Rhino Linings®

SolarMax™ 11-55 TC
DATA SHEET

Part A SolarMax™ 11-55 TC TC ISO – Part # 60302
Part B SolarMax™ 11-55 TC Resin – Part # 60304

DESCRIPTION:
SolarMax 11-55 TC is a two-component, 100% solids (no VOCs, no solvents), exothermic, rapid curing, polyaspartic polyurea lining system. SolarMax is based on aliphatic chemistry which has excellent color and gloss stability. Specifically designed for thin coat applications, this product can be applied at 12 mils up to unlimited thickness. With excellent self-leveling properties and the ability to be sprayed smooth or textured, SolarMax combines the durability of a tough polyurea elastomer with excellent color and gloss stability of a topcoat into one product.

TYPICAL USES
- Applications requiring a color stable impact and abrasion resistant lining
- Excellent protective lining for abrasion, impact and corrosion resistance
- Spray-on application creates a monolithic, seamless lining which conforms to any shape and size.
- Tough, durable lining for military applications such as:
  - Tactical vehicles and equipment requiring abrasion, corrosion and impact protection
  - High tensile and tear resistance properties

FEATURES & BENEFITS:
- Excellent weather resistance
- Excellent color and gloss retention for both light and dark colors
- Excellent impact resistance
- Excellent abrasion resistance
- Excellent corrosion resistance
- Good chemical resistance
- Excellent flexibility
- High tensile strength and tear strength
- 12mils – unlimited thickness
- Full cure in 24 hours

CHEMICAL PROPERTIES:	Standard Test	Isocyanate (A)	Resin (B)
Specific Gravity	ASTM D-792	1.12 ±0.02	1.02 ± 0.02
Viscosity, CPS at 80°F (26.7°C)		500 – 600	200 – 250
Solids by Volume/Weight		100%	100%
Volatile Organic Compounds		0 lbs/gal	0 lbs/gal
Mix Ratio, Parts per Volume		1	1
Mix Ratio, Parts per Weight		9.33	8.51
Gel Time, Seconds at 77°F (25°C)		6-10	
Tack-free, Seconds		30-50	
Odor		Slight musty	
Shelf Life - Unopened Containers		12 months	12 months

TYPICAL PHYSICAL PROPERTIES*:	Test	Result
Hardness (Shore D)	ASTM D-2240	55 ± 5
Tensile Strength at (0°C)*	ASTM D-412	3000 ± 300
Elongation at (0°C)*	ASTM D-412	30 ± 5
Tensile Strength at (25°C)*	ASTM D-412	2800 ± 300
Elongation at (25°C)*	ASTM D-412	30 ± 5
Tensile Strength at (50°C)*	ASTM D-412	2300 ± 300
Elongation at (50°C)*	ASTM D-412	17 ± 5
Tear Resistance (pli) Die C*	ASTM D-624	650 ± 75
Water Vapor Transmission	ASTM E-96 Method A	0.123 ± 0.02

*Properties were checked on sprayed lining samples, ⅛" (125 mils), (3.18 mm) thick stock.

(continued):

SOLARMAX 11-55 TC *(continued)*:

PROCESSING CHARACTERISTICS: Test samples were sprayed using the following.

Equipment Used	Process Pressure	Spray Gun	Mix Module
Graco Reactor EXP-1 R3	2500 psi (static) / 1900 – 2000 psi (dynamic)	Fusion - Air Purge	AR2929

PROCESS TEMPERATURES : The system settings required to achieve quality lining application will vary depending on environmental and substrate conditions. The following recommended parameters will help ensure optimum lining quality.

Isocyanate Temperature (A)	Resin Temperature (B)	Hoses - High Pressure	Substrate Surface
150º – 160°F (66° – 71°C)	150º – 160°F (66° – 71°C)	150ºF (66 °C)	60° – 110°F (15° – 43°C)

DRY FILM THICKNESS: Varies based on application, typically a minimum of 12 mils up to unlimited thickness.

SUBSTRATES: Can be applied to any surface that has been properly prepared.

COLOR OPTIONS: Full range of colors.

HOW SUPPLIED: Net weight per set is 910 pounds (412.7 kg). A set of SolarMax consists of one (1) 55 gallon (208 L) drum of 'A' component and one (1) 55 gallon (208 L) drum of 'B' component. Also available in pony drums, hedpacks and cartridges.

STORAGE: Store in sealed containers at 60° – 90°F (16° – 32°C) in a dry area.

Contact Rhino Linings Technical Support at (800) 747-6966 for additional questions.

SAFETY PRECAUTIONS: HEALTH CONSIDERATIONS: Consult the Rhino Linings Safety Data Sheets (SDS)
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.

Rhino Linings®

Rhino Linings Corporation
9747 Businesspark Avenue, San Diego, CA 92131
858-450-0441 | Fax 858-450-6881
800-422-2603
rhinolinings.com