

Dimetcote® 302H

302 Series

Reinforced Inorganic zinc primer

Product Data/ Applications Instructions (For Marine & Offshore use)

- Applies easier than any other inorganic zinc, using spray, brush, or roller
- Can be topcoated with most organic coatings as soon as solvent evaporates
- Low VOC
- Zinc dust is already mixed into the liquid portion
- Fast dry-to-handle
- Excellent resistance to topcoat bubbling
- Outstanding mudcrack resistance
- Excellent corrosion protection from unique formulation

Typical Uses

Dimetcote 302H Reinforced Inorganic Zinc Primer is a proven cathodic primer for protecting steel structures, tanks, equipment piping, and other surfaces exposed in the following environments:

On ships, barges and offshore structures.

Dimetcote 302H Primer is ideal for touch-up and maintenance because of its ease of application, wide compatibility and fast dry-to-recoat.

Recommended Topcoats

Amercoat® 370, 385	Amercoat 233H, 235, 236
Amerlock® 400, 400FD	Amercoat 201, 230
PSX™ 700	Amercoat 5A

Dimetcote 302H surface must be clean and dry before top-coating. Water soluble contaminants may be washed off with water. Remove grease and similar contaminants with an emulsion type cleaner or neutral detergent. Rinse with clean water and allow to dry. Solvent wiping is not satisfactory as contamination may only be spread and not removed. In some cases a mist coat/full coat technique may be required to prevent application bubbling.

Surface Preparation

Coating performance is proportional to the degree of surface preparation. Surface must be cleaned, dry, undamaged and free of all contaminants, including salt deposits. Round off all rough welds and sharp edges, remove all weld spatter. Apply Dimetcote 302H as soon as possible to avoid rusting or other recontamination. Do not leave blasted steel uncoated overnight. Spot blast if needed.

Steel – New without pits or depressions – Dry abrasive blast, SSPC-SP6 or pickle.

Physical Data

Finish	Flat	
Color*	Green	
<i>*Note: At temperatures over 350°F the Dimetcote 302H green color will change to a reddish-gray.</i>		
Components	2	
Curing mechanism	Solvent release and cure reaction with atmospheric moisture	
Dry film thickness per coat	2-4 mils (50-100 microns)	
Coats	1	
Theoretical coverage	ft ² /gal	m ² /L
1 mil (25 microns)	1251	31.0
3 mils (75 microns)	417	10.3
VOC (EPA 24)	lb/gal	g/L
mixed	2.37	284
mixed/thinned (1 pt/gal)	3.3	346
Temperature resistance, dry intermittent	°F	°C
	400	205
Flash point (SETA)	°F	°C
base	99	37
converter	111	44
Amercoat 930	214	101
Amercoat 936	140	60
Amercoat 12	2	-17

Application Data

Applied over	Prepared steel or galvanizing		
Surface preparation	SSPC-SP6 or 10		
Method	Airless or conventional spray		
Mixing ratio (volume)	9:1		
Pot life (hours)	°F/°C		
	90/32	70/21	50/10
	4	8	16
Environmental conditions			
Temperature	°F	°C	
air	20 to 120	-7 to 49	
surface	20 to 130	-7 to 54	
Relative humidity	50-90%		
Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation. At freezing temperatures, surface must be free of ice.			
Drying time (ASTM D1640) @ 3 mils @ 50-90% RH			
	°F/°C		
hard (hours)	90/32	70/21	50/10
	3	6	18
recoat (hours)	3/4	1 1/2	4
maximum topcoat (months)	3	3	3
Thinner	T-10		
Equipment cleaner	Thinner or Amercoat 12		

Previously painted or pitted – Dry abrasive blast, SSPC-SP10. Blast to achieve a 1½ - 2½ mils (37 - 62-microns) anchor profile as indicated by a Keane-Tator Surface Profile Comparator, Testex Tape or similar device. Rougher profiles are acceptable, but require increased film thickness for equivalent protection. Remove abrasive residue or dust from surface.

Galvanized surfaces – Remove any oil, soap film or grease from surface with neutral detergent or emulsion cleaner and roughen surface by light abrasive blast SSPC-SP7.

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.

Airless spray – Standard equipment, such as Graco Bulldog or Speeflo Alaskan PZ. **A fine finish tip 0.016-to 0.022-inch or larger must be used.**

Conventional spray – Industrial equipment such as DeVilbiss MBC gun with 2E or 704E cap/tip, or a Binks 18 gun with a 66SS x 67PB nozzle setup. A variable speed agitator in the pressure pot and an oil and moisture trap in the main air supply line are essential. Separate air and fluid pressure regulators are recommended.

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

Application Procedure

Base and converter are packaged in the correct proportions which, when mixed together, yield 1 gallon or 5 gallons of Dimetcote 302H.

1. Flush all equipment with thinner or Amercoat 12 cleaner to remove any moisture that may be present.
2. Stir mixed base and converter with an explosion-proof power mixer.
3. At temperatures lower than 60°F (16°C), allow a 15 minute induction time before using. Add about 10 minutes for each 10°F (6°C) lower temperature.
4. Strain material through 30 mesh screen to remove undispersed material and prevent possible clogging of equipment.
5. Pot life is limited and shortened by high temperatures; do not mix more coating than will be used within the specified times.
6. Thin for workability or when a rough film or “dry spray” is obtained because of fast solvent evaporation during hot weather or high wind. Use 1 pt. of T-10 per gallon of mixed coating.
7. Adjust spray equipment to apply an even wet coat with minimize overspray.
8. Continue very slow stirring during application to maintain uniformity of material. Avoid fast stirring as this may cause a rise in material temperature.
9. Apply in even, parallel passes, overlap each pass 50 percent. Pay special attention to welds, cut-outs, sharp edges, rivets, bolts, etc., to insure proper thickness. Keep pressure pot at approximately the same elevation as spray gun for proper material delivery to gun.
10. When dry through, check film thickness with a nondestructive dry film thickness gauge. Recoat if greater thickness is required. Normal recommended thickness is 3 mils (75 microns).

11. Random pinholes, holidays and small damaged or bare areas can be touched up by brush when film is dry to touch. Larger areas should be resprayed.

Note – Drying and topcoating times will be longer when film thickness is over 4 mils (100 microns), ventilation and air movement are restricted and temperatures are lower.

12. In confined areas, ventilate with clean air during application and drying until all solvents are removed. Temperature and relative humidity of the ventilating air must be such that moisture will not condense on the surface until after material is dry hard.

13. Clean equipment with thinner or Amercoat 12 cleaner immediately after use or at least at the end of each working day or shift. Clean spray guns more often during hot weather. When left in equipment, Dimetcote 302H will harden and plug spray equipment.

Shipping Data

Packaging unit	1-gal	5-gal
Shipping weight (approx)	lb	kg
1-gal unit		
converter	1.1	0.5
base	19.4	8.8
5-gal unit		
converter	4.6	2.1
base	96.0	43.5

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)	
base	1 year from shipment date
converter	1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities.

Mixed product is nonphotochemically reactive as defined by 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 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.

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 professional use only. Not for residential use.



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