



# Amercoat 71 Primer

## Polyamide Cured Epoxy Primer

### Product Data/ Application Instructions

- A superior epoxy polyamide primer coating
- Forms durable coating systems with a wide range of topcoats for non-immersion services
- Suitable for a variety of substrates
- Excellent rust inhibitive shop primer in corrosive environments
- Suitable as tiecoat over Dimetcote

#### Typical Uses

(with suitable topcoats)

**INDUSTRIAL** - Structural steel, machinery, pipes and tank exteriors in paper mills, oil refineries, power plants, chemical process and waste treatment plants, for non immersion service.

**MARINE** - Decks, hulls, superstructures and other atmospheric areas of ships, barges, offshore structures and workboats. Interiors of (dry) cargo holds.

**NUCLEAR** - In nuclear power plants including containment, on areas subjected to radiation and decontamination and waste handling facilities.

Your PPG representative will be pleased to help you evaluate your particular protection needs and make correct recommendations to suit your specific requirements. Refer also to individual topcoats for more detailed information on complete primer/topcoat systems.

#### Outstanding Characteristics

With the proper topcoat, the primer withstands splash or spillage of water, solvents, chemicals and petroleum products. Suitable topcoats are Amercoat epoxies, coaltar epoxies, acrylics, alkyls and polyurethane coatings.

#### Approvals and Certificates

Amercoat 71 is widely specified for nuclear service. It meets requirements of the American National Standards Institute (ANSI) and other engineering specifications.

Approved primer for Aramco specification APCS 1B.

With suitable primer and topcoat, complies with the following standards:

- NORSOK M-CR-501 (coating system 1);
- ISO 12944 (class C5M);
- Shell specification ES/011 Vol. 2 Rev. 7.

Approved primer for miscellaneous fire proofings

#### Physical Data

Finish .....	flat	
Colour .....	oxide red	
Components .....	2	
Curing mechanism .....	solvent release and reaction between components	
Volume solids : .....	51% (ASTM-D2697, modified) *	
VOC**		
EC SED 1999/13/EC .....	358 g/kg (467 g/l)	
UK PG6/23(92) Appendix 3 .....	435 g/l (3.6 lbs/gal)	
Dry film thickness .....	50 µm per coat	
Number of coats .....	1	
Calculated coverage .....	10.2 m <sup>2</sup> /l at 50 µm	
Allow for application losses, surface irregularities, etc.		
Specific gravity .....	1.39 kg/l (mixed product)	
Flash points (Closed Cup).....	°C	°F
resin .....	22	72
cure .....	30	86
Thinner 91-83 .....	26	79
Thinner 90-58 .....	24	75

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

\*\* VOC figures are quoted according to both the EC directive 1999/13/EC which are theoretically calculated figures and the UK PG6/23(92) Appendix 3 which are practically determined figures.

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## Surface Preparation - Primer

**STEEL** - Blast in accordance with Sa 2½, ISO 8501-1 or Steel Structures Painting Council SP-10. NOTE: blast to achieve a 25 to 50 µm profile as determined with *Testex* Tape or similar instrument. Remove abrasive residues and dust from surface.

**DIMETCOTE** - Surface must be clean and dry. Remove any contamination. Refer to application instructions for the particular Dimetcote types for any other special topcoating requirements. Remove oil or grease with a neutral detergent or emulsion cleaner (like Neutral oil cleaner).

**NEWLY GALVANISED SURFACES** - Remove any oil or soap film with Neutral oil cleaner, treat surface by a lightly blast with fine abrasive.

**WEATHERED GALVANISED SURFACES** - If galvanizing has been exposed to exterior weathering for 6 months or more, remove zinc corrosion products by mechanical means (like power sander or a light blast). Remove oil or grease with Neutral oil cleaner.

**ALUMINUM SURFACES** - Remove oil and grease with Neutral oil cleaner. Lightly blast with fine abrasive or apply chromate-type conversion treatment, such as Alodine 1200, by Henkel..

**IMPORTANT** - Apply primer 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.

**AIRLESS SPRAY** - Standard airless spray equipment, such as Graco, DeVilbiss, Nordson-Bede, Spee-Flo or others having a fluid tip with a 0.38 to 0.53 mm (0.015 to 0.021 inch) orifice.

**CONVENTIONAL SPRAY** - Industrial equipment such as DeVilbiss MBC or JGA gun with 78 or 765 air cap and "E" fluid tip and heavy mastic spring or Binks No. 18 or 62 with a 66 x 63 PB nozzle setup. Separate air and fluid pressure regulators, mechanical pot agitator and a moisture and oil trap in the main air supply line are recommended.

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

## Application Data

Substrate ..... blasted steel, primed steel, aluminium and Dimetcote

Application methods ..... airless or conventional spray, brush or roller

Environmental Conditions (during application)

Air temperature .....	5 to 50°C	41 – 122°F
Surface temperature .....	5 to 60°C	41 – 140°F

To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above the dew point. Minimum temperature for satisfactory cure is 10°C/50°F. Never apply coatings under adverse environmental conditions. Ensure good ventilation when applied in confined areas to assist evaporation and elimination of solvents.

Potlife (at 20°C) ..... 8 hours

Potlife and drying time are dependent on temperature and quantities mixed.

Drying Times (in hours at 50 µm and 18 to 27°C (65 – 81°F)

	Minimum	Maximum
dry to touch .....	2 – 3	not applicable
dry to handle		
(dry to through) .....	4	not applicable
dry to recoat .....	4	
topcoat		

Drying and curing times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperature and longer at lower temperatures.

Thinner ..... Thinner 91-83

Cleaner ..... Thinner 90-58

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## Application Procedure

Amercoat 71Primer is packaged in the proper mixing proportions of resin and cure.

Resin: 16 l in 20 l can

Cure: 4 l in 5 l can

1. Flush equipment with recommended cleaner.
2. Stir resin (in the larger container) to an even consistency with a power mixer.
3. Add cure to resin 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 in 8 hours at 18-27°C (64 – 81°F) or 4 to 6 hours at 27-35°C (81 – 95°F).
4. For conventional spray, thin only as needed for workability with no more than approximately 10 vol % of recommended thinner. Thinning is normally not needed for airless spray.
5. Stir during application to maintain uniformity of material. Apply a wet coat even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
6. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
7. Application at 100 µm wet film thickness will normally provide 50 µm dry film.
8. Check thickness of dry coating with a non destructive dry film thickness gauge, such as a Mikrotest or Elcometer. If less than specified thickness, apply additional materials as needed.
9. Small damages or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
10. 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.
11. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift. When left in spray equipment, Amercoat 71Primer will cure and cause clogging.

## Shipping Data

Packaging  
resin ..... 16 l in 20 l can  
cure ..... 4 l in 5 l can

Shipping weight  
resin ..... approx. 30 kg  
cure ..... approx. 4.6 kg

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

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## 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 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

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 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

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](http://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.