



Rhino™ 3176

Safety 4:1 Press Molding Hardener

Data Sheet



ISO 9001:2000
FM62236

DESCRIPTION:

Modified polyamide/polyamine hardener. 12 minute cycle time at standard process temperatures. Excellent bonding to difficult substrates. Fast wetting of fiberglass reinforcements. Easy to use 4:1 volumetric mix ratio. Excellent flexibility when used in sub-zero environments (on-snow applications). Low toxicity, low odor system. 100% solids. Ships DOT non-regulated.

SUGGESTED USES:

Press molded parts such as snow-skis, water-skis, snowboards, etc.

PROPERTIES OF RHINO 3176 HARDENER (neat):

Viscosity at 77°F, cps	250 – 400
Color (Gardener)	4
Weight Per Gallon	8.8lbs
Mix Ratio, Parts Per 100 Resin	22 by weight (4:1 volume)
Gel Time at 77°F (100 grams)	25 – 30 minutes
Thin Film Set Time at 175°F	12 – 14 minutes

TYPICALLY CURED PROPERTIES W/ 1301 RESIN:

(Cure schedule: Gel at ambient + 2 hours at 100°F or 7 days at 77°F)

HDT (°F)	185	ASTM D648-264
Shore D Hardness	85	
Flexural Strength, psi	18,560	
Tensile Strength, psi	9,750	
Elongation %	4.5	

HOW SUPPLIED (net weights):

FOB San Diego, CA. Rhino 3176: 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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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)

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