PPG Amercoat

Amershield™ Clear Coat

Aliphatic polyurethane

Product Data/ Application Instructions

- Anti-graffiti coating
- Direct to concrete
- Outstanding abrasion, reverse and direct impact resistance
- Good chemical and stain resistance
- Tough and flexible coating

Amershield Clear Coat's drying and curing times may be adjusted with the use of Amercoat® 866M Accelerator.

Typical Uses

Clear coating on prepared concrete or masonry surfaces.

Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. All surfaces must be clean, dry and free of oil, grease, dirt or other contamination.

Concrete – Clean concrete per ASTM D 4258 and masonry surfaces per ASTM D 4261.

Application Equipment

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

Airless and electrostatic spray – Standard equipment Graco, DeVilbiss, Nordson-Bede, Speeflo or others having a 28:1 or higher pump ratio and a fluid tip with a 0.015- to 0.021-inch (0.38- to 0.53-mm) orifice.

Conventional, air-assisted airless and electrostatic spray – Devilbiss, Binks or Graco production spray equipment with moisture and oil trap in the main air supply line.

Brush – Natural bristle. Maintain a wet edge.

Roller – Solvent resistant. Level any air bubbles with a bristle brush.

When brush or roller applied, multiple coats may be needed to achieve dry film thickness.

Application Procedures

1. Flush equipment with thinner or Amercoat 12.
2. Stir resin thoroughly, add cure and mix until uniform. Do not mix more material than will be used within pot life time. Mixing ratio is 4 parts resin to 1 part cure by volume.
3. If thinning is necessary, add up to 1 pint Amercoat 65 per gallon of Amershield Clear Coat.
4. When applying by spray, adjust pressures for equipment configuration and environmental conditions to ensure proper atomization.
5. Apply a wet coat in even, parallel passes; overlap each pass 50 percent.
6. Amershield Clear Coat at 5-mils WFT will normally provide 3-mil DFT.

Physical Data

Finish	Gloss
Color	Clear
Components	2
Curing mechanism	Solvent release and chemical reaction
Volume solids (calculated)	65% ± 3%
Dry film thickness per coat	3 mils (75 microns)
Coats	1

Theoretical coverage	ft^2/gal	m^2/L
1 mil (25 microns)	1043	25.6
3 mils (75 microns)	347	8.5
	lb/gal	g/L
VOC mixed	2.4	294
VOC mixed/thinned (1 pt/gal)	2.9	352
Temperature resistance	°F	°C
continuous	200	93
intermittent	250	121
Flash point (SETA)	°F	°C
cure	122	50
resin	110	43
mixed	115	46
Amercoat 923	102	39 TCC
Amercoat 12	0	-18

Application Data

Applied over	Prepared concrete or masonry
Surface preparation	
concrete/masonry	ASTM D4258 or D4261
Method	Airless, conventional spray, brush or roller
Mixing ratio (by volume)	1 part cure to 3.33 parts resin

Pot life (hours)

	°F/°C			
	90/32	70/21	50/10	30/0
Amershield Clear Coat	1½	2½	5	--
accelerated with 866M	½	1	2	4

Use ½ pt of Amercoat 866M Accelerator per mixed 5 gallons of Amershield Clear Coat

Environmental conditions

Temperature	°F	°C
air and surface	40 to 120	4 to 49
with 866M	32 to 120	0 to 49

Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation.

Drying time (ASTM D1640) (hours)

	°F/°C			
	90/32	70/21	50/10	32/0
touch	2	3½	5	---
with 866M	½	1	2	6
through	10	24	72	---
with 866M	2	3	8	24
Recoat time (maximum, hours)	90/32	80/27	70/21	50/10
	12	24	168	168
with 866M	6	8	12	24

If maximum recoat time exceeded, roughen surface or use Amerase™.

Thinner	Amercoat 923
Equipment cleaner	Thinner or Amercoat 12

7. Clean all equipment with thinner or Amercoat 12 immediately after use.
8. **Moisture sensitive** – Keep cure container tightly closed. Repeated moisture exposure will cause gellation and gassing; handle bulged containers with caution, lids may eject forcibly.

Surface Preparation

Coating performance is proportional to the degree of surface preparation. Prior to coating, all surfaces must be clean, dry and free of all contaminants, including salt deposits.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of both components. Safety precautions must be strictly followed during storage, handling, and use.

Caution – Improper use and handling of this product can be hazardous to health and cause fire or explosion.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. PPG makes no recommendation about the types of safety measures that may need to be adopted because these depend on application and space, of which PPG is unaware and over which it has no control.

If you do not fully understand the warnings and instructions or if you cannot strictly comply with them, do not use the product.

This product is for industrial use only. Not for residential use in California.

Shipping Data

Packaging units	0.87gal	4.33 gal
cure	1-qt can	1-gal can
resin	1-gal can	5-gal can
Shipping weight (approx)	lb	kg
0.87-gal unit	8.6	3.9
4.33-gal unit	41	18.8

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)
resin and cure 1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, and testing variances. Appearance will vary depending on substrate and application method. Allow for application losses and surface irregularities.

The mixed product is nonphotochemically reactive as described by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

PPG Protective & Marine Coatings
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