AMERCOAT®

Amercoat® 68HS

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.
- Meets RSRC Specifications for structural joints using ASTM A325 or A490 bolts, class B

Typical Uses

Amercoat 68HS is a shop primer for bare steel on new construction or major repair projects. Amercoat 68HS 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 may be used to repair itself or inorganic zinc primers.

Typical Properties

Adhesion, Elcometer D4541	1000 psi

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

Physical Data

Finish	Flat	
Color	Reddish gray	
Components	3	
Mixing ratio	as packaged	
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	2.4	288
mixed/thinned (½ pt/gal)	2.8	335
Temperature resistance, dry	°F	°C
continuous (maximum)	400	204
Flash point (SETA)	°F	°C
cure	110	43
resin	82	28
mixed	82	28
Amercoat 65	81	27
Amercoat 12	2	-17
Thinner	Amercoat 65	
Cleaner	Amercoat 12	

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 3-mils (75-microns) profile as indicated by a Keane-Tator Surface Profile Comparator. Testex Tape or similar device. Rougher profiles (up to 4 mils) are acceptable, but the product must be applied in a thickness great enough to achieve a minimum of 3 mils. Guages should be calibrated to the blast profile achieved for proper film thickness measurement.

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

Apply Amercoat 68HS 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. It is recommended that Amercoat 861 be used for faster curing below 50 F. A 30 minute induction time is required at temperatures below 50 F. Surfaces should be protected from rain prior to reaching the dry through state.

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 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 Graco Bulldog Hydra-Spray 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 Data

Applied over	Steel
Surface preparation	SSPC-SP 6 or 10
Method	Airless or conventional spray
Mixing ratio (by volume)	1, 4 or 5 gallon units

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
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material (minimum)	50	10

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Drying time (ASTM D1640) (hours)

	°F/°C			
	90/32	70/21	50/10	32/0
nonaccelerated				
touch	¼	½	1	8
through	4	8	36	72
topcoat (minimum)**	1	2	6	24
topcoat (maximum months)		unlimited*		
accelerated (¼ pt 861/5 gal)				
touch	–	⅓	½	2
through	1½	4	16	60
topcoat (minimum)**	¾	1½	4	24
topcoat (maximum months)		unlimited*		

NR = Not Recommended

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

*** If dry film thickness measurements are not required for the primer, epoxy intermediate coats may be applied at a shorter topcoat interval as follows:*

Air and Surface Temperature	Topcoat Time
32 – 40°F	24 hours
41 – 50°F	8 hours
51°- 60°F	2 hours
61°- 70°F	1 hour
71°- 90°F	30 minutes
90°- 100°F	20 minutes

These times are based on a dry film thickness of 3 mils and a relative humidity of 50%. High film thicknesses and /or higher humidity will require extended cure times prior to topcoating.

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 ½ pint Amercoat 65 per gallon of Amercoat 68HS.
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.
7. Clean equipment with thinner or Amercoat 12 immediately after use.

Shipping Data

Packaging units	1 gal	4 or 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
4-gal unit		
cure	6.9	3.1
resin	22.6	10.3
powder	83.7	38.0
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)

Resin:	3 years from date of manufacture
Cure:	3 years from date of manufacture
Powder	2 years from date of manufacture

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 each component. Safety precautions must be strictly followed during storing, handling and use.

CAUTION – Improper use and handling of this product can be hazardous to health.

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 spray mists and 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 environment and space, of which PPG is unaware and over which it has no control.

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

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

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

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