



# CERAMLON ENV SERIES 84

## PRODUCT PROFILE

- GENERIC DESCRIPTION** Modified Aliphatic Amine Epoxy
- COMMON USAGE** A high-build, ceramic-like coating that provides excellent protection and easy cleaning. May be applied to both steel and concrete providing excellent resistance to abrasion, staining and many chemicals. **NOT FOR IMMERSION SERVICE.**
- COLORS** Refer to Tnemec Color Guide. **Note:** Epoxies chalk with extended exposure to sunlight and will yellow upon aging. Lack of ventilation, incomplete mixing, miscatalyzation or the use of heaters that emit carbon dioxide and carbon monoxide during application and initial stages of curing may accelerate any potential yellowing.
- FINISH** High Gloss. Can vary with texture, porosity of substrate and film thickness.

## COATING SYSTEM

- PRIMERS**
  - Concrete:** Self-priming or Series 63-1500, 66, N69, 216, 218
  - Steel:** Self-priming or Series 66, N69
  - CMU:** 54-660, 130, 216, 230
  - Drywall:** Self-priming, 51-792 or 151-1051. **Note:** Limited to two coats of Series 84 at 3.0 to 5.0 mils DFT per coat.

## SURFACE PREPARATION

- STEEL** SSPC-SP6 Commercial Blast Cleaning
- CONCRETE** Allow new concrete to cure 28 days. SSPC-SP13 Abrasive Blast Cleaning—Concrete surfaces should be abrasive blasted to provide a sound and profiled surface. Reference the SSPC-SP13/NACE 6 Surface Preparation of Concrete and Tnemec's Surface Preparation and Application Guide. Holes, pits, voids and cracks in abrasive blasted concrete should be filled with a suitable filler/surfacer.
- CMU** Allow mortar to cure for 28 days. Level protrusions and mortar spatter.
- ALL SURFACES** Must be clean, dry and free of oil, grease and other contaminants.

## TECHNICAL DATA

- VOLUME SOLIDS** 80.0 ± 2.0% (mixed) †
- RECOMMENDED DFT** 3.0 to 8.0 mils (75 to 200 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 Handle	To Recoat
75°F (24°C)	6-7 hours	7 1/2-8 1/2 hours
45°F (8°C)	24 hours	24 hours

Curing time varies with surface temperature, air movement, humidity and film thickness.

**VOLATILE ORGANIC COMPOUNDS**

**Unthinned:** 1.51 lbs/gallon (181 grams/litre)  
**Thinned 10%:** 2.00 lbs/gallon (240 grams/litre) †

**THEORETICAL COVERAGE**

1,272 mil sq ft/gal (31.2 m<sup>2</sup>/L at 25 microns). See APPLICATION for coverage rates. †

**NUMBER OF COMPONENTS**

Two: Part A and Part B

**PACKAGING**

Five gallon (18.9L) pails and one gallon (3.79L) cans. Order in multiples of 2.

**NET WEIGHT PER GALLON**

14.6 ± 0.25 lbs (6.6 ± .11 kg) (mixed) †

**STORAGE TEMPERATURE**

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

**SHelf LIFE**

12 months at recommended storage temperature.

**FLASH POINT - SETA**

Part A: 85°F (29°C) Part B: 108°F (42°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.**

## APPLICATION

**COVERAGE RATES**

	Dry Mil (Microns)	Wet Mil (Microns)	Sq Ft/Gal (m <sup>2</sup> /Gal)
Minimum	3.0 (75)	4.0 (100)	428 (39.7)
Maximum	8.0 (200)	10.0 (250)	161 (14.9)

Allow for overspray and surface irregularities. 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**

Power mix contents of each container, making sure no pigment remains on the bottom. Pour a measured amount of Part A into a clean container large enough to hold both components. Add an equal volume of Part B to Part A while under agitation. Continue agitation until the two components are thoroughly mixed. Do not use mixed material beyond pot life limits. Unused material must be kept tightly closed at all times. **Note:** Both components must be above 50°F (10°C) prior to mixing. For applications to surfaces between 45°F to 50°F (8°C to 10°C), allow mixed material to stand 20 minutes and restir before using. For optimum application properties, blended components should be above 60°F (16°C).

**THINNING**

Use No. 4 Thinner. For air spray, airless spray or roller, thin up to 10% or 3/4 pint (380 mL) per gallon if necessary.

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**POT LIFE** 2 hours at 45°F (8°C) 1 1/2 hours at 77°F (25°C) 1 hour at 90°F (32°C)

**APPLICATION EQUIPMENT**

**Air Spray**

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss JGA	E	765 or 78	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	60-90 psi (4.1-6.9 bar)	10-20 psi (0.7-1.4 bar)

Low temperatures or longer hoses require higher pot pressure.

**Airless Spray**

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.015"-0.019" (380-485 microns)	2800-3500 psi (193-242 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 3/8" or 1/2" (9.5 mm or 12.7 mm) synthetic nap cover.

**Brush:** Use high quality natural or synthetic bristle brushes.

**SURFACE TEMPERATURE**

Minimum 45°F (8°C) Maximum 135°F (57°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature. Cure time necessary to resist condensation/moisture: 45°F (8°C): 24 hours; 75°F (24°C): 7 1/2 to 8 1/2 hours; 90°F (32°C): 4 hours.

**CLEANUP**

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

† Values may vary with color.

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