



Dimetcote 6

Inorganic Zinc Silicate Coating

Product Data/ Application Instructions

- A heavy duty primer that protects with just a single coat
- Outstanding application characteristics for hot climates
- Excellent storage stability over a wide temperature range
- Compatibility with a wide variety of intermediate coats and topcoats
- Meets nuclear power plant requirements

Typical Uses

As a single coat, Dimetcote 6 resists severe weathering and marine environments. As a primer with recommended topcoats, Dimetcote 6 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 6 can be topcoated amongst others with suitable vinyls, chlorinated rubbers polysiloxanes and epoxies. For specific recommendations consult your PPG representative.

Resistance

Dimetcote 6 without a topcoat has excellent resistance to weathering and ultraviolet exposure. With suitable topcoats Dimetcote 6 is recommended for fumes and splash of mild alkalies, dilute acids (fumes only), salt solutions of most types. Dimetcote 6 is not recommended for spillage of acid or alkaline solutions.

Approvals and Certificates

Approved for ARAMCO specifications: APCS 17A, APCS 1A, APSC 11A with suitable topcoats.

Physical Data

Finish	flat
Colour	reddish grey
Components	2
Mixing ratio (by weight)	
liquid	8.43 kg in 10 l can
powder	16.16 kg in 10 l can
Curing mechanism	solvent release and reaction with atmospheric moisture
VOC*	
EC SED 1999/13/EC	212 g/kg (521 g/l)
UK PG6/23(92) Appendix 3.	521 g/l
Dry film thickness	65 µm per coat
Number of coats	1
Calculated coverage.....	10.2 m ² /l at 65 µm
Allow for application losses, surface irregularities, etc.	
Specific gravity	2.46 kg/l mixed product
Temperature resistance	
continuous	400°C/752°F dry heat
Flash points	
(Closed Cup).....	°C °F
Dimetcote 6 liquid	12 54
Thinner 21-06	24 75

* 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.

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Topcoating

Dimetcote 6 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. Rinse with clean water and allow to dry. Solvent wiping is not satisfactory as contamination may be spread and not removed. NOTE: a mist coat / full coat may be required when applying a subsequent coat on top of Dimetcote 6 to prevent application bubbling. Consult your PPG representative for recommendations.

Repair

Rusted areas must be spot-blasted in accordance with instructions under "Surface Preparation" before touching up with Dimetcote 6. When blasting is not practical, Amercoat 68 zinc based primers may be used for repair. See product literature for these primers for selection according to topcoat compatibility.

Surface Preparation

DRY ABRASIVE BLAST - Prepare steel in accordance with Sa 2½ Swedish Standard SIS 05-5900 1967, ISO 8501-1 or Steel Structure Painting Council SP-10. For immersion services, prepare in accordance with Sa 3 Swedish Standard SIS 05-5900 1967, ISO 8501-1 or SSPC-SP-5. 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 6 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 achieve the proper spray characteristics.

AIRLESS SPRAY - Standard airless spray equipment, such as Graco Hydraspray or others, with a fluid tip with a 0.45- 0.58 mm (0.018-0.023 inch) orifice.

CONVENTIONAL SPRAY - Industrial spray equipment such as DeVilbiss MBC or JGA gun with 704E or 765E cap/tip with leather or teflon needle packing and heavy mastic spring.

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.

MIXER - Use a power mixer 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 6 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 24 hours at 20°C/68°F
12 hours at 30°C/86°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 0 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	18-27°C 81°F	64-10-15 minutes
dry to handle or "dry through"	18-27°C 64-81°F	25-30 minutes
dry to topcoat	18-27°C 64-81°F	24 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/cleaner [Thinner 21-06](#)

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Application Procedure

Dimetcote 6 is packaged in the proper mixing proportions of powder and liquid.

Powder 16.16 kg in a 10 l can
Liquid 8.43 kg in a 10 l steel can

CAUTION - Moisture and water contamination will cause skinning and gelling of Dimetcote 6. Keep container closed at all times. During spraying application, moisture trap must be employed.

1. Flush all equipment with recommended cleaner to remove any moisture that may be present. Moisture can cause hardening of Dimetcote 6 in equipment.
2. Stir liquid with an explosion proof power mixer.
3. Discard the 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. Since potlife is limited and shortened by high temperatures, do not mix more coating than will be used within the following times:
 - 24 hours at 20°C/68°F
 - 12 hours at 30°C/86°F
5. 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 cheesecloth or 60 mesh screen to remove any remaining pieces of skin. Discard gelled material.
6. Thinning is normally not required. 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. Use not more than approximately 10 volume % [Thinner 21-06](#).
7. Adjust spray equipment to apply an even wet coat with minimum overspray.
8. Continue slow stirring during application to maintain uniformity of material. Avoid fast stirring as this may cause a rise in material temperature, shortening potlife.
9. Apply in even, parallel passes, overlapping each pass 50%. Pay special attention to welds, cutouts, sharp edges, rivets, bolts, etc., to insure proper thickness. Keep pressure pots at approximately the same elevation as spray gun for proper material delivery to gun.
10. When dry through, check thickness with a non destructive dry film thickness gauge. Recoat if greater thickness is required. Normal recommended thickness is 65 µm and 75 µm for immersion services. Allowable thickness range is 50 to 150 µm, assuming the surface profile is within the recommended range. Greater thicknesses may develop cracking.
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.
12. Prevent contact with water until the freshly applied coating is at least dry to touch.
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.
14. Clean 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 6 will harden and plug spray equipment.

Shipping Data

Packaging
powder 16.16 kg (2.28 l) in 10 l can
liquid 8.43 kg (7.72 l) in 10 l can

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

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

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Caution

Dimetcote 6 liquid 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. For specific information on hazardous ingredients, required ventilation, possible consequences of contact, exposure and safety measures see Safety Data Sheet.

Take precautionary measure against static discharges. Dimetcote 6 Powder is a 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 gasses, spontaneously flammable in air. If welding is to be performed in confined spaces on steel coated with Dimetcote 6 do so in accordance with instructions in U.S.A. Standard Z 49.1.1973 "Safety in Welding and Cutting". Do not leave mixed material in sealed container beyond the expected pot life as gassing may cause container to burst. 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.

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.

Any recommendations or suggestion relating to the use of the products made by PPG, whether in its technical literature, or response to specific enquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyer's having requisite skill and know-how in the industry, and therefore it is Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

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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.