

Part A - RhinoCast[™] 11-90 Iso - Part #60803
Part B - RhinoCast[™] 11-90 Resin - Part #60805

DESCRIPTION

RhinoCast[™] 11-90, a two component urethane is formulated as a low durometer (Shore A), potting, casting and encapsulating compound with gel times from 8 minutes \pm 2 minutes depending on film thickness. The material is engineered to provide excellent hydrolytic stability and low moisture permeability. It has outstanding thermal cycling properties, low glass transition temperatures and low embedment stress to sensitive electronic components.

This unique urethane formulation will maintain its integrity over a wide operating temperature range, -40°C to 100°C. The low glass transition temperature of -40°C makes this urethane ideal for low temperature potting applications.

FEATURES AND BENEFITS

- Maintains Flexibility at Low Temperatures
- Low Stress on Sensitive Components
- Unaffected by Moisture at High Temperatures
- Thermal Cycling Stability
- Hydrolytic Stability

CHEMICAL PROPERTIES	ISOCYANATE	RESIN	TEST
Specific Gravity (grams/cc)	1.18	1.09	ASTM D-792
Viscosity, CPS at 77°F (25°C)	60 \pm 25	<100	
Weight per Gallon	9.81	9.11	
Mix Ratio, Parts per Volume	1	1	
Solids by Volume	100%	100%	
Solids by Weight	100%	100%	
Volatile Organic Compounds	0 lbs/gal	0 lbs/gal	
Shelf Life - Unopened Containers	12 Months	6 Months	
Base Color	Amber	Black	

TYPICAL PHYSICAL PROPERTIES	RESULT	TEST
Hardness (Shore A)	80 \pm 5	ASTM D-2240
Tensile Strength (psi)*	>1,000	ASTM D-412
Elongation (%)*	>200	ASTM D-412
Tear Resistance Die C*	>200	ASTM D-624
Gel Time	8 mins @ 80°F \pm 3°F	

*Properties were checked on RhinoCast[™] 11-90 polyurethane sample, 1/8" (125 mils), (3.18 mm) thick stock.

APPLICATIONS

- Stable from -40°F (-40°C) to 257°F (125°C)
- Elastomeric properties allow for application to surfaces subject to vibration, expansion, contraction, movement, flexing, abrasion and impact
- Casting material for material handling equipment such as chutes, hoppers, rollers, etc.
- Best used on level, horizontal surfaces due to the extended gel time

STORAGE

Store both components at 75-85°F in original containers. If the containers are opened and the contents partially used, the material left in the container should be blanketed with dry nitrogen before sealing.

(continued)

CHEMICAL RESISTANCE

Good resistance to many routine chemicals such as: weak acids, weak alkalis, oils and cleaning agents. For specific applications and/or information, consult with a Rhino Linings® representative.

SUBSTRATES

Metals, wood, concrete, fiberglass and geotextiles

CASTING THICKNESS RANGE

Varies based on application. Thickness can vary from a minimum of 1/16" (62.5 mils; 1.5 mm) to unlimited thickness. Product gel time decrease with increase film thickness.

SAFETY PRECAUTIONS

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

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. 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
9747 Businesspark Avenue, San Diego, CA 92131
858-450-0441 • Fax 858-450-6881
1-800-422-2603
www.rhino linings.com