



Dimetcote 9X

Inorganic Zinc Silicate Coating

ProductData/ Application Instructions

- A heavy duty primer that protects with just a single coat
- Outstanding application characteristics over a wide range of atmospheric conditions.
- Can be applied by airless or conventional spray
- High-metallic zinc content provides long-term corrosion protection that reduces maintenance costs.
- Abrasion resistance and minimum burn-back during welding reduce touch-up requirements.

Typical Uses

As a single coat, Dimetcote 9X resists severe weathering and marine environments. As a primer with recommended topcoats, Dimetcote 9X is resistant to industrial and chemical exposure as well as marine exposure of structural steel and pipes, tank exteriors, bridges, offshore platforms, marine hulls, superstructures and decks.

Recommended Systems

Dimetcote 9X can be topcoated amongst others with suitable vinyls, chlorinated rubbers polysiloxanes and epoxies. For specific recommendations consult your PPG representative.

Resistance

Dimetcote 9X without a topcoat has excellent resistance to weathering and ultraviolet exposure. With suitable topcoats Dimetcote 9X is recommended for fumes and splash of mild alkalis, dilute acids (fumes only), salt solutions of most types. Dimetcote 9X is not recommended for spillage of acid or alkaline solutions.

Physical Data

Finish	flat	
Colour	grey	
Components	2	
Mixing ratio (by weight)		
liquid	8.15 kg in 10 l jerry can	
powder	15.60 kg in 10 l can	
Curing mechanism	..... solvent release and reaction with atmospheric moisture	
Volume solids.....	62% (ASTM D-2697)*	
Dry film thickness	..... 65 µm per coat	
Number of coats	..... 1	
Calculated coverage.....	9.5 m ² /l at 65 µm	
Allow for application losses, surface irregularities, etc.		
Specific gravity	..... 2.38 kg/l mixed product	
Flash points		
(Closed Cup)	..... °C	°F
Dimetcote 9X liquid	..... 12	54
Thinner40-25	..... 7	45
Cleaner (Thinner 90-58).....	3	37
*Volume solids is measured in accordance with ASTM D-2697.		
Slight variations may occur due to testing variances		

Dimetcote 9X

Surface Preparation STEEL

- Dry abrasive blast in accordance with Swedish Standard SA 2.5 SIS 05 5900 - 1967, ISO 8501-1 or Steel Structures Painting Council SP 10. NOTE : Blast to achieve a 25 to 50 microns profile as determined with a Keane Tator Surface Profile Comparator or similar instrument. Rougher profiles are acceptable but requires increased film thickness for equivalent protection. Remove abrasive residues and dust from surface.

Apply Dimetcote 9X as soon as possible after surface preparation to prevent any contamination. Do not leave blasted steel uncoated overnight. Spot reblast steel if needed.

Topcoating

Dimetcote 9X surface must be clean and dry before topcoating. Water soluble contaminants may be washed off with water. Oil, grease and similar contaminants may be removed with an emulsion-type cleaner such as Amercoat 57 oil cleaner. Rinse with clean water and allow to dry. Solvent wiping is not satisfactory as contamination may be spread and not removed.

Repair

Rusted areas must be spot blasted in accordance with instructions under "Surface preparation" before touching up with Dimetcote 9X. When blasting is not practical, suitable Amercoat zinc-based primers may be used for repair. See product literature for selection according to topcoat compatibility

Application Equipment

The following equipment is listed as a guide and suitable equipment from other manufacturers may be used. Adjustments of pressure and change of tip size may be needed to obtain the proper spray characteristics.

AIRLESS SPRAY - Standard airless spray equipment, such as Graco, DeVilbiss, Nordson-Bede, Spee-Flo, or others having a 28:1 or higher pump ratio and a fluid tip with a 0.48 mm (0.019 inch) orifice or larger.

CONVENTIONAL SPRAY - Industrial equipment such as DeVilbiss MBC or JGA gun with 704 or 765 air cap and "E" nozzle with leather or teflon needle packing and heavy mastic spring. Separate air and fluid pressure regulators, variable speed agitator in the pressure pot and a moisture and oil trap in the main air supply line are recommended.

MIXER - Use power mixer. Mixer must be powered by an air motor or an explosion proof electric motor.

Application Data Summary

Like all high performance coatings, this product must be applied as recommended to obtain the maximum protection for which this coating is formulated. To obtain the maximum performance for which Dimetcote 9X is formulated, strict adherence to all application instructions, precautions, conditions, and limitations is necessary. If conditions exist that are not within the requirements or limitations described, consult your PPG representative.

Application Data

Substrate steel
Application airless or conventional spray
Potlife 8 hours at 20°C/68°F

Potlife is dependent on temperature and quantities mixed.

Environmental Conditions

Air temperature -18 to 50°C 0 to 122°F
Surface temperature 18 to 70°C 64 to 155°F
Relative Humidity 50-90%

To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above dew point. At freezing temperatures, surface must be free of ice.

Drying Times (at 65 µm)

	Surface temperature	Time
dry to touch	20°C / 68°F	5 minutes
dry to handle "dry through"	or 20°C / 68°F	30 minutes
dry to topcoat	20°C / 68°F	16 hours

NOTE: Drying and topcoating times will be longer when ventilation and air movement are restricted, temperatures are lower or relative humidities are lower. A water mist sprayed over the coating when the film is dry to touch will accelerate hardening at lower humidities.

Thinner Thinner 40-25

Cleaner..... Thinner 90-58

Dimetcote 9X

Application Procedure

Dimetcote 9X is packaged in the proper mixing proportions of powder and liquid.

Powder : 15.60 kg in a 10 L can.
Liquid : 8.15 kg in a 10 L jerrycan.
Thinner : 40-25
Cleaner : 90-58

1. Flush all equipment with recommended cleaner to remove any moisture that may be present. Moisture can cause hardening of Dimetcote 9 in equipment.
2. Stir liquid.
3. Discard desiccant bag from powder can and gradually stir powder into liquid. Continue stirring until powder is well dispersed and mixture is free of lumps.
4. Strain material through 250 microns (60 mesh) screen to prevent possible clogging of equipment.
5. Since pot life is limited and shortened by high temperatures, do not mix more material than will be used within the following times (in hours).

10 C	20 C	30 C	50 C
24	8	6	3

IMPORTANT At the end of the pot life, 'kick-out' or separation of the liquid and solids occur, together with gassing. Do not keep mixed material which will not be used before the end of the pot life in tightly closed containers as gassing can create enough pressure to cause containers to burst. Cover containers loosely.

6. Keep containers loosely covered until ready to use to prevent skinning or gelling due to moisture in air. Skins should be skimmed off the top and the material strained through cheese-cloth or 60 mesh screen to remove any remaining pieces of skin. Discard gelled material.
7. Thinning is normally not required. If thinning is necessary for workability or when a rough film or "dry spray" is obtained because of fast evaporation during hot weather or high wind, thin with no more than 10 vol % of recommended thinner.
8. Adjust spray equipment to apply to an even wet coat with minimum overspray.
9. Continue slow stirring during application to maintain uniformity of material. Avoid fast stirring as this may cause a rise in material temperature shortening pot life.
10. Apply in even, parallel passes and overlapping each pass 50%. Pay special attention to welds, cut-outs, sharp edges, rivets, bolts, etc. to ensure proper thickness.
11. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. Recoat if greater thickness is required. Normal recommended thickness is 65 microns and 75 microns for immersion service. Allowable thickness range is 50 to 150 microns, assuming the surface profile is within the recommended range. Greater thickness may develop cracking.
12. 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: Maximum recoat time with itself is 16 hours.
No condensation or rain may be allowed on the surface of the dry coating before recoating.
13. Prevent contact with water until the freshly applied coating is at least dry to touch.
14. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface.

15. Clean all equipment with recommended 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 9X will harden and plug spray equipment.

Shipping Data

Packaging
powder 15.60 kg in 10 l can
liquid 8.15 kg in 10 l jerry can

Shipping weight
powder approx. 17.2 kg
liquid approx. 8.9 kg

Shelf life
Powder 1 year from shipment date when stored indoors in unopened, original containers at 5 to 40 C (41 to 104°F)

Liquid 6 months from shipment date when stored indoors in unopened, original containers at 5 to 40 C(41 to 104°F)

Caution

This product is highly flammable.

Dimetcote 9X powder is harmful dust. Contains zinc. Avoid breathing dust. Wash thoroughly before eating or smoking. Keep away from feed or food products. Contact with water liberates highly flammable gases, spontaneously flammable in air. If welding is to be performed in confined spaces on steel coated with Dimetcote 9X, do so in accordance with instructions in USA Standard Z 49.1-1973 "Safety in Welding and Cutting".

For specific information on hazardous ingredients, required ventilation, possible consequences of contact and safety measures see Safety Data Sheet.

Safety

Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with Product Data/Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods.

Warranty

PPG warrants its products to be free from defects in material and workmanship. PPG's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at PPG's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-conforming products. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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To avoid any confusion that may arise through translation into other languages, the English version of the Product Data/Application Instructions will be the governing literature and must be referred to in case of deviations with product literature in other languages.

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