

Amercoat® 68HS VOC

(68 Series)

Zinc rich epoxy primer

Product Data/ Application Instruction

- High zinc content in dry film.
- Outstanding resistance to severe weathering
- Excellent adhesion to inorganic zincs
- Easily applied by airless or conventional spray
- Fast dry times allow for rapid topcoating
- Amercoat 861 Accelerator can be used for low temperature curing.

Typical Uses

Amercoat 68HS VOC is a shop primer for bare steel on new construction or major repair projects. Amercoat 68HS VOC can also be used as a field maintenance primer over bare steel or steel coated with organic or inorganic zinc primers and epoxy topcoats such as, Amercoat 385, Amerlock® Series or Amershield™. Amercoat 68HS VOC may be used to repair itself or inorganic zinc primers.

Typical Properties

Adhesion, Elcometer D4541 1000 psi

Physical Data

Finish	Flat	
Color	Reddish gray	
Components	3	
Mixing ratio	1- or 5-gal unit package	
Curing mechanism	Solvent release and chemical reaction between components	
Volume solids (ASTM D2697 modified)	70% ± 3%	
Coats	1	
Typical dry film thickness	3 mils (75 microns)	
Theoretical coverage	ft ² /gal	m ² /L
1 mil (25 microns)	1123	27.5
3 mils (75 microns)	374	9.2
VOC	lb/gal	g/L
mixed	0.7	84
mixed/thinned (5 oz/gal)	0.82	99
Temperature resistance, dry continuous (maximum)	°F	°C
	400	204
Flash point (SETA)	°F	°C
cure	60	16
resin	60	16
mixed	60	16
Amercoat 65	81	27
Amercoat 12	2	-17
Thinner	Amercoat 65	
Cleaner	Amercoat 12	

Typical Systems

1st Coat	2nd Coat	3rd Coat
Amercoat 68 Series	Amercoat 385 or Amercoat 370	Amercoat 450 Series
Amercoat 68 Series	PSX 700	
Amercoat 68 Series	Amershield	
Amercoat 68 Series	Amerlock Series	Amercoat 450 Series

Surface Preparation

Coating performance, in general, is proportional to the degree of surface preparation. Surface must be clean, dry and free of all contaminants.

Steel – Without pits or depressions: blast SSPC-SP6.

Rusted and pitted: blast SSPC-SP10.

Blast to achieve a 1- to 2-mil (25- to 50-micron) profile as indicated by a Keane-Tator Surface Profile Comparator. Testex Tape or similar device.

For touch-up or repair, power tool clean per SSPC-SP11 is acceptable.

Apply Amercoat 68HS VOC as soon as possible to prevent blasted surface from rusting. Keep moisture, oil, grease or other organic matter off surface before coating. Spot blast to remove any contamination; solvent-wiping is not satisfactory.

Repair inorganic zinc surfaces – must be clean, dry, free of all contaminants and loose paint. Blast damaged areas to SSPC-SP10 or mechanically clean to SSPC-SP3 or SP11.

Epoxy or urethane surfaces – abrasive or brush blast damaged areas down to bare metal. Remove all contaminants before applying coating.

Environmental Conditions

Resin and cure material must be a minimum of 50°F before mixing. For satisfactory cure, air and surface temperatures must be above 50°F (10°C). Use Amercoat 861 Accelerator when air and surface temperatures are below 50°F (10°C)

Temperature	°F	°C
air	32 to 120	0 to 49
surface	32 to 140	0 to 60
material (minimum)	50	10

Surface temperatures must be minimum 5°F (3°C) above the dew point to prevent condensation.

Application Data

Applied over	Steel		
Surface preparation	SSPC-SP 6 or 10		
Method	Airless or conventional spray		
Mixing ratio (by volume)	1- or 5-gal unit package		
Pot life (hours)	°F/°C		
	90/32	70/21	50/10
nonaccelerated	8	16	24
accelerated (¼ pt 861/5 gal)	5	9	16
Environmental conditions			
Temperature	°F	°C	
air	32 to 120	0 to 49	
surface	32 to 140	0 to 60	
material (minimum)	50	10	

Surface temperatures must be minimum 5°F (3°C) above the dew point to prevent condensation.

Drying time (ASTM D1640) (hours)	°F/°C			
	90/32	70/21	50/10	32/0
nonaccelerated				
touch	¼	½	1	NR
through	4	8	36	NR
topcoat (minimum)	1	2	6	NR
topcoat (maximum months)	6	6	6	NR
accelerated (¼ pt 861/5 gal)				
touch	–	⅓	½	2
through	1½	4	16	96
topcoat (minimum)	¾	1½	4	24
topcoat (maximum months)	6	6	6	6

NR = Not Recommended

Application Equipment

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure, hose and tip size may be needed for proper spray characteristics.

Conventional spray – Industrial equipment such as DeVilbiss MBC or JGA, or Binks #18 or 62 spray gun. A moisture and oil trap in the main air supply, mechanical pot agitator, separate regulators for air and fluid pressure are recommended.

Airless spray – Standard equipment such as a 33:1 pump or larger with a 0.017-inch tip with preorifice or fine finish tip.

Power mixer – Jiffy Mixer powered by an air or explosion-proof electric motor.

Application Procedure

1. Flush all equipment with thinner or Amercoat 12 before use.
2. Stir each component separately, then mix cure into resin and mix until uniform. Slowly stir in zinc dust and mix until uniformly blended. Maintain slow agitation during application to ensure the material remains uniformly blended.

Pot life (hours)	°F/°C		
	90/32	70/21	50/10
nonaccelerated	8	16	24
accelerated (¼ pt 861/5 gal)	5	9	16

3. Thinning may be required; thin with up to 5oz/gal of Amercoat 65 thinner to maintain compliance with SCAQMD Rule 1113.
4. Apply a wet coat in even, parallel passes; overlap each pass 50 percent to avoid holidays, bare areas and pinholes. If required, cross spray at right angles to first pass.
5. Check dry film thickness using nondestructive dry film thickness gauge such as Mikrotest or Elcometer. If less than the specified thickness, apply additional material. Typical dry film thickness is 3 mils in one coat, however dry film thickness up to 5 mils in one coat is acceptable. Do not exceed 5 mils in one coat as excess dry film thickness may result in increased mechanical damage during handling or shipping.
6. Touch up random pinholes, holidays and small damaged or bare areas by brush when film dry to touch. Larger areas should be resprayed.

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	90/32	70/21	50/10	32/0
nonaccelerated	¼	½	1	NR
touch	4	8	36	NR
topcoat (minimum)	1	2	6	NR
topcoat (maximum months)	6	6	6	NR
accelerated (¼ pt 861/5 gal)				
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topcoat (maximum months)	6	6	6	6

NR=Not Recommended

Drying times are dependent on air and surface temperatures as well as film thickness, ventilation and relative humidity. Maximum recoating time is highly dependent upon actual surface temperatures - not simply ambient air temperatures. Surface temperatures should be monitored, especially with sun-exposed or otherwise heated surfaces. Higher surface temperatures shorten the maximum recoat window.

7. Clean equipment with thinner or Amercoat 12 immediately after use.

Shipping Data

Packaging units	1 gal	5 gal
cure	1-qt can	1-gal can
resin	1-gal can	5-gal can
powder	1-gal can	EnviroPac
Shipping weight (approx)	lb	kg
1-gal unit		
cure	2	0.9
resin	5.4	2.5
powder	20.2	9.2
5-gal unit		
cure	8.4	3.8
resin	26.6	12
powder	98.5	44.7

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)
cure, resin, powder 1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities. See application instructions for complete information and safety precautions.

This mixed product is photochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of both components. Safety precautions must be strictly followed during storage, handling, and use.

Caution – Improper use and handling of this product can be hazardous to health and cause fire or explosion.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. PPG makes no recommendation about the types of safety measures that may need to be adopted because these depend on application and space, of which PPG is unaware and over which it has no control.

If you do not fully understand the warnings and instructions or if you cannot strictly comply with them, do not use the product.

This product is for industrial use only. Not for residential use in California.



PPG Protective & Marine Coatings

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