



Amercoat 4560GF

High solids epoxy glass flake coating

(formerly Steelguard 4560GF)

Product Data/ Application Instructions

- Two pack epoxy glass flake protective coating
- EPA compliant
- High build, high solids and low VOC
- Network Rail approved
- Excellent abrasion and impact resistance
- Excellent barrier properties
- Resists high humidity and moisture
- Suitable for water immersion

Typical Uses

As a maintenance or new construction coating Amercoat 4560GF protects steel structures in severe environments. These include bridges, marine structures, petroleum processing and storage facilities, chemical and power plants and other heavy industrial facilities. On offshore platforms, Amercoat 4560GF is suitable for splash zones, underdecking and other steelwork subject to salt spray and condensation.

Approvals

Amercoat 4560GF is approved and registered to Network Rail RT98 specification item 7.2.3.

Outstanding Characteristics

Amercoat 4560GF exhibits excellent barrier properties thus providing enhanced anti-corrosion performance when used as a single coat or in combination with primers and topcoats. Also shows excellent resistance to cathodic disbondment.

Physical Data

Finish	glossy
Colour	limited range
Components	2
Mixing ratio (by volume)	
resin	3 parts
cure	1 part
Curing mechanism	solvent release and reaction between components. Effective cure down to 5°C/41°F

Volume solids :	90+/-3%
VOC	116 g/l
Dry film thickness	300-750 µm per coat

	typical	minimum	maximum
Dry film thickness (µm)	400	300	750
Wet film thickness (µm)	444	333	833

(wet film thicknesses quoted are typical for one airless spray coat)

Calculated coverage

2.3 m ² /l at 400 µm

Allow for application losses, surface irregularities, etc.

Specific gravity

typically 1.34 kg/l (mixed product)

Flash points		
(Closed Cup).....	°C	°F
resin	48	118
cure	40	104
Amercoat 65	24	75
Amercoat 12 cleaner.....	24	75

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Surface preparation

Amercoat 4560GF is a high solids epoxy coating suitable for steel surfaces. Dependent upon the expected service conditions, Amercoat 4560GF may be applied directly to suitably prepared bare steel. This must be abrasive blast cleaned to ISO 8501-1 Sa2½ standard. The blast profile achieved should be approximately 75 to 100 microns and must be angular as produced by grit. Application should occur before degradation of the surface takes place. If oxidation occurs then the steel should be reprepared. May also be applied over suitable primers such as Amercoat 139, Amercoat 4274, Amercoat 4371 and Amercoat 3651. Advice on specific systems should be sought from your Ameron representative. In all cases the surface must be dry and free of dust, salts, grease and other contaminants immediately before coating

Mixing

Stir the resin component thoroughly, then add the cure and continue mixing until the product is uniform throughout. A powerful mixer should be used. Do not mix-off when resin and cure temperatures are greater than 35°C/95°F.

Application

AIRLESS SPRAY: Use standard airless spray equipment capable of producing a minimum pressure at the tip of 2800 psi (200 kg/cm²). Adjustments of pressure, tip size and fan angle may be necessary to obtain the proper spray characteristics. Tip size range 17-21 thou (0.43-0.53mm). The use of 1/2" diameter spray lines is recommended. Spray lines should be kept as short as possible. In line filters should be removed although a large mesh sieve is recommended at the pump intake.

BRUSH: Brush application to obtain the typical dft of 400 microns should be limited to small areas only, for example when stripe coating or carrying out repairs. On larger areas more than one coat may be required to achieve the typical dft.

Overcoating

Maximum overcoating times refer to overcoating with Ameron two pack acrylic topcoats. When overcoating with itself then the recoat time should be no longer than 7 days at 20°C/68°F. If being used as a stripe coat with itself then Amercoat 4560GF can be applied using a wet-on-wet technique. For specific overcoating and topcoat recommendations contact your Ameron representative.

Application Data

Substrate blasted or primed steel

Application methods airless spray, brush

Induction time (at 20°C/68°F) not applicable

Potlife (at 20°C/68°F) 45 minutes

Drying characteristics °C/°F

Temperature	5/41	10/50	20/68
Touch dry	12 hours	9 hours	6 hours
Hard dry	24 hours	16 hours	12 hours
Overcoating (minimum)	24 hours	24 hours	16 hours
Overcoating (maximum)	3 months	3 months	6 weeks

This product will cure down to 0°C/32°F, however drying times will be extended.

Note: All information relates to the typical dry film thickness.

Environmental conditions

Amercoat 4560GF should only be applied within the limits of temperature and humidity set out below.

Relative humidity: Up to 90%

Surface temperature: Minimum 5°C/41°F

..... Maximum 45°C/113°F

The surface temperature must also be at least 3°C/5°F above the dew point.

Thinner Amercoat 65

Cleaner Amercoat 12 cleaner

Amercoat 4560GF

Application procedure

1. Clean the equipment with the recommended cleaning solvent before use.
2. Stir the resin component thoroughly, then add the cure and continue mixing until the product is uniform throughout. A powerful mixer should be used. Thinning is not required.
3. For airless spray, apply a wet even coat in parallel passes. Overlap each pass by 50% to avoid bare areas, pinholes or holidays.
4. Give special attention to welds, rough spots, sharp edges and corners, rivets, bolts, etc.
5. Application at 444µm wet film thickness will normally provide 400µm 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 thickness, apply additional material as needed.
7. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas either by spray or brush using Amercoat 4560GF.
8. In confined areas ventilate with clean air during application and drying. The humidity should be maintained below 90% and the temperature such that moisture condensation will not form on the surface.
9. Clean all equipment with fresh, clean solvent immediately after use.

Before using the product, read the label on the can and consult the material safety data sheet.

Shipping Data

Packaging.....	20 litres in two part units
resin	15 l in 20 l can
cure	5 l in 5 l can
Shipping weight (approx)	
resin	23 kg
cure	6 kg
Shelf life	1 year from shipment date or as indicated on label when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F).

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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

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron'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 Ameron 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 Ameron of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

Ameron 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 Ameron be liable for consequential or incidental damages.

Any recommendations or suggestion relating to the use of the products made by Ameron, 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

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In no event shall Ameron be liable for consequential or incidental damages.

Due to Ameron'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 Ameron Performance Coatings & Finishes website at www.amerondirect.co.uk

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.