#### **DESCRIPTION**

Inorganic Zinc Silicate Primer

#### PRINCIPAL CHARACTERISTICS

- >85% zinc in dry film
- VOC Compliant <2.8 lb/ gal
- · Provides outstanding corrosion resistance
- · Good abrasion resistance
- Resistant to dry temperature up to 750°F(399°C)
- Recommended for ISO 12944 C5I and C5M conditions

## **COLOR AND GLOSS LEVEL**

- Green
- Flat

## BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Three
Volume solids	80 ± 4%
VOC (Supplied)	max. 2.7 lb/US gal (approx. 324 g/l)
Temperature resistance (Continuous)	To 750°F (399°C)
Recommended dry film thickness	2.0 - 5.0 mils (50 - 125 μm) depending on system
Theoretical spreading rate	642 ft²/US gal for 2.0 mils (16.0 m²/l for 50 μm)
Shelf life	Liquid: at least 9 months when stored cool and dry Activator: at least 24 months when stored cool and dry Powder: at least 24 months when stored cool and dry

### Notes:

- See ADDITIONAL DATA Overcoating intervals
- See ADDITIONAL DATA Curing time
- Color will drift at elevated temperatures
- Applications up to 6.0 mils (150  $\mu$ m) are acceptable with random spot readings up to 8.0 mils (200  $\mu$ m). For high temperature applications, a maximum of 3.0 mils (75  $\mu$ m) is allowed
- volume solids is based on applied properties and accounts for film porosity

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

• Coating performance is proportional to the degree of surface preparation.

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#### Steel

- Abrasive Blast to SSPC SP-6 or higher with a 1.0-3.0 mil surface profile
- Higher surface profiles up to 5 mils (125 μm) are acceptable, but the product must be applied in a thickness great enough
  to achieve a minimum of 2.5 mils (65 μm) dry film thickness
- Apply this product as soon as possible to avoid rusting of blasted surfaces
- · Keep moisture, oil, grease and other organic matter off surface before coating
- For touch up and repair, power tool cleaning in accordance with SSPC SP-11 is acceptable

## **Substrate temperature and application conditions**

- Surface temperature during application should be between 20°F (-7°C) and 130°F (54°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 20°F (-7°C) and 120°F (49°C)
- Relative humidity during application and curing should be above 50% to obtain optimal curing properties

Note: Work area can be artificially humidified by atomized water spray and/or ponding water under the coated structures. After the film is dry-to-touch, a fine mist may be applied over the coating to expedite curing in low humidity environments

#### SYSTEM SPECIFICATION

- · Primers: Direct to metal
- Topcoats: PSX 700, AMERLOCK 2/400, AMERCOAT Epoxies and PITTGUARD Epoxies

### **INSTRUCTIONS FOR USE**

#### Mix as packaged

- Only mix full kits. Liquid, powder and activator are packaged in the correct proportions which, when mixed together, yield 0.68 gallons or 3.4 gallons of DIMETCOTE 9 H
- Pre-mix base component with a pneumatic air mixer at moderate speeds to homogenize the container. Add powder
  component slowly under agitation until fully mixed. Strain the mixture from one container to another through a 30 mesh
  filter/strainer to remove any undispersed lumps.

## Pot life

8 hours at 70°F (21°C)

Note: See ADDITIONAL DATA - Pot life

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## **Application**

- Area should be sheltered from airborne particulates and pollutants
- · Ensure good ventilation during application and curing
- Provide shelter to prevent wind from affecting spray patterns
- Repair: When dry though, measure the dry film thickness. If film thickness is lower than specified, additional material can
  be applied up 24 hours from the previous application. Thin the second coat with AMERCOAT 101 thinner or AMERCOAT
  930 thinner. Ensure any dry spray is removed
- Repair: For aged inorganic zinc coatings, spot blast rusted areas in accordance with the surface preparation instructions before touching up with ⊠this product. When blasting is not practical, AMERCOAT 68 HS or ☒ DIMETCOTE 302 H may be used for repair
- Mist spray: A mist coat / full coat application technique is required when topcoating to prevent application bubbling.
   Ensure dry spray is removed from the surface
- Product can be un-topcoated in certain applications

## **Material temperature**

Material temperature during application should be between 40°F (4°C) and 90°F (32°C)

#### Air spray

- · Separate air and fluid pressure regulators and a moisture and oil trap in the main air supply line are recommended.
- Maintain continuous agitation to keep zinc in suspension
- · Limit fluid hose lenght to 50 feet

#### **Recommended thinner**

THINNER 21-06 (AMERCOAT 65) (xylene)), THINNER 21-25 (AMERCOAT 101) (recommended for  $> 60^{\circ}F$  (16°C)), AMERCOAT 930 (recommended for applications  $> 80^{\circ}F$  (27°C) or when dry spray is a problem)

#### Volume of thinner

0 - 8%

## **Nozzle orifice**

Approx. 0.070 in (1.8 mm)

#### **Airless spray**

- 30:1 pump or larger
- Use standard airless spray equipment
- · A reversible fluid tip recommended

#### **Recommended thinner**

THINNER 21-06 (AMERCOAT 65) (xylene)), THINNER 21-25 (AMERCOAT 101) (recommended for  $> 60^{\circ}F$  (16°C)), AMERCOAT 930 (recommended for applications  $> 80^{\circ}F$  (27°C) or when dry spray is a problem)

#### **Nozzle orifice**

0.019 - 0.023 in (approx. 0.48 - 0.58 mm)

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## **Brush/roller**

• Use a high-quality natural-bristle brush. Brush application is only recommended for small touch-up and/or repair areas. Roller application is not recommended

#### **Recommended thinner**

AMERCOAT 65 (Xylene)| AMERCOAT 101 (recommended for >60°F (16°C)), AMERCOAT 930 (recommended for applications >80°F (27°C) or when dry spray is a problem)

## **Cleaning solvent**

AMERCOAT 12 CLEANER or AMERCOAT 65 THINNER (xylene)

## **ADDITIONAL DATA**

Overcoating interval for	rcoating interval for DFT up to 3 mils and 50% relative humidity				
Overcoating with	Interval	40°F (4°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	48 hours	36 hours	24 hours	16 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

#### Notes:

- A MEK rub resistance test according to ASTM D4752 can be performed to confirm cure to topcoat. A rating of 4 or higher indicates sufficient cures. A minimum rating of 3 should be obtained prior to overcoating.
- Surface must be power washed as needed to remove all surface contaminants including zinc salts. Surface must be clean and dry
- When re-coating to build film thickness within 24 hours of the initial application and prior to the film reaching an MEK resistance of 3 or higher per ASTM D4752, use a wire screen to remove any dry spray and apply a thinned down coat using 25-30% AMERCOAT 101 thinner (Thinner 21-25) to achieve the specified film thickness and apply in a wet coat.
- When re-coating to build film thickness after product has reached an MEK resistance of 3 or higher and passes a coin rub test, uniformly abrade the surface taking caution not to polish/burnish the film. This is best done by light abrasive blasting followed by cleaning of any particulate contamination on the surface. Apply a thinned down coat using America 101 (Thinner 21-25) as described above.

Curing time for DFT up to 3 .0 mils and 50% relative humidity			
Substrate temperature	Dry to touch	Dry to handle	
40°F (4°C)	40 minutes	70 minutes	
50°F (10°C)	30 minutes	40 minutes	
70°F (21°C)	15 minutes	20 minutes	
90°F (32°C)	5 minutes	10 minutes	

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Pot life (at application viscosity)	t life (at application viscosity)		
Mixed product temperature	Pot life		
50°F (10°C)	12 hours		
70°F (21°C)	8 hours		
90°F (32°C)	4 hours		

Note: Maintain agitation throughout application to prevent settling of the zinc. Protect product from moisture contamination

## **Product Qualifications**

- SSPC Paint 20, Type IC, Level 1
- · RCSC Class B slip coefficient for high strenght bolted connections
- · Zinc dust meets ASTM D520 type 2 standards
- AASHTO M300

#### **SAFETY PRECAUTIONS**

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

## **WORLDWIDE AVAILABILITY**

It is always the aim of PPG Protective and 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**

•	CONVERSION TABLES	INFORMATION SHEET	1410
•	EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
•	SAFETY INDICATIONS	INFORMATION SHEET	1430
•	SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD -	INFORMATION SHEET	1431
	TOXIC HAZARD		

## **WARRANTY**

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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#### **LIMITATIONS OF LIABILITY**

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Packaging: Available in 0.67 gallon and 3.4-gallon kits

	<u> </u>
Product code	Description
DI9H-A	Liquid
DI9H-B	Activator
DI9-P	Zinc Powder

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