

Rhino RPF 3.0 3lb. Rigid Pour Foam Data Sheet

Part A - Rhino RPF 3.0 FR Iso - Part # 60950 Part B - Rhino RPF 3.0 FR Resin - Part # 60951

DESCRIPTION:

Rhino RPF 3.0 is a water-blown, closed cell, polyurethane molding foam. Rhino RPF 3.0 has a nominal density of 3.0 pounds per cubic foot. It is ideal for use in furniture moldings, decorative wood replications and industrial applications. When cast, Rhino RPF 3.0 expands to fill the mold and flows into intricate cavities reproducing the designed article each time.

TYPICAL USES:

- Furniture moldings
- Structural moldings
- Aquatic features
- Mold patterns
- Modeling

FEATURES & BENEFITS:

- 100% solids, low VOCs
- Adheres to any sound surface
- Immediate bond

CHEMICAL PROPERTIES:	Test	Isocyanate (A)	Resin (B)
Specific Gravity (grams/cc)	ASTM D-792	1.2	1.07 - 1.10
Viscosity, CPS @ 77° F (25	° C)	200 ± 50	325 ± 100
Solids by Volume/Weight		100%	100%
Volatile Organic Compound	s	0 lbs/gal	0 lbs/gal
Mix Ratio, parts per volum	e	1	1
Mix Ratio, parts per weigh	t	103	100
Color		brown	amber
Shelf Life - Unopened Con	tainers	12 months	6 months

REACTION PROFILE*:

Cream Time, seconds	3 – 9				
Gel Time, seconds	11 – 18				
Rise Time, seconds	12 – 24				
Tack Free, seconds	20 – 30				

*Properties were tested at 77° F (25° C) using hand mix drill and Jiffy Mixer.

TYPICAL PHYSICAL PROPERTIES:

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	Density, Core (pcf)		ASTM D-1622	3.0 ± 0.2
	Tensile Strength (psi)		ASTM D-1623	119
	Flexural Strength (psi)	Rise Parallel to Bean Thickness	ASTM D-790	61
	Flexural Modulus (psi)	Rise Parallel to Bean Thickness	ASTM C-273	1338
	Compressive Strength (psi)	Perpendicular to Rise	ASTM D-1621	284 846
_	Compressive Modulus (psi)	Parallel to Rise	ASTM D-1621	2840
	Shear Strength (psi)	Rise Parallel to Speciman Width Rise Parallel to Speciman Thickness	ASTM C-273 ASTM C-273	56 63
	Closed-Cell Content (%)		ASTM D-2856	>95%
	Tumbling Friability (in/lb)	20 minutes	ASTM C-421	8.2
	Water Absorption (%)		ASTM D-2842	1.9

Rhino RPF 3.0 FR (continued):

SURFACE BURNING CHARACTERISTICS:	Test	Result	
Fire Rating	ASTM E-84	non-rated	
Flame Spread Index	ASTM E-84	non-rated	
Smoke Development Index	ASTM E-84	non-rated	

PROCESS TEMPERATURE AND ENVIRONMENT CONDITIONS: The system settings required to achieve quality molding application will vary depending on environmental and mold conditions. The following recommended parameters will help ensure optimum molding quality.

PREPARATION: While prepping equipment, heating drums and re-circulating, agitate the 'B' component mildly using a pneumatic or equivalent performing mixer. Mild agitation may be necessary, not to exceed 4 hours per day.

APPLICATION INSTRUCTIONS: Rhino Rpf 3.0 must be installed by approved contractors who have successfully completed an approved training program, or Rhino Linings approved field certification program which covers proper application techniques, environmental health and safety.

If used in buildings, Rhino Rpf 3.0 must be separated from the interior of habitable spaces of buildings by ½" (12.7 mm) gypsum or equivalent 15 minute thermal barrier. This product is not intended for use in residential or commercial structures. When flushing or purging lines, never spray polyurethane foam into large, thick piles as the heat generated during the curing process can cause spontaneous combustion. Before adding additional foam, ensure that the core temperature is less than 150° F (66° C).

HOW SUPPLIED: Shipping weight per set is 1,040 pounds (472 kg). A set of Rhino Rpf 3.0 consists of one (1) 55 gallon (208 L) drum of 'A' component and one (1) 55 gallon (208 L) drum of 'B' component.

STORAGE: Rhino Rpf 3.0 should be stored between 60 - 90° F (15.6 - 32.2° C) out of direct sunlight.

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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