DESCRIPTION

Low VOC Zinc Rich Epoxy Primer

PRINCIPAL CHARACTERISTICS

- >85% zinc in dry film
- Provides outstanding corrosion resistance
- Fast dry times for rapid topcoating
- AMERCOAT 861 accelerator can be used for low temperature curing
- Compliant with California SCAQMD Rule 1113

COLOR AND GLOSS LEVEL

- Reddish gray
- Flat

BASIC DATA AT 68°F (20°C)

Data for mixed product			
Number of components	Three		
Volume solids	70 ± 2%		
VOC (Supplied)	max. 0.7 lb/US gal (approx. 84 g/l)		
Recommended dry film thickness	2.0 - 5.0 mils (50 - 125 μm) depending on system		
Theoretical spreading rate	374 ft²/US gal for 3.0 mils (14.0 m²/l for 76 μm)		
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 24 months when stored cool and dry Powder: at least 36 months when stored cool and dry		

Notes:

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

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Coating performance is proportional to the degree of surface preparation. All previous coats must dry and free of contaminants



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 prevent blasted surface from rusting.
- 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 50°F (10°C) and 120°F (49°C)
- With accelerator: Surface temperature during application should be between 32°F (0°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 120°F (49°C)
- With accelerator: Ambient temperature during application and curing should be between 32°F (0°C) and 100°F (38°C)
- Relative humidity during application and curing should not exceed 85%

Note: Product can be applied without accelerator at surface and air temperatures down to 40°F. Material temperature must be maintained at 60 to 90°F at the time of application. Due to the long curing time at this temperatures when accelerator is not used, it is recommended that temperatures above 50°F are expected within 12 hours of application. Coated surfaces should be protected from moisture until dry through time is reached.

SYSTEM SPECIFICATION

- Primers: Direct to metal, can be used to touch up inorganic zincs such as DIMETCOTE 9-SERIES
- Topcoats: AMERSHIELD VOC, PSX 700, AMERCOAT 450H, AMERLOCK 2/400 VOC, AMERCOAT 385, AMERCOAT 370, PITTHANE Series Urethanes, PITTGUARD Epoxies

INSTRUCTIONS FOR USE

Mix as packaged

• Pre-mix base component with a pneumatic air mixer at moderate speeds to homogenize the container. Add hardener to base and agitate with a power mixer for 1-2 minutes until completely dispersed. 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

9 hours at 70°F (21°C)

Notes:

- Maintain agitation throughout application to prevent settling of the zinc. Protect product from moisture contamination
- See ADDITIONAL DATA Pot life



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

Material temperature

Material temperature during application should be between 50°F (10°C) and 90°F (32°C)

Air spray

- Use standard conventional equipment
- Separate air and fluid pressure regulators and a moisture and oil trap in the main air supply line are recommended.
- Hoses should normally be kept as short as possible
- Maintain continuous agitation to keep zinc in suspension

Recommended thinner

THINNER 21-85 (PPG 97-739 (exempt)), THINNER 21-06 (AMERCOAT 65 (xylene)), THINNER 21-25 (AMERCOAT 101) recommended for > 90°F (32°C))

Volume of thinner

0 - 10%

Nozzle orifice Approx. 0.070 in (1.8 mm)

Airless spray

- 45:1 pump or larger
- Hoses should normally be kept as short as possible
- Maintain continuous agitation to keep zinc in suspension

Recommended thinner

THINNER 21-85 (PPG 97-739 (exempt)), THINNER 21-06 (AMERCOAT 65 (xylene)), THINNER 21-25 (AMERCOAT 101) recommended for > 90°F (32°C))

Volume of thinner

0 - 5%

Nozzle orifice

0.017 – 0.019 in (approx. 0.43 – 0.48 mm)



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
- Ensure the brush/roller is well-loaded to avoid air entrainment. Level air bubbles with a brush. Multiple coats may be necessary to achieve adequate film build

Recommended thinner

PPG 97-739 (exempt), AMERCOAT 65 (xylene), AMERCOAT 101 (recommended for > 90°F (32°C))

Cleaning solvent

AMERCOAT 12, 12E, or 12V Cleaner, 97-739, AMERCOAT 65 thinner (xylene)

ADDITIONAL DATA

Overcoating interval for DFT up to 3.0 mils (75 μm)					
Overcoating with	Interval	32°F (0°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
various two-pack epoxy and polyurethane	Minimum	Not recommende	6 hours d	2 hours	1 hour
coatings	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

Note: Surface must be power washed as needed to remove all surface contaminants including zinc salts. Surface must be clean and dry

overcoating interval for dft up to 3.0 mils using Amercoat 861 Accelerator					
Overcoating with	Interval	32°F (0°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
various two-pack epoxy and polyurethane coatings	Minimum Maximum	24 hours Unlimited	4 hours Unlimited	1.5 hours Unlimited	45 minutes Unlimited

Notes:

- Surface must be power washed as needed to remove all surface contaminants including zinc salts. Surface must be clean and dry
- With force cure capabilities (oven temperatures of 140°F (60°C) to 180°F (82°C)), product can be overcoated after 5-15 minutes. Allow 5-10 minutes flash off prior to heating past 120°F (49°C). Addition of AMERCOAT 861 accelerator is recommended for this procedure.

Curing time for DFT up to 3.0 mils (75 µm)			
Substrate temperature	Dry to touch	Dry to handle	
40°F (4°C)	6 hours	3 days	
50°F (10°C)	1 hour	36 hours	
70°F (21°C)	30 minutes	8 hours	
90°F (32°C)	15 minutes	4 hours	



Curing time with AMERCOAT 861 accelerator for DFT up to 3.0 mils (75 μm)			
Substrate temperature	Dry to touch	Dry to handle	
32°F (0°C)	2 hours	4 days	
50°F (10°C)	30 minutes	16 hours	
70°F (21°C)	20 minutes	4 hours	
90°F (32°C)	10 minutes	1.5 hours	

Pot life (at application viscosity)		
Mixed product temperature	Pot life	
50°F (10°C)	24 hours	
70°F (21°C)	16 hours	
90°F (32°C)	8 hours	

Pot life (at application viscosity) with AMERCOAT 861 accelerator		
Mixed product temperature	Pot life	
50°F (10°C)	16 hours	
70°F (21°C)	9 hours	
90°F (32°C)	5 hours	

Product Qualifications

- SSPC Paint 20, Type IC, Level 1
- Zinc dust meets ASTM D520 type 2 standards

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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Packaging: Available in 1-gallon and 5-gallon kits

Product code	Description
AT68HSV-A	Base
AT68HSV-B	Hardener
AT68HSV-P	Zinc Powder

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