



TNEME-ZINC 90G-1K97

PRODUCT PROFILE

GENERIC DESCRIPTION Aromatic Polyurethane, Zinc-Rich

COMMON USAGE An advanced technology, single-component, moisture-cured, zinc-rich primer providing extraordinary performance, user-friendly and easy application. Also used for field touch-up of inorganic zinc coating.

COLORS Greenish-Gray

ZINC PIGMENT 83% by weight in dried film

SPECIAL QUALIFICATIONS 90G-1K97 Tnemec-Zinc uses a pigment which meets the requirements of **ASTM D 520 Type III** and contains less than .002% lead. This level qualifies it to be classed as "non-lead" (less than 0.06% lead by weight) as defined in Part 1303 of the Consumer Product Safety Act Regulations. Conforms to **SSPC Paint 20, Type II**.

COATING SYSTEM

TOPCOATS Series 1, 6, 27, 46H-413, 66, L69, L69F, N69, N69F, V69, V69F, 73, 84, 104, 113, 114, 115, 135, 161, 290, 291, 394, 1028, 1029, 1070, 1071, 1072, 1074, 1074U, 1075, 1075U, 1077, 1078. **Note:** Certain topcoat colors may not provide one-coat hiding depending on method of application. Contact your Tnemec representative. **Note:** Series 115 must be used as an intermediate coat if Series 35 is the specified topcoat. **Note:** Series 90G-1K97 must be exterior exposed for three days prior to topcoating with Series 1028 or 1029.

SURFACE PREPARATION

ALL SURFACES **Severe Exposure:** SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum angular anchor profile of 1.5 mils. **Moderate Exposure:** SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 1.5 mils.

TECHNICAL DATA

VOLUME SOLIDS 62.0 ± 2.0%

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

CURING TIME

| Temperature † | To Handle | To Recoat |
|---------------|-----------|-----------|
| 75°F (24°C) | 2 hours | 8 hours |
| 55°F (11°C) | 4 hours | 12 hours |
| 35°F (2°C) | 6 hours | 16 hours |

† 50% relative humidity. Curing time varies with surface temperature, air movement, humidity and film thickness. **Ventilation:** When used in enclosed areas, provide adequate ventilation during application and cure. **Note:** For faster curing and low-temperature applications, add No. 44-710 Urethane Accelerator (see separate product data sheet).

VOLATILE ORGANIC COMPOUNDS

Unthinned: 2.75 lbs/gallon (330 grams/litre)
Thinned 2.5%: 2.86 lbs/gallon (343 grams/litre)
Thinned 10%: 3.16 lbs/gallon (379 grams/litre)

HAPS

Unthinned: 4.33 lbs/gal solids
Thinned 2.5%: 4.62 lbs/gal solids (No. 2 Thinner); 4.34 lbs/gal solids (No. 3 Thinner)
Thinned 10%: 5.50 lbs/gal solids (No. 2 Thinner); 4.37 lbs/gal solids (No. 3 Thinner)

THEORETICAL COVERAGE

996 mil sq ft/gal (24.4 m²/L at 25 microns). See APPLICATION for coverage rates.

NUMBER OF COMPONENTS

One

PACKAGING

Five gallon (18.9L) pails (yielding three gallons) and one gallon (3.79L) cans.

NET WEIGHT PER GALLON

23.77 ± 0.60 lbs (10.78 ± .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

9 months at recommended storage temperature.

FLASH POINT - SETA

78°F (26°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.

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APPLICATION

COVERAGE RATES

| | Dry MILS (Microns) | Wet MILS (Microns) | Sq Ft/Gal (m ² /Gal) |
|-----------|--------------------|--------------------|---------------------------------|
| Suggested | 3.0 (75) | 5.0 (125) | 332 (30.8) |
| Minimum | 2.0 (65) | 3.0 (75) | 498 (46.3) |
| Maximum | 3.5 (90) | 5.5 (140) | 285 (26.5) |

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.

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 (24°C). For brush or roller, thin up to 10% or 3/4 pint (380 mL) per gallon with No. 3 Thinner. Do not thin more than 2.5% when air pollution regulations limit the atmospheric discharge of volatile organic compounds (VOC) in coatings to a maximum of 340 grams/litre (2.80 lbs/gal).

POT LIFE

24 hours at 77°F (25°C) and 50% R.H.
Caution: This product cures with moisture acting as a curing agent. Moisture and/or high humidity will shorten pot life. **Keep container closed when not in use.**

APPLICATION EQUIPMENT

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

Keep material agitated to prevent settling.

Roller: Use a 1/4" or 3/8" (6.4 mm or 9.5 mm) synthetic nap cover. Stir material frequently or keep under agitation to prevent settling.

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.

AMBIENT HUMIDITY

Minimum 25% R.H. Maximum 95% R.H.

CLEANUP

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

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