



# Rhino™ 1391 Toughened Epoxy Resin Data Sheet



ISO 9001:2000  
FM62236

## DESCRIPTION:

Medium viscosity, toughened, undiluted, extended pot life epoxy resin with excellent physical properties. Fast wetting of reinforcement materials. Use 1391 where resistance to cracking and increased impact resistance is desirable. 100% solids, highly resistant to crystallization in cold environments. No VOCs and DOT non-regulated.

## SUGGESTED USES:

Filament winding, other epoxy/fiberglass applications where extended pot life, additional toughness, crack resistance and high impact strength are desired.

## PROPERTIES OF RHINO 1391 RESIN (neat):

Viscosity:	2,800 – 3,400cps
EEW:	177 – 185
Color:	Gardner 1 max
Weight/Gal:	9.6 – 9.7lbs

## MIXING:

Recommend Rhino 1391 be used at slightly elevated temperature 85° – 110°F (product use temperature). Storage below 45°F is not recommended due to potential crystallization of the product (requiring re-heating to restore original viscosity). All standard epoxy curing agents are compatible with Rhino 1391, so proportion resin and hardener in accordance with the selected hardener system's recommended mix ratio. Mix resin and hardener for 3 – 5 minutes being certain to scrape the bottom and sides of the mixing container. Mix no more material than may be applied before the expiration of the pot life.

## CURING:

Refer to the selected curing agent's data for specific cure schedules and profiles.

## HOW SUPPLIED:

3000lb totes (net weight) and 500lb drums (net weight). FOB San Diego, CA.

## 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.

©2009 Rhino Linings Corporation. All rights reserved.



**Rhino Linings Corporation**  
9151 Rehco Road, San Diego, CA 92121  
858-450-0441 • Fax 858-450-6881  
1-800-422-2603  
www.rhino linings.com

Rhino Linings Australasia Pty Ltd ..... +61 7 5585 7000  
(Asia and Australia)  
Rhino Linings Canada, Inc ..... 1-866-447-1471  
Rhino Linings Europe ..... +49 6103 936474  
(Africa, Europe and Middle East)  
Rhino Linings Latin America..... +52 55 5632 0195  
(Mexico, Caribbean, Central and South America)

5513 081409

Resin - Rhino™ 1391