) up to unlimited thickness

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

**CHEMICAL RESISTANCE:** PipeLiner 5000 PW 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.

**SURFACE PREPARATION:** Apply Rhino PipeLiner 5000 PW only to clean, dry, sound surfaces free of loose particles or other foreign matter. A primer may be required, subject to type and/or condition of the substrate. Consult technical service personnel for specific primer recommendations and substrate preparation procedures.

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 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 PW 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.

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