DESCRIPTION

Inorganic Zinc Silicate Primer

PRINCIPAL CHARACTERISTICS

- · High level of zinc in dry film
- VOC compliant for <420 g/L requirements
- 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
- >80% zinc in dry film

COLOR AND GLOSS LEVEL

- Green
- Flat

BASIC DATA AT 68°F (20°C)

Data for mixed product		
Number of components	Two	
Volume solids	71 ± 4%	
VOC (Supplied)	max. 3.4 lb/US gal (approx. 411 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	569 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 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 μ m) are acceptable with random spot readings up to 8.0 mils (200 μ m). For high temperature applications, a maximum of 3.0 mils (75 μ m) is allowed
- VOC (Supplied): For compliance with regulations which require < 2.8 lb/US gal (340 g/L), DIMETCOTE 9 H can be specified interchangeably
- volume solids is based on applied properties and accounts for film porosity



Ref. P108 Page 1/6

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Coating performance is proportional to the degree of surface preparation.

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

Note: Product can be un-topcoated in certain applications

INSTRUCTIONS FOR USE

- · Only mix full kits
- 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

12 hours at 70°F (21°C)

Note: See ADDITIONAL DATA - Pot life



Ref. P108 Page 2/6

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
- A thinned down mist coat should be applied prior to the full thickness topcoat to minimize application bubbling and pinholing. Remove any dry spray by lightly screening the surface prior to topcoating.
- 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.
- 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

Material temperature

Material temperature during application should be between 40°F (4°C) and 100°F (38°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
- · Use standard conventional equipment

Recommended thinner

THINNER 21-06 (AMERCOAT 65) (xylene)), THINNER 21-25 (AMERCOAT 101) (recommended for > 60°F (16°C)), AMERCOAT 930 (recommended for applications > 80°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
- · A reversible fluid tip recommended
- Use standard airless spray equipment
- · Hoses should normally be kept as short as possible
- · Maintain continuous agitation to keep zinc in suspension

Recommended thinner

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

Nozzle orifice

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



Ref. P108 Page 3/6

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)

Volume of thinner

0 - 5%

Cleaning solvent

AMERCOAT 12 CLEANER or AMERCOAT 65 THINNER (xylene)

ADDITIONAL DATA

Overcoating interval for D	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)
recommended topcoats	Minimum	48 hours	30 hours	20 hours	16 hours
	Maximum	Extended	Extended	Extended	Extended

Notes:

- To confirm cure to topcoat, conduct a MEK rub test per ASTM D4752. A rating of 4 or higher is sufficient for topcoating
- Maximum interval is only unlimited when the surface is free from any contamination
- 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)	45 minutes	75 minutes	
50°F (10°C)	30 minutes	50 minutes	
70°F (21°C)	15 minutes	25 minutes	
90°F (32°C)	5 minutes	10 minutes	



Ref. P108 Page 4/6

Pot life (at application viscosity)	
Mixed product temperature	Pot life
50°F (10°C)	16 hours
70°F (21°C)	12 hours
90°F (32°C)	8 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 2
- 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		

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Ref. P108 Page 5/6

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Packaging: Available in 0.85 gallon and 4.25-gallon kits

Product code	Description
DI9V-A	Liquid
DI9-P	Zinc Powder

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Ref. P108 Page 6/6