

Dimetcote 11

Inorganic Zinc Silicate Coating

Product Data/ Application Instructions

- Single pack zinc silicate
- A heavy duty primer that protects with just a single coat
- Outstanding application characteristics over a wide range of atmospheric conditions
- Excellent compatibility with weldable zinc silicate preconstruction primers such as Dimetcote Steel Primer 210 and 215
- Provides the long term corrosion protection typical for inorganic zinc silicates

Typical Uses

As an outstanding single coat maintenance system, it resists severe weathering and marine environments. As a "permanent" primer with recommended topcoats, Dimetcote 11 is resistant to industrial and chemical exposures as well as marine exposure on structural steel and pipes, tank exteriors, bridges and offshore platforms.

Recommended Systems

Dimetcote 11 is specially formulated for good compatibility with Dimetcote Steel Primer 215 *, a single pack weldable zinc silicate preconstruction primer, and with Dimetcote Steel Primer 210 *, a two pack weldable zinc silicate preconstruction primer. Dimetcote 11 can be topcoated amongst others with suitable epoxies, polysiloxanes, vinyls and chlorinated rubbers. Specific recommendations can be obtained from your PPG representative.

* **Welding test reports of Dimetcote Steel Primer 210 and 215 are available on request.**

Repair

Rusted areas must be spotblasted in accordance with instructions under **Surface Preparation** before touching up with Dimetcote 11. When blasting is not practical, Amercoat 68 or 160HF zinc-based primers may be used for repair. See product literature for these primers for selection according to topcoat compatibility.

Physical Data

Finish	flat
Colour	grey
Components	1
Curing mechanism	solvent release and reaction with atmospheric moisture
VOC*	
EC SED 1999/13/EC.....	263 g/kg (559 g/l)
UK PG6/23(92) Appendix 3	558 g/l
Dry film thickness	65 µm per coat
Number of coats	1
Calculated coverage	8.9 m ² /l at 65 µm
Allow for application losses, surface irregularities, etc.	
Temperature resistance	
continuous	400°C/752°F dry heat
Induction time (at 20°C/68°F)	not required
Specific gravity	2.13 kg/l
Flash points	
(Closed Cup).....	°C °F
Dimetcote 11	18 64
Amercoat 65	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 11 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 only be spread and not removed.

NOTE: a mist coat / full coat may be required when applying a subsequent coat on top of Dimetcote 11 to prevent application bubbling. Consult your PPG representative for recommendations.

Surface Preparation

STEEL - Dry abrasive blast in accordance with Swedish Standard Sa 2½ 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 residues or dust from surface.

Apply Dimetcote 11 as soon as possible to avoid rusting or other contamination. Do not leave blasted steel uncoated overnight. Spot reblast if needed.

STEEL COATED WITH DIMETCOTE STEEL PRIMER 210 OR 215 - Dependent on condition of shopprimer, Dimetcote 11 may be applied without sweepblasting. However, a specific recommendation should be obtained from your PPG representative.

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 Hydra-Spray or others, with a fluid tip with a 0.53 mm (0.021 inch) orifice or larger.

CONVENTIONAL SPRAY - Industrial spray equipment such as a 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, Dimetcote 11 must be applied as recommended to obtain the maximum protection for which this coating is formulated. To obtain the maximum performance for which Dimetcote 11 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	prepared steel
Application methods	airless or conventional spray
Potlife (at 20°C/68°F)	not applicable
Environmental Conditions	
Air temperature	-5 to 50°C 23 to 122°F
Steel temperature	-5 to 55°C 23 to 131°F

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 dry film thickness and 50-95% RH)		
	°C/°F	10/50 20/68
dry to touch (minutes)	10	7
dry to handle (minutes)	30	20
dry to topcoat (hours)	24	16

Drying times are dependent on the temperature, film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperatures and longer at lower temperatures.

Thinner/cleaner

Amercoat 65

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Application Procedure

Dimetcote 11 is a one component material, and 8 liter is packaged in a 10 liter can.

1. Flush all equipment with recommended cleaner to remove any moisture that may be present. Moisture can cause hardening of Dimetcote 11 in equipment.
2. Stir Dimetcote 11 with an explosion proof power mixer.
NOTE: Dimetcote 11 may show a soft settlement of zinc on the bottom of the can. This settlement must be completely redispersed in the liquid.
3. Strain material through 60 mesh screen to prevent possible clogging of equipment.
4. 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 vol % of Amercoat 65 thinner. Do not use any other thinner.
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 cheese-cloth or 60 mesh screen to remove any remaining pieces of skin. Discard gelled material.
6. Adjust spray equipment to apply an even wet coat with minimum overspray.
7. Continue slow stirring during application to maintain uniformity of material.
8. Apply in even, parallel passes, overlapping 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 level as spray gun for proper material delivery to gun.
9. When dry through, check film thickness with a non-destructive dry film thickness gauge. Recoat if greater thickness is required. Normal recommended thickness is 65 µm. Dimetcote 11 is tolerant to higher film thickness, up to 150 µm in one spray application. Greater thickness may develop mudcracking of the dry film. When the coating is not sound and well adhering due to mudcracking or dry spray, it should be removed and reapplied at the specified thickness.
10. 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.
11. Prevent contact with water until the freshly applied coating is at least dry to touch.
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.
13. 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 11 will harden and plug spray equipment.

Shipping Data

Packaging	8 l in 10 l can
Shipping weight	approx. 18 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 11 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.

If welding is to be performed in confined spaces on steel coated with Dimetcote 11 do so in accordance with instructions in U.S.A. Standard Z 49.1-1973.

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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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.

