



Rhino™

Rhino™ 5001 Impact Resistant High Gloss Epoxy System Data Sheet



ISO 9001:2000
FM62236

DESCRIPTION:

Rhino 5001 is a hydrogenated, premium quality, high gloss coating system. It contains no solvents (100% solids, zero VOC) or carcinogens and has minimal odor to assure low toxicity and ease of application. Rhino 5001 has a unique toughened quality (urethane effect) that makes an aesthetically impact resistant system and color retention for exterior use. The viscosity is well suited for self-leveling applications. This system also has excellent chemical, and abrasion resistance.

SUGGESTED USES:

- Floor coatings
- Urethane replacement (indoors)
- UV stable applications

TECHNICAL DATA:

Solids by Volume	100%
Volatile Organic Content (VOC)	0 lbs./gal
Mixing Ratio	2:1 by volume
Viscosity	3,000 cps
Pot Life at 77°	60 – 70 min
Application Temperature	55°F minimum, 100°F max
Maximum Re-coat Time at 77°F	73 hours
Dry To Touch at 77°F	8 – 9 hours
Light Traffic at 77°F	24 – 36 hours
Full Cure at 77°F	7 Days

Complies with ACI Standard 503.1 - 4 and ASTM C-881-90 Type I, II, IV, V, VI and VII. Grade 2, Class B, C, D, E and F. Cures in presence of moisture and humidity. Resin non-crystallizing.

PHYSICAL PROPERTIES OF CURED SYSTEM (CURED 7 DAYS AT 77°F):

Compressive Strength (psi)	12,000 – 14,000	ASTM D695
Flexural Strength (psi)	13,000 – 13,500	ASTM D790
Tensile Strength (psi)	7,500 – 8,500	ASTM D638
Tensile Elongation (%)	4.3	ASTM D638
HDT (F)	190	ASTM D648-264
Bond Strength (psi) to concrete	>400, w/ 100% concrete failure	
Water Absorption (% gain) 24 hrs	< 1	
Shore D Hardness	78	

HOW SUPPLIED:

FOB San Diego, CA. Rhino 5001: 15 gallon and 165 gallon kits.

DIRECTIONS FOR USE:

Follow general surface preparation and application procedures specified in ACI 503.1-4.

CONDITIONS TO AVOID:

- Do not apply to concrete less than 30 days old.
- Do not apply to concrete with curing or sealing membranes.
- Do not apply to base concrete at a temperature less than 50°F

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SURFACE PREPARATION OF RHINO™ 5001:

Concrete surfaces must be structurally sound and free from contaminants such as dust, oil or dirt. Surfaces must be shot blasted or mechanically abraded to achieve a minimum 5-mil profile. Coated surfaces must be mechanically cleaned and abraded with 60 – 80-mesh. A calcium chloride “dome” test is recommended and hydrostatic pressure must be <5 psi before epoxy coating application. Free-standing water must be removed.

MIXING:

Thorough and complete mixing is critical, a Jiffy mixer is recommended. First mix each component separately. Proportion each component at the ratio of 2 parts A (resin) to 1 part B (hardener) by volume or, if using 1-gallon kits, pour all of Part B (hardener) into Part A (resin) and mix at 400 – 600 RPM for 3 – 5 minutes. Use an up and down motion, scraping the mixing container sides and bottom. Mix no more material than may be applied in 20 minutes. Good material mixing is critical.

PRIMING:

Best results are obtained using Rhino 1500 series H2O based epoxy primers first. 1500 series should be applied at a rate of 250 – 300 sq. ft. per gallon.

FLOOR COATINGS:

Rhino 5001 is an excellent bonding, medium viscosity, chemically resistant protective floor coating. It is a moisture insensitive coating, which holds a “high gloss” when applied at up to 100 mils using a neoprene squeegee. It will not crater or blush, and dries to a high gloss. Rhino 5001 will protect concrete in areas where high concentrations of traffic are used.

SAFETY PRECAUTIONS:

Health Considerations: Consult the Rhino Linings® Material Safety Data Sheets.

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product MSDS 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. Because of numerous factors affecting results, **Rhino Linings Corporation makes no warranty of any kind, express or implied**, other than that the material conforms to its applicable current Standard Specifications. Rhino Linings Corporation hereby disclaims any and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of Rhino Linings Corporation for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.

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