



Amercoat 383HS

Polyamide Cured Epoxy Topcoat

Product Data/ Application Instructions

- High build epoxy intermediate coat or topcoat
- Economical long term protection in only one coat
- Excellent durability in marine atmosphere
- Accepts urethane or acrylic topcoats where improved gloss and colour retention are required
- Also available with MIO

Typical Uses

Tank exteriors, structural steel and piping in chemical plants, refineries, pulp & paper mills, offshore platforms and other structures exposed to severe weathering or salt spray.

Outstanding Characteristics

Amercoat 383HS is a high build polyamide epoxy made with a high solids content and designed for industrial and marine use. It works extremely well as a coating over primed steel.

Recommended Systems

Substrate	Primer	Topcoat
Steel, Inorganic Primers	Dimetcote 6, 9, 11	Amercoat 383HS
Steel, Organic Primers	Amercoat 68, 71(TC) or 182ZPHB	Amercoat 383HS

Where improved gloss and colour retention is desired, Amercoat 383HS may be topcoated with Amercoat 450 series polyurethanes, PSX 700,

Approvals and Certificates

Amercoat 383HS is approved by BS 476, part 7-class I - surface flame spread.

Physical Data

Finish	flat
Colour	see Standard Colour List *
Components	2
Mixing ratio (by volume)	
resin	4 parts
cure	1 part
Curing mechanism	solvent release and chemical reaction between components
Volume solids	63% (ASTM D2697, modified)**
VOC	25% by weight / 348 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	1.40 kg/L (white; mixed product)
Flash points	
(Closed Cup)	°C °F
resin	32 90
cure	25 77
Amercoat 65	24 75
Amercoat 12	3 37

*Uniform appearance may require two coats when used in a less hiding colour over contrasting primers or intermediate coats. Use only a light coloured primer or intermediate coat when only one finish coat in a less hiding 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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Resistance guide

Environment	Suitability of Amercoat 383HS	
	splash and spillage	fumes and weathering
Acid	Fair	Good
Alkaline	Excellent	Excellent
Salt solutions		
Acidic	Good	Very Good
Neutral	Excellent	Excellent
Alkaline	Excellent	Excellent
Water	Excellent	Excellent

This chart is only a guide to show typical resistance of Amercoat 383HS. Your PPG representative will help you evaluate your particular corrosion protection needs and make the correct recommendation for your specific requirements.

Surface Preparation

STEEL - Prepare surface in accordance with application instructions for the specific primer being used. Be sure primer is clean and dry when Amercoat 383HS is applied.
CONCRETE - Surfaces must be cured, clean, dry, and free of previous coatings and disintegrated or chalky materials.

Application Equipment

Use of following equipment is suggested, but suitable equipment from other manufacturers may be used. Adjustments of pressures 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 28:1 or higher pump ratio and a fluid tip with a 0.45 to 0.60 mm (0.018 to 0.024 inch) orifice.
CONVENTIONAL SPRAY - Industrial equipment such as DeVilbiss MBC or JGA gun with 78 or 765 air cap and "E" fluid tip, or Binks No. 18 or 62 gun 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 explosion proof electric motor.

Application Data Summary

To obtain the maximum performance for which Amercoat 383HS is formulated, strict adherence to all application instructions, precautions, conditions and limitations is necessary.

Application Data

Substrate primed steel or concrete
 Application methods airless or conventional spray
 Potlife (at 20°C/68°F) 8 hours
 Potlife is dependent on temperature and quantities mixed.

Environmental Conditions (during application)

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

The surface temperature must be at least 3°C/5°F above the dew point at all times to prevent moisture condensation. Minimum temperature for a 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.

Drying Times

(minim drying and topcoating times at 125 µm and 21°C/70°F)
 dry to touch (ASTM D1640)..... 2 hours
 dry to recoat (with itself)..... 8 hours
 dry though (ASTM D1640).... 16 hours
 dry to topcoat..... 16 hours

Drying times are dependent on film thickness, temperature and ventilation. At 18 to 27°C (64 to 81°F), a full cure at 125 µm normally requires 48 hours. Lower temperatures retard and higher temperatures accelerate the curing rate. However, for most conditions, the coating may be placed in service as soon as it has reached the dry through state.

Thinner Amercoat 65
 Cleaner Amercoat 12 (or Amercoat 65)

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Application Procedure

Amercoat 383HS is packaged in two components in the proper proportions.

Resin 16 l in a 20 l can

Cure 4 l in a 5 l can

1. Flush equipment with recommended cleaner before use.
2. Stir resin and cure to an even consistency with a power mixer.
3. Add cure to resin and continue stirring for 5 minutes.
Since the potlife is limited and shortened by high temperatures, do not mix more material than will be used within 8 hours at 21°C/70°F or 4 hours at 30°C/86°F.
4. For conventional spray, thin only as needed for workability with no more than 10 vol %. Thinning is normally not needed for airless spray.
5. Stir during application to maintain uniformity of material. Apply a wet coat in even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays. Give special attention to corners, welds, rough areas, edges.
- # NOTE: A mist coat of Amercoat 383HS is recommended when applied over fresh zinc silicates to minimize bubbling.
6. Normal recommended dry film thickness is 125 µm. However, if a greater thickness is applied in local areas because of overlapping, no runs or sags will normally occur at a dry film thickness up to 250 µm. Total dry film thickness must not exceed 375 µm.
7. Application of a wet film thickness of 202 µm will normally provide 125 µm of dry film.
8. Check thickness of dry coating with a non destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.
9. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
10. 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 383HS will cure and cause clogging.

Shipping Data

Packaging

resin 16 l in a 20 l can
cure 4 l in a 5 l can

Shipping weight

resin approx. 32.2 kg
cure approx. 5.1 kg

Shelf life

resin/cure 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 flammable. 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, 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.

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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.