

DIMETCOTE® 9H

February 2012
Revision of November 2011

DESCRIPTION	Inorganic Zinc Silicate Primer
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - >85% zinc in dry film - VOC compliant for <340 g/L requirements - Provides outstanding corrosion resistance - Abrasion resistant - Resistant to dry film temperatures of up to 750°F - Recommended for ISO 12944 C5I and C5M Conditions
COLOR AND GLOSS	Flat Green
BASIC DATA	
Volume solids	80% ± 4% (based on applied film, including porosity)
VOC*	2.7 lbs/gal (323 g/L)
Recommended Dry film thickness	2 – 5 mils per coat (50 – 125 microns)
	<i>* Applications up to 6 mils are acceptable with random spot readings up to 8 mils. For high temperature applications, a maximum of 3 mils is allowed.</i>
Theoretical Spread Rate	@ 1 mils dft 1283 ft ² /gal @ 3 mils dft 427 ft ² /gal
Components	3 (liquid, activator, zinc powder)
Shelf Life	Liquid and activator – 10 months from date of manufacture when stored indoors in the original unopened container. Storage temperature should be 40-100 °F and in dry conditions. Powder – 24 months from date of manufacture when stored indoors in the original unopened container.
SURFACE PREPARATION	Coating performance is proportional to the degree of surface preparation.
Steel	<ul style="list-style-type: none"> - Abrasive blast to SSPC SP-6 or higher with a 1.0-3.0 mil surface profile. Higher surface profiles up to 5 mils are acceptable, but the product must be applied in a thickness great enough to achieve a minimum of 2.5 mils dry film thickness. <p>Apply <i>Dimetcote</i> 9H as soon as possible to prevent the blasted surface from rusting. Keep moisture, oil, grease, or other organic matter off surface before coating. For touch up and repair, power tool cleaning in accordance with SSPC SP-11 is acceptable.</p>
ENVIRONMENTAL CONDITIONS	
Ambient temperatures	0°F to 120°F (-18°C to 49°C) Surface temperature must be at least 5°F above the dew point temperature.
Material temperatures	40°F to 90°F (10°C to 32°C)
Relative humidity	50% minimum
	<i>* 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</i>
Surface temperature	0°F to 130°F (-18°C to 54°C) Surface temperature must be at least 5°F above the dew point temperature.
General air quality	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.

DIMETCOTE 9H

INSTRUCTIONS FOR USE

Mixing

Only mix full kits. Liquid, powder, and activator are packaged in the correct proportions which, when mixed together, yield 0.68 gallons or 3.4 gallons of *Dimetcote* 9H.

Pre-mix base component with a pneumatic air mixing at moderate speeds to homogenize the container. Pour in the activator component. 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*

Temperature	50°F	70°F	90°F
<i>Dimetcote</i> 9H	12 hours	8 hours	6 hours

* Maintain agitation throughout application to prevent settling of the zinc. Protect product from moisture contamination.

Airless spray

Standard airless spray equipment, 30:1 pump or larger, 0.019 – 0.023, reversible fluid tip recommended

Air spray

Thin up to 8%, standard conventional equipment, 0.070" fluid orifice. A moisture and oil trap in the main line is required. Separate regulators for air and fluid pressure are recommended. Use an agitated pressure pot. Limit fluid hose length to 50 feet.

Brush & roll

Use a high quality natural bristle. Brush application is only recommended for small touch up and/or repair areas. Roller application is not recommended.

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.

For aged inorganic zinc coatings, spot blast rusted areas in accordance with the surface preparation instructions before touching up with *Dimetcote* 9H. When blasting is not practical, *Amercoat* 68HS or *Dimetcote* 302H may be used for repair.

Thinner

Amercoat 65 (xylene), *Amercoat* 101 (recommended for > 60°F), *Amercoat* 930 (recommended for applications > 80°F or when dry spray is a problem)

Cleaning solvent

Amercoat 12 Cleaner or *Amercoat* 65 thinner (xylene)

Primers

Direct to metal

Topcoats

PSX 700, *Amerlock* 2/400, *Amercoat* 385, *Amercoat* 370, *Amercoat* 399, *Amercoat* 435
A mist coat / full coat application technique is required when topcoating to prevent application bubbling. Ensure dry spray is removed from the surface.

Product can be un-topcoated in certain applications.

Safety precautions

For paint and recommended thinners see safety sheet 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.

DRY/CURE TIMES

Dimetcote 9H @ 3 mils dft and 50% relative humidity

	40°F	50°F	70°F	90°F
Dry to touch	45 minutes	30 minutes	15 minutes	5 minutes
Dry to handle	70 minutes	40 minutes	20 minutes	10 minutes
Dry to overcoat*	48 hours	36 hours	24 hours	16 hours
Maximum overcoat	Unlimited**			

* A MEK rub resistance test according to ASTM D4752 can be performed to confirm cure to topcoat. A rating of 4 or higher indicates sufficient cures. A minimum rating of 3 should be obtained prior to overcoating.

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

