



## 100% Solids Epoxy Coating

# Product Data/ Application Instructions

- Solvent free, 100% solids epoxy seal-coat designed for protection of buried and subaqueous concrete pipelines
- Durable, abrasion-resistant, exterior pipe coating with high dielectric strength unaffected by moisture or soil chemicals
- Designed for production line application on moist surfaces of freshly placed or cured cement-mortar coated pipe and concrete pipe

#### **Typical Uses**

Amercoat 1972B is used as an exterior seal-coating for cement-mortar coated and concrete pipe to protect installed pipelines against stray current electrolysis, to provide a barrier against aggressive soils and ground waters, and to reduce current requirements for cathodically protected pipelines. When applied to freshly placed or partially cured cement-mortar and concrete surface, it also serves as a curing membrane.

Amercoat 1972B was first used in 1969 on a large-diameter prestressed concrete water transmission pipeline in the surface of the surface of the surface and the surface of the surface

prestressed concrete water transmission pipeline in the southwestern U.S.A. to protect against cathodic interference. Subsequently. Amercoat 1972B has been used to protect 24 million square meters of pipe on several other large pipeline projects around the world where cathodic interference or unusually corrosive soils were of major concern.

In the Middle East, Amercoat 1972B has been used extensively since 1980 as an exterior sealcoat on cementmortar coated pipelines and on concrete pipelines to provide a barrier to aggressive soils and ground waters.

#### **Outstanding Characteristics**

Amercoat 1972B, a solvent-free, 100% solids epoxy, is a highperformance, chemical and corrosion resistant concrete pipe exterior seal-coat. It is chemically compatible with hydrating cement mortar and concrete and can be applied to moist surfaces of freshly placed or cured cement mortar and concrete without special surface treatment. Its smooth, hard, abrasion-resistant finish facilitates the handling, transportation and installation of the pipe without damage to the coating. Amercoat 1972B does not depend upon solvent evaporation during the curing process which enables high film buildup in a single application without running, sagging or shrinking. The solvent-free, 100% solids composition facilitates applying a continuous coating to the required thickness in one application over relatively rough mortar or concrete surfaces. It is a two component coating using in-line static mixing during application, allowing the use of fast reacting resin and cure materials for rapid production line processing of the pipe being coated

#### **Physical Data**

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Finish	gloss
Colour	black, white *
Components	2
Mixing ratio (by volume) resin	1 part 1 part
Curing mechanism	chemical reaction between components
Volume solids	100% (ASTM D2697)
VOC	0
Dry film thickness	16 - 36 mils / 400 - 900 $\mu$ m per coat
Number of coats	1
Theoretical coverage	1 mil (25 $\mu$ m) 1604 ft²/gal (39.4 m²/l)
Recommended coverage rough surfacesmooth surface	m²/l)

Allow for application losses, surface irregularities, etc.

Flash points		
(Closed Cup)	°C	°F
resin	76	169
cure	85	185
Amorooat 12	21	20

<sup>\*</sup> Amercoat 1972B black contains coal tar, Amercoat 1972B white is coal tar free.

#### **Surface Preparation**

CONCRETE - Impacted cement mortar or cast concrete needs no special surface treatment. Smooth, dense, steel-trowelled surfaces must be roughened by abrasive blast or acid etch. All surfaces must be clean and free of dirt, other contaminants and loose laitance.

#### **Application Equipment**

The following equipment is a partial guide and suitable equipment from other manufacturers may be used. Adjustments of pressures and change of tip size may by needed to achieve the proper spray characteristics.

AIRLESS SPRAY - Plural-component metering, mixing and spraying apparatus, such as Graco Variable Ratio Hydra-Cat, with a 0.021 - to 0.035 inch (0.53 to 0.88 mm) tip and 60 to 120 psi (4.2 to 8.4 kg/cm²) inbound air pressure to a 28:1 or 34:1 pump.

#### **Application Data Summary**

Amercoat 1972B is a solvent-free 100% solids, high-build, epoxy seal-coat for protection of buried and subaqueous concrete, pipelines. It provides a durable, abrasion resistant coating with high dielectric strength and full film thickness in one application. Refer to Amercoat 1972B product data sheet for properties and uses. To obtain the maximum performance for which Amercoat 1972B is formulated, strict adherence to all application instructions, precautions, conditions and limitations is necessary

#### **Application Data**

Potlife is dependent on temperature and quantities mixed.

#### **Drying Times**

Amercoat 1972B reaches a dry through time in 12 hours at 24°C/75°F. Higher curing temperatures will reduce dry through times; lower temperatures will prolong dry through time. If the coating is applied when the ambient temperature is below 10°C/50°F, the coated pipe should be placed in a neated enclosure for coating cure at an elevated temperature.

Thinner ..... not applicable

Cleaner ..... Amercoat 12

#### **Application Procedure**

Amercoat 1972B is packaged in the proper mixing proportions of resin and cure.

Resin: 190 l in 200 l drum Cure: 190 l in 200 l drum

- 1. Flush equipment with Amercoat 12 before use.
- Inline heat resin and cure components separately to 49 to 66°C (120 -150°F) Stir each component to a uniform consistency. Do not add thinner.
- 3. Adjust equipment to provide 1:1 ratio mixing
- 4. Apply a heavy, wet coat in even, parallel passes overlapping each pass 50% to avoid bare areas.
- 5. Apply material at a rate to achieve specified thickness.
- 6. Clean equipment immediately with Amercoat 12 after
- For touch-up purposes, small amounts approximately 1 pint (0.5 litre) may be hand mixed and brush applied.
   Clean equipment promptly with Amercoat 12 after use.

CAUTION: Amercoat 1972B, when mixed and held in containers of 1 pint (0.5 Litre) or more, reacts rapidly, solidifying with generation of excessive heat. Once applied to the substrate at recommended thickness, curing takes place at normal rates

#### **Shipping Data**

Packaging resincure	190 l in 200 l drum 190 l in 200 l drum
Shipping weight resin	approx. 300 kg approx. 305 kg
Shelf life resin/cure	1 year from shipment date when stored indoors in unopened, original containers at 5 to 55°C (41

to 131°F).

#### Caution

This product is 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 the health:

- 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

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.

Any recommendations or suggestion relating to the use of the products made by PPG, 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 knowhow 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**

PPG's liability on any claim of any kind, including claims based upon PPG'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 PPG be liable for consequential or incidental damages.

Due to PPG'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 PPG Protective & Marine Coatings website at www.ppgpmc.com

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.

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