



ENDURA-SHIELD® SERIES 72

PRODUCT PROFILE

GENERIC DESCRIPTION	Aliphatic Acrylic Polyurethane
COMMON USAGE	A low VOC coating highly resistant to abrasion, wet conditions, corrosive fumes, chemical contact and exterior weathering. NOT FOR IMMERSION SERVICE.
COLORS	Refer to Tnemec Color Guide. Note: Certain colors may require multiple coats depending on method of application and finish coat color. When feasible, the preceding coat should be in the same color family (blue, gray, etc.), but noticeably different.
FINISH	Gloss

COATING SYSTEM

PRIMERS	Steel: Series 1, 20, 27, 27WB, 37H, 66, L69, L69F, N69, N69F, V69, V69F, 90-97, 91-H ₂ O, 94-H ₂ O, 135, L140, L140F, N140, N140F, V140, V140F, 161, 394, 530 Note: Series 530 exterior exposed more than 24 hours, Series 135 exterior exposed more than two months, or Series N69 or N140 exterior exposed more than three months must first be scarified or reprimed with themselves. Brush blasting with fine abrasive is the preferred method of scarification. Recoat windows for other primers may apply. See those data sheets for additional information.
TOPCOATS	Series 700, 701, 1070, 1071, 1072, 1074, 1074U, 1075U, 1077, 1078, optional when extended weatherability is desired.

SURFACE PREPARATION

ALL SURFACES	Must be clean, dry and free of oil, grease and other contaminants. See primer product data sheet for surface preparation recommendation.
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TECHNICAL DATA

VOLUME SOLIDS	62.0 ± 2.0% (mixed) †
RECOMMENDED DFT	2.0 to 5.0 mils (50 to 125 microns) per coat. Note: Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.

CURING TIME	Temperature	To Touch	To Handle	To Recoat
	75°F (24°C)	1 hour	5-8 hours	12 hours

Curing time varies with surface temperature, air movement, humidity and film thickness. **Note:** For faster curing and low-temperature applications, add No. 44-710 Urethane Accelerator.

VOLATILE ORGANIC COMPOUNDS	Unthinned: 2.04 lbs/gallon (244 grams/litre) Thinned 10% (Max) (No. 39 Thinner): 2.46 lbs/gallon (294 grams/litre) Thinned 10% (Max) (No. 49 Thinner): 2.04 lbs/gallon (244 grams/litre) †
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HAPS	0.00 lbs/gal solids
THEORETICAL COVERAGE	994 mil sq ft/gal (24.4 m ² /L at 25 microns) †

NUMBER OF COMPONENTS Two: Part A and Part B

MIXING RATIO By volume: Four (Part A) to one (Part B)

PACKAGING	PART A (partially filled)	PART B	When Mixed
5 Gallon Kit	5 gallon pail	1 gallon can	3 gallons (11.3L)
1 Gallon Kit	1 gallon pail	1 quart can	1 gallon (3.79L)

NET WEIGHT PER GALLON 11.15 ± 0.25 lbs (5.06 ± .11 kg) †

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

TEMPERATURE RESISTANCE (Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

SHELF LIFE Part A: 12 months at recommended storage temperature.
Part B: 12 months at recommended storage temperature.

FLASH POINT - SETA Part A: 55°F (13°C) Part B: 112°F (43°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.

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APPLICATION

COVERAGE RATES

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested	2.5 (60)	4.0 (100)	398 (37.0)
Minimum	2.0 (50)	3.0 (75)	497 (46.2)
Maximum	3.0 (75)	5.0 (125)	331 (30.8)

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 contents of the container marked Part A, making sure no pigment remains on the bottom. Add the contents of the can marked Part B to Part A while under agitation. Continue agitation until the two components are thoroughly mixed. When used with 44-710 Urethane Accelerator, first accurately add four (4) fluid ounces 44-710 into Part A under agitation; continue as above. Do not use mixed material beyond pot life limits. **Caution: Part B is moisture-sensitive and will react with atmospheric moisture. Keep unused material tightly closed at all times.**

THINNING

For brush or roller, thin up to 10% or 3/4 pint (380 mL) per gallon with No. 39 Thinner or No. 49 Thinner. Thinning is required for proper brush or roller application. **Caution: Do not add thinner if more than thirty (30) minutes have elapsed after mixing.**

POT LIFE

3 hours at 75°F (24°C)

APPLICATION EQUIPMENT

Roller: Use 1/4" to 3/8" (6.4 mm to 9.5 mm) synthetic woven nap roller cover. Do not use long nap roller covers. **Note:** Two coats are required to obtain dry film thickness above 3.0 mils (75 microns).
Brush: Recommended for small areas only. Use high quality natural or synthetic bristle brushes. **Note:** Two or more coats may be required to obtain recommended film thicknesses.

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. Cure time necessary to resist direct contact with moisture at surface temperature: 70°F (21°C): 4 to 8 hours. If the coating is exposed to moisture before the preceding cure parameters are met, dull, flat or spotty-appearing areas may develop. Actual times will vary with air movement, film thickness and humidity.

CLEANUP

Clean all equipment immediately after use with the recommended thinner or MEK.

† Values may vary with color.

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