



Dimetcote 3A

Waterbased Inorganic Zinc Silicate

Product Data/ Application Instructions

- **Waterbased tanklining resistant to a wide range of chemicals**
- **No solvent flammability hazard**
- **Fast drying and handling**
- **Ready for service 24 hours after application of curing solution**

Typical Uses

Dimetcote 3A is an inorganic zinc silicate coating for use as a tanklining to protect ship's cargo and ballast tanks, storage tanks containing solvents, fuels and a broad range of petroleum products.

Recommended Systems

Dimetcote 3A is used as a one coat tanklining for continuous or intermittent immersion service.

Resistance guide

See Dimetcote Chemical Resistance List.

Physical Data

Finish	flat
Colour	grey
Components	2
Mixing ratio (by weight)	
liquid	8.1 kg
powder	22.6 kg
Mixing ratio (by volume)	
liquid	7 l
powder	3 l
Curing mechanism	water evaporation and chemical reaction between components by using curing solution
VOC	0
Dry film thickness	75 µm per coat
Number of coats	1
Calculated	8.3 m ² /l at 75 µm
Allow for application losses, surface irregularities, etc.	
Specific gravity	3.1 kg/l (mixed product)
Flash points (Closed Cup).....	not applicable

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Surface Preparation

STEEL - Blast in accordance with ISO Standard 8501-1 to Sa 2½ or Steel Structures Painting Council SSPC SP-10 without pits or depressions. For immersion services, prepare in accordance with Sa 3 (ISO 8501-1) or SSPC SP-5.

NOTE: Blast to achieve a 40 to 65 µm profile, as determined with *Testex* Tape or similar instrument. Remove abrasive residues and dust from surface. **IMPORTANT** - Apply Dimetcote 3A as soon as possible after surface preparation to prevent any contamination. Do not leave blasted steel uncoated overnight. In case of contamination, remove contaminants. Spot blast steel 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.

CONVENTIONAL SPRAY - Industrial equipment such as DeVilbiss MBC gun with 62 or 64 air cap and "E" fluid tip and heavy mastic spring. Separate air and fluid pressure regulators and a slow mechanical pot agitator are recommended. A moisture and oil trap in the main air supply line is essential. **MIXER** - Use power mixer powered by an air motor or an explosion proof electric motor. Mixer speed should be slow. Too fast mixing can result in lower thickness during application.

Application Data Summary

Dimetcote 3A is a waterbased inorganic zinc silicate for heavy-duty tanklining. Like all high performance coatings, Dimetcote 3A must be applied as recommended to obtain the maximum protection for which this coating is formulated. If conditions exist which are not within the requirements or limitations described, consult your Ameron representative.

Repair

If cured and damaged, spot reblast. Then apply additional Dimetcote 3A.

Application Data

Substrate prepared steel

Application methods conventional spray

Environmental Conditions (during application and drying)

Air temperature	5 to 50°C	41 to 122°F
Surface temperature	5 to 55°C	41 to 131°F

RH during application and drying 70% max. To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above dew point. Never apply coatings under reverse environmental conditions. Ensure good ventilation when applied in confined areas to assist evaporation. Dehumidification equipment is required in confined areas.

Drying Times (in minutes at 75 µm and 50-70% RH)

..... °C/°F	10/50	20/68	30/86
dry to touch	20	15	10
dry to recoat (minimum)	20	10	5

* Please contact your Ameron representative for maximum recoating times.

NOTE: Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperature or lower humidity and longer at lower temperatures or higher humidity. Prior to recoating ensure the surface is clean.

Observe the following drying times for Dimetcote 3A prior to application of the curing solution (in hours) at 70% maximum relative humidity:

	°C/°F	10/50	20/68	30/86
75 µm	32	16	12	
150 µm	48	24	18	

NOTES:

- 150 µm is the maximum allowed dry film thickness reading
- For temperatures between 10°C/50°F, 20°C/68°F and 30°C/86°F, the lowest temperature has to be observed;
- For dry film thicknesses between 75 and 150 µm, the highest measured dft has to be observed.

Potlife (at 20°C/68°F) 8 hours

Potlife is dependent on temperature and quantities mixed.

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

Thinner not applicable

Cleaner fresh water

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Application Procedure

Dimetcote 3A is packaged in the proper mixing proportions of liquid and powder.

Liquid 7 l in 10 l jerrycan
Powder 3 l in 5 l can
Curing solution 10 l in 10 l jerrycan

1. Flush equipment with fresh water before use.
2. Stir liquid mixing to an even consistency with a power mixer.
3. Discard the desiccant bag from powder, add powder to liquid and continue stirring for 5 minutes.
NOTE: since the potlife is limited and shortened by high temperatures, do not mix more material than will be used within the potlife period (8 hours at 20°C/68°F).
4. Do not thin for any reason.
5. Strain mixture through 30 mesh screen to remove any coarse particles.
6. Stir slowly during application to maintain uniformity of material. Apply a wet coat by even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
7. Stripe coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
8. Application at 120 µm wet film thickness will normally provide 75 µm dry film.
9. Keep pressure pot at approximately same elevation as spray gun for proper material delivery to gun.
10. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.
11. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray before the product has come into contact with moisture condensation or curing solution.
12. Ensure that the Dimetcote 3A coating dries as quickly as possible by good ventilation and dehumidification. After the entire surface is visibly dry, allow at least 16 hours further drying at a relative humidity below 70% before applying curing solution. It is essential that no moisture or condensation comes on the coating during drying.
13. Clean all equipment with fresh water immediately after use or at least at the end of each working day or shift. When left in spray equipment, Dimetcote 3A will cure and cause clogging.

Curing

1. After the proper drying time, apply a coat Dimetcote 3A curing solution by spray or brush, making sure the surface is entirely wet.
2. If puddles of curing solution develop disperse promptly with an hose or brush or mop.
3. Allow the curing solution to remain on the surface for 24 hours.
4. Remove residues of the curing solution as soon as possible after 24 hours curing period. Cleaning can be done by flushing the surface with fresh water or by steaming. Scrubbing with a stiff brush will remove heavy deposits.

Shipping Data

Packaging
liquid 6.8 l (8.1 kg) in 10 l jerrycan
powder 3.2 l (21.7 kg) in 5 l can
curing solution 10 l (10.9 kg) in 10 l jerrycan *

Shipping weight
liquid approx. 9 kg
powder approx. 24 kg
curing solution approx. 12 kg

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

* Order ½ l for each litre of Dimetcote 3A (mixed)

** Product contains water; protect from freezing.

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Caution

Dimetcote 3A does not contain any organic solvents and therefore does not present the dangers which are normally related to solvents. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent damage to the health:

1. circulate adequate fresh air continuously during application and drying;
2. use fresh air masks;

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.

Dimetcote 3A is a flammable powder.

Dimetcote 3A curing solution can cause skin and eye burns. Breathing vapours will be irritating and may cause nausea or vomiting. Wear approved respiratory equipment and full cover clothing.

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.

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron'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 Ameron 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 Ameron of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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