



PROTUFF ALUMINUM SERIES 133

PRODUCT PROFILE

GENERIC DESCRIPTION Phenalkamide Aluminum Epoxy Mastic

COMMON USAGE A high-build, aluminum-filled surface tolerant epoxy mastic designed for application over tightly adhered corrosion, marginally prepared steel, and old coatings. Series 133 may be applied at low-temperatures and over dew point conditions and on damp surfaces. The preferred selection for holding back active corrosion and as a basecoat under weather-able and epoxy finishes.

COLORS 1243 Aluminum

FINISH Semi-gloss

COATING SYSTEM

PRIMERS Self-priming

TOPCOATS Series 138, 1094, 1095, 1096. **Note:** The following maximum recoat time applies when using Series 138, 1094, 1095, 1096: twenty one (21) days. If this time limit is exceeded, Series 133 must be uniformly scarified prior to topcoating.

SURFACE PREPARATION

STEEL Minimum surface preparation of bare steel or previously painted steel requires a cleanliness level as defined by SSPC-SP WJ-4/NACE WJ-4 Light Cleaning by use of Low Pressure Water Cleaning (LP WC) between 3,500 and 5,000 psi using a 0 degree rotating nozzle. If all visible contaminants, loose mill scale, loose rust and other corrosion products, and loose paint have not been removed, SSPC-SP2 Hand Tool Cleaning or SSPC-SP3 Power Tool Cleaning should be employed until the surface cleanliness definition is met.

GALVANIZED STEEL & NON-FERROUS METAL Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services.

PAINTED SURFACES Test patch is recommended.

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

TECHNICAL DATA

VOLUME SOLIDS 76% (mixed)

RECOMMENDED DFT 4.0 to 8.0 mils (100 to 205 microns)

CURING TIME

Temperature	To Handle/To Recoat	Max Recoat
90°F (32°C)	4 hours	21 days
75°F (24°C)	12 hours	21 days
65°F (18°C)	16 hours	21 days
55°F (11°C)	24 hours	21 days
45°F (7°C)	48 hours	21 days
35°F (2°C)	72 hours	21 days

VOLATILE ORGANIC COMPOUNDS

Unthinned: 1.63 lbs/gal (195 grams/litre)
Thinned 5% (No. 2 Thinner): 1.89 lbs/gal (227 grams/litre)

HAPS

Unthinned: 1.49 lbs/gal solids
Thinned 5% (No. 2 Thinner): 1.96 lbs/gal solids

THEORETICAL COVERAGE

1220 mil sq ft/gal (29.9 m²/L at 25 microns). See APPLICATION for coverage rates.

NUMBER OF COMPONENTS

Two: Part A (Epoxy) and Part B (Amine)

MIXING RATIO

By volume: Two (Part A) to one (Part B)

PACKAGING

	Part A	Part B	When Mixed
Large Kit	6 gallon pail	3 gallon pail	5 gallons (18.9 L)
Small Kit	1 gallon can	1 gallon can	1 gallon (3.79 L)

NET WEIGHT PER GALLON

12.18 ± 0.25 lbs (5.5 ± .11 kg) (mixed)

STORAGE TEMPERATURE

Minimum 50°F (10°C) Maximum 80°F (27°C)

TEMPERATURE RESISTANCE

(Dry) Continuous 300°F (149°C)

SHELF LIFE

12 months at recommended storage temperatures.

FLASH POINT - SETA

Part A: 92°F (33°C) Part B: 96°F (36°C)

HEALTH & SAFETY

This product contains chemical ingredients which are considered hazardous. Read container label warning and 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)
4.0 (100)	5.0 (125)	305 (28.3)
8.0 (205)	11.0 (280)	152 (14.2)

MIXING

Power mix contents of each container, 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. Do not use mixed material beyond pot life limits. **Note:** Both components must be above 50°F (10°C) prior to mixing. For application to surfaces between 35°F to 60°F (2°C to 16°C), allow mixed material to stand thirty (30) minutes and restir before using. For optimum application properties, blended components should be above 60°F (16°C).

THINNING

Thin up to 5% or 1/4 pint (190 mL) per gallon with No. 2 Thinner.

POT LIFE

1 hour at 75°F (24°C)

SUBSTRATE CONDITIONING

Do not apply over puddles, ponding, or standing water. All standing and heavy accumulations of water must be removed before application. In the case of sweating pipes accumulated water must be removed. Brush, roll, or spray/backroll to displace water and create a monolithic film in direct contact with substrate.

APPLICATION EQUIPMENT

Airless Spray

Pump Size	Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
45:1 or greater	0.017" - 0.021" (430 - 555 microns)	3,000 - 4,100 psi (207 - 283 bar)	3/8" to 1/2" (9.5 mm - 12.7 mm)	60 mesh

Brush: Recommended for small areas only. Use high quality synthetic or nylon bristle brushes.

Roller: Use high quality 3/8" to 1/2" synthetic woven nap roller covers.

SURFACE TEMPERATURE

Minimum 35°F (2°C) Maximum 135°F (57°C)

CLEANUP

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

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