

Rhino 311 DTM - Part # 50528

DESCRIPTION: Rhino 311 DTM epoxy is a low VOC, three-component primer/sealer offering excellent direct-to-metal adhesion and corrosion protection over properly cleaned steel, stainless steel, aluminum and other substrates. The system offers flexibility greater than standard epoxy primers and requires no induction time. This low VOC DTM epoxy primer/sealer is designed for application over bare steel or aluminum substrates and can be top coated as soon as 30 minutes after applying.

FEATURES & BENEFITS:

- No induction time required
- Low VOCs
- Excellent direct to metal adhesion

CHEMICAL PROPERTIES:

	Result
Viscosity (sprayable) Gardener #2 Zahn Cup (ISO calibrated)	18 – 20 sec
VOC (max)	2.10 lbs/gal (0.25 kg/l)
Ready to Spray Volume Solids	48.28%
Mix Ratio, parts per volume	3 : 1 : 1
Pot Life @ 70°F (21°C)	12 hours (when using thinner)
Recoat*	48 hrs without scuffing
Glass Slick (min)*	10
Topcoat (min)*	45
Tack-free/solid (hrs)*	1.5
Sandable (hrs)*	1.5
Dry to Touch (hrs)*	1.5
Walk on time (hrs)*	1.5
Dust Free (hrs)*	2
Tape Free (hrs)*	2
Dry to Sand (hrs)*	2
Force Dry to Sand (min)*	45 @ 160°F (71° C) or 30 @ 180°F (82° C)
Coverage (per kit)	774 sqft (71 sm) @ 1 mil dft
Color	resin hardener thinner
	clear gray clear

*Air dry at 75°F (24°C) and 25% relative humidity and 2.0 – 2.5 mils. Dry times will be extended by thicker films, low temperature or high humidity.

TYPICAL PHYSICAL PROPERTIES:

	Result
Flexibility (1/8" conical mandrel)	Pass
Impact Resistance (direct to 80 in-lbs)	Pass
Humidity – 100 hrs	Pass
Salt Spray - 1000 hrs	Pass
Gloss Holdout (at 15 – 30 min recoat)	Excellent

PROCESSING CHARACTERISTICS:

Equipment – Gun Type	Nozzle	Air Pressure
Conventional Siphon Feed	1.3 – 1.5 mm	55 – 65 psi
Conventional Gravity Feed	1.3 – 1.5 mm	55 – 65 psi
Conventional Pressure Feed	0.8 – 1.1 mm	55 – 65 psi
HVLP Gravity Feed	1.3 – 1.5 mm	8 – 10 psi at cap
HVLP Pressure Feed	0.8 – 1.1 mm	8 – 15 oz/min, 8 – 10 psi at cap

DRY FILM THICKNESS: Recommended thickness is 2.0 – 2.5 mils

RHINO® 311 DTM (continued):

SURFACE PREPARATION: Wash surfaces with a mild detergent in hot water. Rinse well and wipe dry with a lint free clean cloth. Solvent clean with the appropriate solvent cleaner, and wipe dry with a clean cloth. Abrade repair area to remove paint and all rust as needed. Apply filler to clean bare metal as needed. Sand all areas to be refinished with 320-grit sandpaper and featheredge all broken film areas.

MIXING INSTRUCTIONS:

- 3 parts Rhino 311 DTM resin
- 1 part Rhino 311 DTM hardener
- 1 part Rhino 311 DTM thinner

Stir Rhino 311 DTM hardener thoroughly and strain prior to mixing with resin and thinner. Mix by volume: 3 parts Resin with 1 part Hardener and 1 part Thinner. Stir or shake the three components thoroughly before application. For a high solids alternate mix ratio to fill blast profiles, mix 3 parts Resin with 1 part Hardener and 0.5 part Thinner. When using thinner, pot life of primer at 70° – 80°F (21° – 27° C) is 4 hours.

APPLICATION GUIDE: For pressure/siphon feed, apply 2 medium coats at a gun distance of 8 – 10 inches. Spray to hiding. For HVLP, apply 1 full wet coat with 50% overlap, applying the second coat in a cross-hatch method. Rhino 311 DTM primer may be recoated up to 72 hrs without scuffing. Solvent wipe for all top coats is recommended. After 3 days, scuff sand with 320 grit or finer sandpaper and solvent wipe to insure proper adhesion.

NOT RECOMMENDED FOR: Not for use for immersion services. Not for use on surfaces with extended surface temperatures of 250° F (121° C) or more. Do not apply on surfaces with temperature below 60° F (15 °C)

SUBSTRATES:

Cold rolled steel	SMC
Hot rolled steel	IMC
Aluminum	ED5050 E-Coat
Fiberglass	Body filler
Stainless steel	

HOW SUPPLIED: 3 component kit

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.

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