

Dimetcote 9HS

Inorganic Zinc Silicate Primer

Product Data/ Application Instructions

- A heavy-duty primer that protects with just a single coat
- Tanklining resistant to a wide range of chemicals
- Low VOC
- 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

Typical Uses

As a single coat, Dimetcote 9HS resists severe weathering and marine environments. As a primer with recommended topcoats, Dimetcote 9HS 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 9HS can be topcoated amongst others with suitable polysiloxanes and epoxies. For specific recommendations consult your PPG representative.

Resistance

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

Approvals and Certificates

With suitable topcoats, complies to the following standards:

- NORSOK M-CR-501 (coating system 1)
- ISO 12944 (class C5M)
- Shell specification ES/011 Vol. 2, Rev. 7

Physical Data

Finish	flat
Colour.....	grey
Components	2
Mixing ratio (by weight)	
liquid	1 part
powder	3.51 parts
Curing mechanism	solvent release and reaction with atmospheric moisture
VOC*	
EC SED 1999/13/EC	124 g/kg (417 g/l)
UK PG6/23(92) Appendix 3.	293 g/l (2.4 lbs/gal)
Dry film thickness	75 µm per coat minimum
Number of coats	1
Calculated coverage	10.5 m ² /l at 75 µm
Allow for application losses, surface irregularities, etc.	
Specific gravity	3.36 kg/l (mixed product)
Flash points (Closed Cup).....	°C °F
liquid	12 54
mixed	11 52
Amercoat 12	24 75
Amercoat 18	27 81
Amercoat 930	101 214

* VOC figures are quoted according to both the EC directive 1999/13/EC which are theoretically calculated figures and the UK PG6/23(92) Appendix 3 which are practically determined figures

Dimetcote 9HS

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.

Surface Preparation

DRY ABRASIVE BLAST - Prepare steel in accordance with Sa 3 Swedish Standard SIS-05-5900, 1967 ISO 8501-1 or Steel Structures Painting Council SP-10.

NOTE: Blast to achieve a 35 to 65 µm anchor profile as indicated with *Testex* Tape or similar device. Rougher profiles are acceptable but require increased film thickness for equivalent protection. Remove abrasive residue or dust from surface. Apply Dimetcote 9HS as soon as possible to avoid rusting or other contamination. Do not leave blasted steel uncoated overnight. Spot reblast if needed.

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 fine finish tip with a 0.4 mm (0.016 inch) to a 0.55 mm (0.022 inch) or larger.

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

Repair

Rusted areas must be spot-blasted in accordance with instructions under **Surface Preparation** before touching up with Dimetcote 9HS.

Topcoating

Dimetcote 9HS 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 drying. Solvent wiping is not satisfactory as contamination may only be spread and not removed. NOTE: a mist coat / full coat may be required when applying a subsequent coat on top of Dimetcote 9HS to prevent application bubbling. Consult your PPG representative for recommendations

Application Data

Substrate suitable prepared steel

Application methods conventional spray or airless

Environmental Conditions (during application and drying)
Air temperature -18 - 50°C 0 - 122°F
Surface temperature -18 - 55°C 0 - 131°F
Relative humidity 50-90%

To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above dew point. Never apply coatings under adverse environmental conditions. Ensure good ventilation when applied in confined areas to assist evaporation and eliminations of solvents.

At freezing temperatures surface must be free of ice.

Potlife (hours)	°C/°F	30/86	20/68	10/50
		2	4	6

NOTE: Since the potlife is limited and shortened by high temperatures, do not mix more material than will be used within the potlife period.

CAUTION - Moisture or water contamination in Dimetcote 9HS liquid will cause short potlife, skinning and gelling.

Drying Times (ASTM D1640)				
(in minutes at 75 µm and 70-90% RH)				
	°C/°F	30/86	20/68	10/50
dry to touch		5	10	20
dry to through		20	40	80
dry to topcoat (in hours)		16	16	16
ready for immersion				
service (days)		1	2	4

Induction time (at 20°C/68°F) not applicable

Thinner Amercoat 18 or 930
Cleaner Amercoat 12, Amercoat 18,
Amercoat 930



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Application Procedure

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

Powder 26.13 kg in 10 l can
Liquid 7.44 kg in 10 l jerrycan

1. Flush all equipment with Amercoat 12 cleaner or Amercoat 18 or 930 thinner to remove any moisture that may be present. Moisture can cause hardening of coating in equipment.
2. Stir liquid with an explosion-proof power mixer.
3. Discard desiccant bag from powder can and gradually stir powder into liquid. Continue stirring until powder is well dispersed, and uniformly blended to a workable consistency. **IMPORTANT:** At the end of the potlife, "kick-out" or separation of liquid and solids occur, together with gassing. Do not keep mixed material, which has exceeded the potlife in tightly closed containers as gassing can create enough pressure to cause containers to burst. Cover containers loosely.
4. Strain material through 30 mesh screen to remove undispersed material and prevent possible clogging of equipment.
5. Keep containers loosely covered during use to prevent skinning or gelling due to moisture in air. Skim off skins and strain material through cheesecloth or 30 mesh screen to remove any remaining skin pieces. Discard gelled material.
6. Thin only for workability or when a rough film or "dry spray" is obtained because of fast solvent evaporation during hot weather or high wind up to 10% Amercoat 18 or 930.
7. Adjust spray equipment to apply an even wet coat with minimum 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 and moisture entrainment shortening potlife and causing gelling.
9. Apply in even, parallel passes, overlap each pass 50%. 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 (conventional spray).
10. Prevent contact with water until the freshly applied coating is dry to touch.
11. When dry through, check film thickness with a nondestructive dry film thickness gauge. Recoat if greater thickness is required before product has been in contact with moisture. Normal recommended thickness is 75 µm minimum. Total dry film thickness must not exceed 200 µm. 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: Drying and topcoating times will be longer when film thickness is over 100 µm, ventilation and air movement are restricted and temperatures 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.
13. 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 to touch.
14. Clean all equipment with Amercoat 12 immediately after use or at least at the end of each working day or shift. When left in spray equipment, Dimetcote 9HS will cure and cause clogging

Shipping Data

Packaging	
liquid	7.44 kg (6.32 l) in 10 l jerrycan
powder	26.13 kg (3.68 l) in 10 l can
Shipping weight	
liquid	approx. 8 kg
powder	approx. 27 kg
Shelf life	
liquid	6 months from shipment date when stored indoors in unopened, original containers at 5 - 40°C (41-104°F). powder 1 year from shipment date when stored indoors in unopened, original containers at 5 - 40°C (41-104°F)



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Caution

This product is highly flammable. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to health:

1. circulate adequate fresh air continuously during application and drying;
2. use fresh air masks and explosion proof equipment;
3. prohibit all flames, sparks, welding and smoking.

Do not empty into drains. Take precautionary measures against static discharges. For specific information on hazardous ingredients, required ventilation, possible consequences of contact, exposure 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.

PPG makes no other warranties concerning the product. No other warranties, whether express, implied or statutory, such as warranties of merchantability or fitness particular purpose, shall apply. In no event shall PPG be liable for consequential or incidental damages.

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Due to PPG's policy of continuous product improvement, the information contained in this Product Data/Application Instructions sheet is subject to change without notice. It is the Buyer's responsibility to check that this issue is current prior to using the product. For the most up-to-date Product Data/Application Instructions always refer to the PPG Protective & Marine Coatings website at www.ppgpmc.com

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.

Condition of Sale

All our transactions are subject to our Terms and Conditions of Sale.

