DESCRIPTION

Two component, ultra low VOC, water-based epoxy primer

PRINCIPAL CHARACTERISTICS

- General-purpose epoxy primer
- · Suitable for steel, concrete, galvanized steel, stainless steel, aluminum, and wood substrates
- Low VOC
- Low odor, soap and water clean up

COLOR AND GLOSS LEVEL

- · Light gray
- Matte

Note:

- Epoxy coatings will characteristically chalk and fade upon exposure to sunlight. Light colors are prone to ambering to some extent in interior or exterior exposures

BASIC DATA AT 20°C (68°F)

Data for mixed product		
Number of components	Two	
Volume solids	46 ± 3%	
VOC (Supplied)	max. 20.0 g/l (approx. 0.2 lb/US gal)	
Recommended dry film thickness	2.0 - 4.0 mils (50 - 100 μm) depending on system	
Theoretical spreading rate	368 ft²/US gal for 2.0 mils (9.0 m²/l for 50 μm)	
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry	

Notes:

- See ADDITIONAL DATA Overcoating intervals
- See ADDITIONAL DATA Curing time

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RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Steel

- · Remove weld spatter, protrusions, and laminations in steel
- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
- Abrasive blast with an angular abrasive to an SSPC SP-6 cleanliness or higher for optimum performance. Achieve a surface profile of 1.0 – 2.0 mils (25 – 50 μm)
- For maintenance and repair in atmospheric service, the product can be applied over surfaces prepared in accordance with SSPC SP-2 or SSPC SP-3 (hand and power tool cleaning).

Concrete

- Allow concrete, mortar, plaster, etc. to cure for 30 days or more under normal drying conditions
- · Remove all surface contaminants such as oil, grease, and embedded chemicals
- Abrade surface per ASTM D-4259 to remove all efflorescence and laitance, to expose subsurface voids, and to provide a surface roughness equivalent of 80 grit sandpaper or coarser
- Surface should be free from moisture in accordance with ASTM D4263. Refer to Information Sheet # 1496ACUS for further details regarding moisture measurements
- Slabs on grade should have a maximum moisture content of 3 lbs / 1,000 ft²/24 hours when measured by calcium chloride test

Galvanizing

- Galvanizing that has had at least 12 months of exterior weathering may be coated after preparation in accordance with SSPC-SP1 to remove all contaminants and white rust
- Alternately, power tool clean to uniformly abrade the surface or lightly abrasive blast with a fine abrasive to produce a uniform and dense anchor profile of 1.0 – 2.0 mils (25 – 50 μm)
- New, or otherwise un-weathered galvanized surfaces or galvanized surfaces that have been passivated with a
 chromate treatment must be prepared in accordance with SSPC-SP 16. Coatings may not adhere to chromate
 sealed galvanizing if the chromates are not completely removed

Non-ferrous metals and stainless steel

· Abrasive blast in accordance with SSPC SP-16 guidelines

Wood

- · Surface must be clean dry and sound
- · Knots and pitch streaks must be scraped, sanded, and spot primed before full coat of primer is applied
- All nail holes or small openings must be properly caulked

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Aged coatings and repairs

- Ensure the coating system is sound and well adhered
- . Do not apply over acrylic coatings or coatings that exhibit poor solvent resistance
- A test patch is recommended to determine compatibility and adhesion
- Sweep blast in accordance with SSPC-SP 7 or otherwise thoroughly abrade the existing coating
- Feather the edges of tightly adhered, in-tact coatings at the perimeter of repair areas
- Rusted or otherwise damaged areas should be power tool cleaned in accordance with SSPC-SP 3, feathering the edges of tightly adhered intact coating at the perimeter of repair areas

Substrate temperature and application conditions

- Surface temperature during application should be between 50°F (10°C) and 100°F (38°C)
- Surface temperature during application should be at least 5°F (3°C) above dew point
- Ambient temperature during application and curing should be between 50°F (10°C) and 100°F (38°C)
- Relative humidity during application should be between 0% and 85%

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 4:1

- Pre-mix base component with a pneumatic mixer at moderate speeds to homogenize the container. Add hardener
 to base and agitate with a power mixer for 2-3 minutes until completely dispersed
- Immediately after mixing, the material may appear to increase in viscosity however after the prescribed induction time, the material should be briefly mixed and the viscosity will return to the initial state

Application

- · Area should be sheltered from airborne particulates and pollutants
- Avoid combustion gases or other sources of carbon dioxide that may promote amine blush and ambering of light colors
- Ensure good ventilation during application and curing
- · Provide shelter to prevent wind from affecting spray patterns

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Air spray

· Use standard conventional equipment

Recommended thinner

Tap water

Volume of thinner

0 - 10%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Nozzle pressure

Atomizing pressure 55 - 70 p.s.i. (4.0 - 5.0 bar); Fluid pressure as required

Airless spray

• 30:1 pump or larger

Recommended thinner

Tap water

Volume of thinner

0 - 10%

Nozzle orifice

0.015 - 0.017 in (approx. 0.38 - 0.43 mm)

Nozzle pressure

2000 - 2500 p.s.i. (approx. 138 - 173 bar; 13.8 - 17.2 MPa)

Brush/roller

• Use a high quality polyester/nylon brush and/or a high quality 3/8" nap roller. In hot or dry conditions, layoff lightly rolling with 3/8" nap roller cover. Multiple coats may be required to achieve specified film thickness

Recommended thinner

Tap water

Volume of thinner

0 - 10%

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ADDITIONAL DATA

Overcoating interval for DFT up to 2.0 mils (50 μm)				
Overcoating with	Interval	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	16 hours	6 hours	4 hours
	Maximum	2 months	30 days	14 days

Curing time for DFT up to 2.0 mils (50 µm)				
Substrate temperature	Dry to touch	Dry to handle		
50°F (10°C)	3 hours	16 hours		
77°F (25°C)	1 hour	6 hours		
90°F (32°C)	40 minutes	4 hours		

Pot life (at application viscosity)		
Mixed product temperature	Pot life	
50°F (10°C)	10 hours	
70°F (21°C)	5 hours	
90°F (32°C)	3 hours	

SAFETY PRECAUTIONS

 For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

REFERENCES

• Information sheet | Explanation of product data sheets

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AVAILABILITY OF PACKAGING

Packaging

• 1-gallon and 5-gallon kits

Depending on specific country of application the following versions are available:

Product	Color
98E-99	Hardener
98E-46	Gray Primer Base

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