



Amercoat 300A

Water Based Epoxy Finish

(formerly Amercoat 2203A)

Product Data/ Application Instructions

- **Chemical and weather resistant finish coat**
- **Withstands nuclear radiation**
- **Easily and quickly decontaminated**
- **Provides excellent adhesion to a great variety of surface coatings**
- **Environmentally designed, contains no solvents**

Typical Uses

Chemical and weather resistant finish coat on steel and concrete surfaces in chemical plants, oil refineries, offshore platforms and other steel structures. As it is easily cleaned and does not contain any solvents. Amercoat 300A can be used in food and pharmaceutical industries as well as for maintenance in confined areas. As a radiation resistant, easily decontaminated finish coat for steel and concrete surfaces in the nuclear industry. Amercoat 300A is used as a finish coat over suitable primers and body coats for the protection of steel and concrete for applications where no solvents are allowed.

Resistance

As epoxy finish coat Amercoat 300A provides excellent resistance to severe weathering and splash and spillage of salt water, oils and chemicals in the chemical, oil refining and pharmaceutical industry.

Approvals and Certificats

"0" class fire rating (UK Building Regulations) based on testing according BS 476 parts 6 and 7 (fire propagation and flame spread).
Good decontamination properties according to BS 4247 with Dimetcote 9 as primer and Amercoat 2201A as tiecoat.

Physical Data

Finish	glossy
Colour	white, other colours available on request *
Components	2
Mixing ratio (by volume)	
resin	1.75 l
cure	3.25 l
Curing mechanism	evaporation of water and chemical reaction between components
Dry film thickness	50 µm per coat
Number of coats	1 or 2**
Volume solids	52% (ASTM D2697 modified) ***
VOC	0
Calculated coverage	10.4 m ² /l
Allow for application losses, surface irregularities, etc.	
Specific gravity	1.33 kg/l mixed product
Flash points (Closed Cup).....	not applicable

* minimum order size for colours not on stock: 70 litres

** Uniform appearance may require 2 coats of Amercoat 300A in a light colour on tanks and other large structures over contrasting primers or intermediate coats. Use only a light coloured primer or intermediate coat when one finish coat of Amercoat 300A in a light colour is specified.

*** Volume solids is measured in accordance with ASTM D2697 modified. Slight variations ± 3% may occur due to colour and testing variances.

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Surface Preparation

STEEL - Prepare in accordance with application instructions for the specific primer being used. Be sure primer is clean and dry when Amercoat 300A is applied. When used as a refresher coat over existing coating system surface should be dry and free of contaminants like oil, grease and loose coating.

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, Wagner or others having a fluid tip with a 0.33 to 0.53 mm (0.013 to 0.021 inch) orifice.

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

Application Data Summary

Like all high performance coatings Amercoat 300A must be applied as recommended to obtain the maximum protection for which this coating is formulated. To obtain the maximum performance for which Amercoat 300A 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 properly primed steel, sound existing coating systems

Application airless spray, brush or roller*

Potlife (at 21°C/70°F) 1½ hour

Drying Times

(at 50 µm dft, 21°C/70°F and 50 to 80% relative humidity)

dry to touch 4 hours

dry to recoat 16 hours

Drying of waterborne coatings is dependent on temperature, ventilation, relative humidity and coating thickness. Times are proportionally shorter at higher temperature and longer at lower temperatures. Potlife and drying times are dependent on temperature.

Environmental Conditions

(during application)

Air temperature: 10 to 30°C 50 to 86°F

Surface temperature: 10 to 30°C 50 to 86°F

Storage: 10 to 35°C 50 to 95°F

Amercoat 300A contains water; protect from freezing. To prevent moisture condensation during application and curing, surface temperature must be at least 3°C/5°F above dew point. At relative humidities above 80% drying times will be retarded due to the low evaporation rate of water under these conditions. During application and curing relative humidity should not be above 90%.

Thinner fresh water

Cleaner fresh water or
Amercoat 12

*Brush or roller application may require additional coats.

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Application Procedure

Amercoat 300A is packaged in two components in the proper mixing proportions of resin and cure which should be mixed together before use.

Resin 1.75 l in 5 l can

Cure 3.25 l in 5 l can

1. Flush equipment with fresh water.
2. Stir pigmented resin solution thoroughly to homogeneous liquid.
3. Add cure to resin and mix until uniform. Do not mix more material than will be used in 1½ hours at 21°C/70°F.
4. Mixing shall be done with a power mixer only to obtain the required degree of emulsion. Insufficient emulsification (too low speed of mixer or mixing manually etc.) will be detrimental to the performance of the coating.
5. The end of the potlife will not be shown by viscosity increase. Material must be used prior to the expiration of the potlife. Potlife of Amercoat 300A is:
 - 1½ hours at 21°C/70°F
 - 2½ hours at 15°C/59°F
 - 3½ hours at 10°C/50°F
6. When applying by conventional spray, use adequate air pressure and volume to ensure proper atomization. To optimise spraying, Amercoat 300A can be thinned with up to 15 vol % fresh water.
7. When applying by airless spray, thinning with fresh water may be required up to 15%.
8. Only fresh, clean water should be used for thinning.
9. Apply a wet coat in even, parallel passes, overlapping each pass 50%.
10. Recommended dry film thickness is 50 µm. Application of a wet film thickness of 97 µm normally provides a 50 µm dry film.
- 11a. In areas where the use of solvents is prohibited, the equipment can be cleaned by extensive flushing with warm fresh water. It is recommended to do the final cleaning outside this area with solvents like Amercoat 12 Cleaner.
- 11b. In non restricted areas equipment can be cleaned by flushing with Amercoat 12 Cleaner.

Shipping Data

Shipping weight

resin approx. 3.8 kg

cure approx. 3.9 kg

Shelf life

resin/cure 1 year from shipment date when stored indoors in unopened, original containers at 10 to 35°C (50 to 95°F)*

*Product contains water; protect from freezing.

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Caution

This product does not contain organic solvents and therefore does not present the dangers which are normally related to solvents.

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

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.

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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.