

Amercoat 5405

Alkyd Finish

Product Data/ Application Instructions

- **A high solids alkyd resin based protective coating**
- **Easily applied by brush, roller or spray**
- **Excellent maintenance coating, compatible with a wide range of primers and existing coatings**

Amercoat 5405 is a high solids alkyd based coating for industrial and marine use. To obtain the maximum performance for which Amercoat 5405 is formulated, strict adherence to all application instructions, precautions, conditions and limitations is necessary. If conditions exist that are not within the requirements or limitations described, consult your PPG representative.

Typical Uses

Alkyd topcoat over correctly primed steel surfaces, exposed to weathering and moderate industrial and marine surfaces. Not suitable for exposure in strong alkaline conditions.

Recommended Systems

One or two coats of Amercoat 5405 at 35 to 50 µm (1.4-2 mils), over one coat of Amercoat 5105 primer at 50 µm (2 mils) for the protection of structural steel, exterior of storage tanks, etc. in moderate industrial atmospheres. Other suitable primers may also be used. When applied over zinc silicate primers, use Amercoat 71(TC) as a tiecoat. One coat of Amercoat 5405 at 50 µm (2 mils) is normally suitable as a decorative finish coat over 50 µm (2 mils) Amercoat 5105 on interior steel surfaces.

Resistance Guide

Amercoat 5405 has excellent weather resistance in moderate industrial and marine environments when applied over correctly primed surfaces. Amercoat 5405 has a moderate chemical resistance, but is not suitable for exposure in strong alkaline conditions. Amercoat 5405 resists normal handling and service conditions when cured.

Physical Data

Finish.....	gloss	
Colour	RAL and BS colours *	
Components	1	
Curing mechanism	solvent release and reaction with oxygen from the air	
Volume solids	56% (ASTM D2697, modified)**	
VOC***		
EC SED 1999/13/EC	305 g/kg (370 g/l)	
UK PG6/23(92) Appendix 3	358 g/l (3.0 lbs/gal)	
Dry film thickness	35 - 50 µm per coat****	1.4 - 2 mils per coat
Number of coats	1 - 2	
Calculated coverage	16 m ² /l at 35 µm	11.2 m ² /l at 50 µm
Allow for application losses, surface irregularities, etc.		
Specific gravity	1.20 kg/l (white)	
Flash points (Closed Cup).....	°C	°F
Amercoat 5405	40	104
Amercoat 15	38	100

* Uniform appearance may require two coats, using white as a first coat, when used in a less hiding colour over contrasting primers or intermediate coats. Use a white 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.

*** 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.

****Amercoat 5405 aluminium has a recommended dry film thickness of 25 µm (1 mil).

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Surface Preparation

NEW SURFACES - Prepare surface in accordance with the primer to be used. Once primed, surface should be free from any foreign matter (like dust and moisture) before applying Amercoat 5405.

PREVIOUSLY COATED SURFACES - If intact and recently coated with Amercoat primers, Amercoat 5405 or other alkyds : surface should be clean, dry and free from dust.

OLD OR DAMAGED SURFACES - Remove dust, contaminants or loose coatings by sanding, power tool cleaning or spot reblasting. Bare substrates should be primed with suitable primer. Apply spot topcoat or full topcoat as required.

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 28:1 or higher pump ratio and a fluid tip with a 0.28 to 0.33 mm (0.011 to 0.013 inch) orifice.

CONVENTIONAL SPRAY - Industrial equipment such as DeVilbiss MBC or JGA gun with 704 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 and a mechanical pot agitator are recommended. A moisture and oil trap in the main air supply line is essential.

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

BRUSH - Natural bristle. Maintain a wet edge.

Repair

Spot blast or power tool clean bare substrate to the requirements shown under surface preparation.

Feather edges of intact coating. Remove dust, dirt and contamination before recoating.

Application Data

Substrate properly primed steel

Application methods airless or conventional spray

Environmental Conditions (during application and drying)

Air temperature: 0 to 50°C 32 - 122°F

Surface temperature: 0 to 60°C 32 - 140°F

Material temperature: 10 to 40°C 50 - 104°F

Surface temperature must be at least 3°C/5°F above dew point to prevent moisture condensation on the surface. Never apply coatings under adverse environmental conditions. Ensure good ventilation when applied in confined areas to assist evaporation and elimination of solvents.

Drying times (at 50 µm (2 mils) dft), °C/°F

	10/50	20/68	30/86
dry to touch	8	2	1½
dry to handle	48	12	8

NOTE: drying 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. Prior to recoating ensure the surface is clean. Maximum recoating time intervals are dependent on temperature, degree of weathering and service conditions of the complete coating system. Consult your PPG representative for specific recommendations.

Thinner/cleaner Amercoat 15



Amercoat 5405

Application Procedure

Amercoat 5405 is a one component product and packaged 20 l in a 20 l can.

1. Flush equipment with recommended cleaner before use.
2. Stir all material thoroughly before applying.
3. If thinning is necessary for workability, thin with no more than 10 vol % of recommended thinner. For airless spray normally no thinning is required.
4. Spray on heavy wet coat, making parallel passes and overlapping each pass 50%. Follow with a "cross-spray" pass at right angles to first pass. Give special attention to angles, corners, rough spots, edges, etc. to avoid pinholes, bare areas and holidays.
5. Application at 90 µm wet film thickness will normally provide 50 µm dry film.
6. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than specified, apply additional material as needed.
7. To repair or touch up bare areas, pinholes or holidays, simply apply additional materials. Smaller areas may be brushed. Allow 24 hours at 20°C between full coats.
8. 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.
9. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift.

Shipping Data

Packaging 20 l (5.3 gal)

Shipping weight approx. 27 kg

Packaging 5 l (1.3 gal)

Shipping weight approx. 6.7 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 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.

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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.

