



Amercoat 741

Inorganic Silicate Topcoat

Product Data/ Application Instructions

- **Excellent solvent, temperature resistance**
- **Resists up to 5.0×10^9 Rad radiation**
- **Not combustible after application and curing**
- **One component self curing solvent based topcoat**

Typical Uses

Amercoat 741 can be used as a topcoat on Dimetcote zinc silicate primers in the chemical and petrochemical, marine, offshore, conventional and nuclear industry. It can be used as a high temperature resistant topcoat, with excellent mechanical properties over zinc silicate primers, like exterior surfaces of stacks and (insulated) piping up to 400°C. Due to its inertness and inorganic nature, Amercoat 741 has excellent resistance to radiation and is recommended as a white topcoat over Dimetcote zinc silicate primers on steel structures exposed to high levels of cumulative nuclear radiation.

Outstanding Characteristics

Amercoat 741 is a single component inert inorganic topcoat of 125 µm dry film thickness with excellent resistance to a large variety of solvents. Amercoat 741 is after application and curing a non-combustible coating.

Systems using Amercoat 741

Amercoat 741 is normally recommended as a single topcoat of 125 µm dry film thickness on Dimetcote 6. In case Dimetcote 9 Series is being used the substrate shall be fresh water washed and dried prior to the application of Amercoat 741. When other zinc silicate primers are concerned, ask your Ameron representative for a suitable recommendation.

Physical Data

Finish	flat
Colour	white, pearl grey (SC 708)
Components	1
Curing mechanism	solvent release and reaction with atmospheric moisture
Volume solids	62% (ISO 3233)*
VOC	27% by weight / 475 g/l
Dry film thickness	125 µm per coat
Number of coats	1
Calculated coverage	5.0 m ² /l at 125 µm
Allow for application losses, surface irregularities, etc.	
Specific gravity	1.73 kg/l
Temperature resistance	400°C dry heat
Flash points	
(Closed Cup).....	°C °F
Amercoat 741	12 54
Amercoat 65	24 75

* Volume solids is measured in accordance with ISO 3233. Slight variations ±3% may occur due to colour and testing variances.

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Surface Preparation

NEW SURFACES - Prepare surface in accordance with the Dimetcote primer to be used. Once primed, surface should be free from any foreign matter (like dust and moisture) before applying Amercoat 741.
OLD OR DAMAGED ZINC SILICATES - Remove dust, contaminants and loose zinc salts with sweep blasting. Bare substrates should be primed with suitable zinc silicate primer.

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 equipment can **not** be used! *Binks Alpha* airless is the only acceptable airless pump having a 60:1 pump ratio and a 0.030" tip or higher. Use the lowest possible spraying pressure; hose length should not exceed 12 meters.

CONVENTIONAL SPRAY - Industrial equipment having separate air and fluid pressure regulators and a mechanical pot agitator are recommended. A moisture and oil trap in the main air supply line is essential. Material hose: internal diameter 0.5 inch. Maximum length of material hose is 6 meter.

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

Application Data Summary

Like all high-performance coatings, Amercoat 741 must be applied as recommended to obtain the maximum protection for which this coating is formulated. To obtain the maximum performance for which Amercoat 741 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 Ameron representative.

Application Data

Substrate Dimetcote primed steel
Application methods conventional spray, *Binks Alpha* airless spray
Potlife (at 20°C/68°F) not applicable

Environmental Conditions
(during application and drying)
Air temperature: -18 to 50°C 0 to 122°F
Surface temperature: -18 to 70°C 0 to 158°F

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 elimination of solvents.

Drying Times
(at 50-90% RH) °C/°F 10/50 20/68 35/95
insoluble to water (in minutes) 60 30 15
dry to handle (in hours)..... 6 4 2

NOTE: Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperatures and longer at lower temperatures. Prior to recoating ensure the surface is clean. Maximum recoating time depends on coating system to be used. Amercoat 741 may be accelerated by wetting the surface with fresh water. Consult your Ameron representative for specific recommendations.

Thinner/cleaner Amercoat 65

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Application Procedure

Amercoat 741 is a one component product and packaged in a 10 l can.

1. Flush equipment with recommended cleaner before use.
2. Stir all material thoroughly before applying. If thinning is necessary for workability, thin with no more than 10% of recommended thinner. Continue stirring during application.
3. Spray on heavy, wet coat by even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays. Follow with a "cross spray" pass at right angles to first pass.
4. Give special attention to angles, corners rough spots, edges, etc. to avoid pinholes, bare areas and holidays.
5. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than 125 µm, apply additional material as needed.
6. To repair or touch up bare areas, simply apply additional material; smaller areas may be brushed. Allow 30 minutes at 20°C/68°F between full coats.
7. 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.
8. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift.

NOTE: Avoid moisture contact in open cans. Keep containers closed to prevent moisture access.

Amercoat 741 is moisture reactive.

Shipping Data

Packaging	10 l in a 10 l drum
Shipping weight	approx. 18.6 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

This product is combustible. 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

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.

Ameron 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 Ameron be liable for consequential or incidental damages.

Any recommendations or suggestion relating to the use of the products made by Ameron, 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.

Limitation of Liability

Ameron's liability on any claim of any kind, including claims based upon Ameron's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim.

In no event shall Ameron be liable for consequential or incidental damages.

Due to Ameron'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 Ameron Performance Coatings & Finishes website at www.amerondirect.co.uk

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.