



PRODUCT PROFILE

GENERIC DESCRIPTION Aromatic Polyurethane, Mio-Zinc Filled Primer

COMMON USAGE Specially formulated, one-component, moisture-cured, micaceous iron oxide and zinc filled primer that offers superior bonding to marginally prepared rusty steel and tightly adhered old coatings. This high performance primer is ideal for corrosion resistance with a triple barrier mechanism of zinc, mio and urethane resin built into the dry film. It is suitable as a corrosion resistant primer under certain fireproofing systems. Contact your Tnemec representative for specific information.

COLORS Grayish-Green

SPECIAL QUALIFICATIONS UL classified in accordance with UL 263 (ASTM E119). Meets material adhesion test ASTM E 736 for use under various fire -resistive products. Contact your Tnemec representative for specific information. Meets AISC requirements for Class B surface with a mean slip coefficient no less than 0.50 and tension creep not in excess of .005 inches (.13 mm) (SSPC-SP5/NACE 1 and SSPC-SP3). **Note:** Using other products as primers or topcoats voids AISC requirements.

PERFORMANCE CRITERIA Contact your Tnemec representative for specific test results.

COATING SYSTEM

PRIMERS Self-priming

TOPCOATS Series 25, 27, 35, 66, N69, N69F, 73, 113, 114, 115, 161, 1028, 1029, 1074 & 1075.
Note: If Series 394 is exterior exposed for 1 year or more it must be scarified or recoated with itself before topcoating. Scarification or recoating with itself is required if the Series 394 has been exterior exposed for 3 days or longer and Series 113 is the specified topcoat. **Note:** Series 25, 35 and 115 require the use of Series 44-900 adhesion promoter when topcoating Series 394. **Note:** Certain topcoat colors may not provide one coat hiding depending on method of application. Contact your Tnemec representative.

SURFACE PREPARATION

STEEL **Enclosed or Fireproofed:** SSPC-SP3 Power Tool Cleaning.
Moderate Exterior Exposure: Abrasive blast cleaning generally produces the best coating performance. If conditions won't permit this, Series 394 may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces.
Immersion & Severe Exposure: SSPC-SP10/NACE 2 Near-White Blast Cleaning.
Slip Critical Connections: SSPC-SP5/NACE 1 White Metal Blast Cleaning or SSPC-SP3 Power Tool Cleaning.

ALL SURFACES Must be clean and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS 61.0 ± 2.0% (mixed)

RECOMMENDED DFT 2.5 to 3.5 mils (65 to 90 microns) per coat.

CURING TIME Without 44-710

Temperature †	To Touch	To Handle	To Recoat
70°F (21°C)	1/4 hour	1 1/2 hours	2 hours
60°F (16°C)	1/4 hour	2 3/4 hours	2 3/4 hours
50°F (10°C)	1/4 hour	5 hours	5 hours

† 50% Relative Humidity. Curing time will vary with surface temperature, humidity and film thickness.
Note: When recoating Series 394 with topcoats other than itself, the minimum recoat time is 16 hours.

With 44-710: The use of 44-710 can greatly reduce recoat times. Reference the 44-710 Urethane Accelerator product data sheet. **Note:** 44-710 Accelerator must be used when the surface temperature falls below 50°F (10°C).

VOLATILE ORGANIC COMPOUNDS **Unthinned:** 2.76 lbs/gallon (330 grams/litre)
Thinned 10% (No. 2 or 3 Thinner): 3.18 lbs/gallon (381 grams/litre)
Thinned 10% (No. 49 Thinner): 2.76 lbs/gallon (330 grams/litre)

HAPS **Unthinned:** 0.00 lbs/gal solids
Thinned 10% (No. 2 Thinner): 1.19 lbs/gal solids
Thinned 10% (No. 3 Thinner): 0.04 lbs/gal solids
Thinned 10% (No. 49 Thinner): 0.00 lbs/gal solids

THEORETICAL COVERAGE 978 mil sq ft/gal (24.0 m²/L at 25 microns). See APPLICATION for coverage rates.

NUMBER OF COMPONENTS One

PACKAGING Five-gallon (18.9L) pails (yielding 3 gallons) and one-gallon (3.79L) cans

NET WEIGHT PER GALLON 21.2 ± 0.60 lbs (9.61 ± .27 kg)

STORAGE TEMPERATURE Minimum 20°F (-7°C) Maximum 110°F (43°C)

TEMPERATURE RESISTANCE (Dry) Continuous 250°F (121°C) Intermittent 300°F (149°C)

SHELF LIFE 12 months at recommended storage temperature.

FLASH POINT - SETA 85°F (29°C)

HEALTH & SAFETY Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product.
Keep out of the reach of children.

PERIMEPRIME® | SERIES 394

APPLICATION

COVERAGE RATES

	Dry Mills (Microns)	Wet Mills (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested	3.0 (75)	5.0 (125)	326 (30.3)
Minimum	2.5 (65)	4.0 (100)	391 (36.4)
Maximum	3.5 (90)	5.5 (140)	284 (26.4)

Allow for overspray and surface irregularities. Wet film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

MIXING

Stir thoroughly making sure no pigment remains on the bottom of the can. Use a power mixer and keep material under constant agitation while mixing.

THINNING

For spray, thin up to 10% or 3/4 pint (380 mL) per gallon with No. 2 Thinner if temperatures are below 80°F (27°C). Thin up to 10% or 3/4 pint (380 mL) per gallon with No. 3 Thinner if temperatures are above 80°F (27°C). For brush or roller, thin up to 10% or 3/4 pint (380 mL) with No. 3 Thinner. **Note:** No. 49 Thinner may be substituted where there are VOC restrictions.

POT LIFE

24 hours at 77°F (25°C) and 50% R.H. **Caution: This product cures with moisture acting as a catalyst. Incorporation of moisture or moisture laden air (humidity) during use will shorten pot life.** The use of a solvent blanket (small addition of solvent that sits atop the paint in the can) can help to retard a reaction with moisture in the container but agitation will have to be done by manual means, taking care to not disturb the solvent or incorporate it into the paint. Avoid continual agitation at high RPM. When feasible keep containers of material covered during use.

APPLICATION EQUIPMENT

Note: When intermediate and finish coats are white or light colors, best hiding of this primer can be achieved by spray application; or when roller applied, by using 1/4" synthetic woven nap covers.

Air Spray

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss † JGA	E	765 or 704	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	40-50 psi (2.8-3.4 bar)	10-20 psi (0.7-1.4 bar)

† (with heavy mastic spring) Low temperatures or longer hoses will require additional pressure. Use pressure pot equipped with an agitator and keep pressure pot at same level or higher than the spray gun. Compressed air must be dry.

Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.017"-0.021" (430-535 microns) Reversible Tip	2400-3000 psi (165-207 bar)	1/4" or 3/8" (6.4 or 9.5 mm)	60 mesh (250 microns)

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

Roller: Use a 1/4" or 3/8" (6.4 mm or 9.5 mm) synthetic woven nap roller cover.

Brush: Use high quality natural or synthetic bristle brushes.

SURFACE TEMPERATURE

Minimum 35°F (2°C) Maximum 120°F (49°C)
The surface should be dry and at least 5°F (3°C) above the dew point. **Note:** Series 44-710 Accelerator must be used if the surface temperature is below 60°F (16°C) and 30% relative humidity, or if the surface temperature is below 50°F (10°C) regardless of humidity level.

AMBIENT HUMIDITY

Minimum 20% Maximum 90%

CLEANUP

Flush and clean all equipment immediately after use with the recommended thinner or xylene.

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