



PERIMEPRIME SERIES 394

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 0250 Greenish-Gray

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 in accordance with RCSC Appendix A 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). Contact Tnemec Technical Service for more information. **Note:** Using other products as primers or topcoats voids AISC requirements.

Series 394 was tested in accordance with, and passed, the California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010 emissions testing and meets qualifications of LEED v4, Collaborative for High Performance Schools, and Living Building Challenge.

PERFORMANCE CRITERIA Contact your Tnemec representative for specific test results.

COATING SYSTEM

PRIMERS Self-priming, 90-97, 90G-1K97

TOPCOATS Series 27, 27WB, 66, 66HS, L69, L69F, N69, N69F, 73, 113, 114, 115, 161, 161HS, 740, 750, 1026, 1028, 1029, 1074, 1074U, 1075, 1075U.
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 115 requires 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. **Note:** Series 394 must be exterior exposed for one day prior to topcoating with 27WB or three days prior to topcoating with 1028 or 1029.

SURFACE PREPARATION

STEEL **Enclosed or Fireproofed:** SSPC-SP3 Power Tool Cleaning (SSPC Rust Grade Condition C). **Moderate Exterior Exposure:** Abrasive blast cleaning to SSPC-SP6/NACE 3 Commercial Blast Cleaning generally produces the best coating performance for this exposure. If conditions won't permit this, Series 394 may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces (SSPC Rust Grade Condition C). **Immersion & Severe Exposure:** SSPC-SP10/NACE 2 Near-White Blast Cleaning. **Slip Critical Connections:** SSPC-SP6/NACE 3 Commercial Blast Cleaning or SSPC-SP3 Power Tool Cleaning (SSPC Rust Grade Condition C).

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 Topcoat
75°F (24°C)	1/4 hour	1 1/2 hours	16 hours
65°F (18°C)	1/4 hour	2 3/4 hours	16 hours
55°F (13°C)	1/4 hour	5 hours	20 hours

† 50% Relative Humidity. Curing time will vary with surface temperature, humidity and film thickness.
Note: When recoating Series 394 with itself, the minimum recoat time is 2 hours at 70°F (21°C).

With 44-710: The use of 44-710 can greatly reduce dry to handle cure times. **Note:** 44-710 Accelerator must be used when the surface temperature falls below 50°F (10°C).

VOLATILE ORGANIC COMPOUNDS **Unthinned:** 2.05 lbs/gallon (246 grams/litre)
Thinned 10% (No. 49 Thinner): 2.05 lbs/gallon (246 grams/litre)

HAPS **Unthinned:** 0.75 lbs/gal solids
Thinned 10% (No. 49 Thinner): 0.75 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 pail yielding 3 gallons (11.4 L) and one-gallon can yielding 0.95 gallons (3.6 L)

NET WEIGHT PER GALLON 21.36 ± 0.60 lbs (9.70 ± .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 90°F (32°C)

PERIMEPRIME | SERIES 394

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

APPLICATION

COVERAGE RATES

	Dry MILS (Microns)	Wet MILS (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)	280 (26.0)

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, brush or roller, thin up to 10% or 3/4 pint (380 mL) per gallon with No. 49 Thinner.

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)	50-60 psi (3.4-4.1 bar)	15-25 psi (1.0-1.7 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) high quality 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 35°F to 60°F (2°C to 16°C) and 20% to 40% relative humidity, or if surface temperature is below 50°F (10°C) regardless of humidity.

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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