



Amercoat 91



Epoxy Novolac Tank Lining

Product Data/ Application Instructions

- High performance epoxy novolac also defined phenolic epoxy tanklining
- Broad spectrum of chemical resistance
- Withstands continuous immersion in deionised water up to 93°C (199°F)
- Withstands continuous immersion in hot concentrated brine up to 70°C (158°F)
- Withstands continuous immersion in hot sour crude up to 150°C (302°F)
- Temperature resistance to 230°C (446°F) on insulated or uninsulated surfaces when mixed with Amercoat 880 glass flake additive

Typical Uses

Amercoat 91 provides excellent protection to prepared steel and concrete exposed to chemical immersion, splash, spillage and fumes. Amercoat 91 is used as high performance tanklining for road tankers and storage tanks in the chemical and petrochemical industries.

Amercoat 91 has excellent resistance to continuous and alternating service for a wide range of chemicals, solvents, caustic, crude and fuel oil, as well as, neutral, alkaline and non oxidizing salt solutions in water. It may be cleaned between cargoes with hot cleaning, up to a butterworth temperature of 82°C(180°F).

Physical Data

Finish	low gloss
Colour	light buff, white*
Components	2
Mixing ratio (by volume)	
resin	7.3 parts
cure	1 part
Curing mechanism	Solvent release and chemical reaction between components
Volume solids (calculated)	54%
VOC (calculated)	27% by weight 410 g/L 3.4 lbs/gal
Dry film thickness	125-150 µm (5 - 6 mils) per coat
Number of coats	2
Calculated coverage	3.6 m ² /l at 150 µm

Allow for application losses, surface irregularities, etc.

Density	1.5 kg/l (mixed product)	
Flash points (closed cup)	°C	°F
resin	31	88
cure	93	199
Amercoat 65	24	75
Amercoat 12	24	75

Thinner

Cleaner

* When exposed to high temperatures will discolor.

Amercoat 91



Application Instructions

Adhere to all instructions, precautions, conditions, and limitations to obtain maximum performance. For conditions outside the requirements or limitations described contact your Ameron representative.

Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. All surfaces must be clean, dry and free of all contamination, including soluble salts before applying coating.

STEEL – NEW WITHOUT PITS OR DEPRESSIONS. Blast in accordance with Sa 2½ ISO 8501-1 or SSPC-SP10.

RUSTED OR PITTED STEEL. Blast in accordance with Sa 3 ISO 8501-1 or SSPC-SP5.

Blast to achieve an angular minimum profile of 38 micron as determined with *Testex* Tape or a similar device. Remove abrasive residue or dust from surface.

Apply Amercoat 91 as soon as possible to prevent re-rusting. Keep moisture, oil, grease or other organic matter off surface before coating. Spot reblast to remove any contamination. Solvent whipping is not adequate.

CONCRETE- Clean concrete and masonry surfaces; abrasive blast (ASTM D4259). Fill small holes or voids with Nu-Klad 114A before applying Amercoat 91.

Application Equipment

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure, hose and tip size may be necessary for proper spray characteristics.

Airless spray- Standard equipment, such as Graco Bulldog Hydra-Spray or larger, with a 0.017-0.023 inch tip.

Conventional spray- Industrial equipment, such as DeVilbiss MBC or JGA spray gun, and a pressure material pot. A moisture and oil trap in the air supply and separate regulators for air and fluid pressure are required.

Power mixer- Jiffy mixer powered by an air or explosion proof electric motor.

Application Data

Substrate Blasted steel, concrete

Environmental Conditions

Air temperature	10 - 45°C	50 - 113°F
Surface temperature	10 - 50°C	50 - 122°F

Surface temperature must be at least 3°C/5°F above dew point to prevent moisture condensation on the surface.

Application conventional or airless spray, brush

Potlife (at 21°C/70°F) 6 hours

Potlife and drying times are dependent on temperature, ventilation, relative humidity, coating thickness, etc.

Induction time 15 minutes

Temperature resistance*	°C	°F
Wet	93	199
Dry	204	399

Drying times at 23°C/73°F

to touch	1 hour
to recoat minimum	16 hours
to recoat maximum	90 days
before immersion	1 week

Thinner Amercoat 65

Cleaner Amercoat 12

Amercoat 91



Application Procedure

1. Flush equipment with recommended thinner before use.
2. Stir resin solution thoroughly to homogeneous liquid.
3. Add cure to the resin and mix until uniform using a power mixer. Amercoat 91 is packaged in the proper mixing proportions of resin and cure. Do not mix more material than will be used during the potlife
4. Allow an induction time of 15 minutes at 20°C (68°F)
5. If necessary for workability, use up to 10% of recommended thinner for airless or conventional equipment.
6. Apply a wet coat in even parallel passes, overlapping each pass 50% to avoid holidays, bare areas and pinholes to achieve a dry film thickness of 125-150 microns (5 - 6 mils).
7. Check the dry film thickness using nondestructing dry film thickness gauge. If less than the specified thickness apply additional material. Total dry film thickness must not exceed 350 microns (14 mils) in 2 coats, and must not be less than 200 microns
8. When a pinhole-free coating is required, check continuity with a non destructive holiday detector (wet sponge method)
9. Normal recommended dry film thickness is 125-150 µm (5 - 6 mils).
10. After use, clean equipment with recommended cleaner.

Shipping Data

Packaging	
resin	17.59 l (4.65 gal) in 20 l can
cure	2.41 l (0.64 gal) in 5 l can
Shipping weight	
resin	29.3 kg
cure	2.8 kg
Shelf life	1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41-104°F)

Safety

Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with application instructions must be observed during all storage, handling, use and drying periods.

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.

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-confirming 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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All our transactions are subject to our Terms and Conditions of Sale.