



# Rhino™ 3102 Fast 4:1 Epoxy Hardener Data Sheet



ISO 9001:2000  
FM62236

## DESCRIPTION:

Aliphatic base hardener. Fast setting, even in thin films. Good low temperature cure. High HDT with post cure. Excellent chemical resistance. Fast wetting of fiberglass reinforcements. Easy to use 4:1 mix ratio. 100% solids and DOT non-regulated.

## SUGGESTED USES:

Hand lay up laminating, marine construction, tooling, fairing compounds, "hot" coating or sealing of wood or porous substrates, chemically resistant coatings.

## PROPERTIES OF RHINO 3102 HARDENER (neat):

Viscosity at 77° F, cps	1,500
Weight per Active H	50
Color (Gardener)	6
Weight Per Gallon	9.0lbs
Mix Ratio, Parts Per 100 of Resin	22 by weight (4:1 volume)
Gel Time (150 grams)	11 – 15 minutes
Thin Film set Time, hours	2.0-2.5

## PROPERTIES WHEN CURED WITH RHINO 1301, 1310-L and 1316 RESINS:

(Cure schedule: Gel at ambient + 2 hours at 212°F or 7 days at 77°F)

HDT, °F	195	ASTM D648-264
Barcol Hardness	83	
Flexural Strength, psi	17,900	
Flexural Modulus, psi	377,000	
Tensile Strength, psi	9,450	
Tensile Modulus, psi	493,000	
Elongation %	4.5	

## HOW SUPPLIED (net weights):

FOB San Diego, CA. Rhino 3102: 2lb Quarts, 8lb Gallons, 40lb Pails and 450lb Drums.

## 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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Hardener - Rhino™ 3102