



# Amercoat 352GF

## Solvent Free Epoxy

### Product Data/ Application Instructions

- High build epoxy, 100% solids content
- Excellent resistance to water
- Excellent barrier properties
- Glass flake reinforced
- Easily cleaned, abrasion resistant
- Does not require high temperatures for curing

#### Typical Uses

Amercoat 352GF is a solvent free high performance coating that can be applied with standard airless equipment. It is suitable for use as a tank lining for fresh water, salt water, ballast water, sour crude oil and dry bulk materials.

Amercoat 352GF can be used in both marine and industrial environments such as ships tanks, ballast tanks, storage tanks, tank cars and railroad tanks. The abrasion resistance of Amercoat 352GF allows it to be used as a lining for slurries, or as a coating for concrete in high wear services.

Amercoat 352GF is an excellent barrier coat, providing longterm resistance to corrosion even under aggressive conditions. It is suitable for immersion in sour crude oil and in both salt and fresh waters.

Note: For use on concrete surfaces, Nu-Klad 114A surfacer may be required. Obtain specific recommendations from your PPG representative.

#### Repair

Areas damaged back to bare steel: Remove all rust, loose paint, grease or other contaminants preferably by spot abrasive blasting. Where abrasive blasting is not possible, disc sand using No. 16 open coat paper.

Feather edges of surrounding intact coating.

Under Tickness areas: Remove contaminants and if required roughen surface and apply Amercoat 352GF as soon as possible after surface is cleaned to prevent contaminants on the surface.

#### Physical Data

|  |  |
|--|--|
| Finish .....   | semi-gloss   |
| Colour .....   | grey*  |
| Components .....   | 2  |
| Mixing ratio (by volume)                                   |  |
| resin .....  | 2 parts  |
| cure .....   | 1 part   |
| Curing mechanism .....                                     | chemical reaction between components                                       |
| Dry film thickness .....                                   | 500-1000 µm per coat   |
| Number of coats .....                                      | 1 or 2   |
| Volume solids .....  | 100%   |
| VOC  |  |
| EC SED 1999/13/EC.....                                     | 5 g/kg (6 g/l)   |
| UK PG6/23(92) Appendix 3.                                  | 0 g/l  |
| Calculated coverage .....                                  | 1 m <sup>2</sup> /l at 1000 µm<br>2 m <sup>2</sup> /l at 500 µm            |
| Allow for application losses, surface irregularities, etc. |  |
| Specific gravity .....                                     | 1.41 kg/l (mixed product)  |
| Temperature resistance.....                                | Dry                      Wet   |
|  | °C                      °F                      °C                      °F |
| Continuous .....   | 120    248    40    104  |
| Short term peak temp .....                                 | 150    302    40    104  |
| Flash points (Closed Cup).....                             | °C                      °F   |
| resin .....  | 70                      158  |
| cure .....   | 112                     234  |
| Amercoat 12 .....  | 24                      75   |

\* Colour is not stable and will change Under exposure to UV. This will not affect film integrity or Coating performance.

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

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## Surface Preparation

**STEEL** - Dry abrasive blast to Swedish Standard Sa 3 SIS 05 5900 - 1967, ISO 8501-1 or Steel Structures Painting Council SP-5. Surface must be free of moisture, grease and other contaminants. Apply Amercoat 352GF as soon as possible to keep steel from rusting. Obtain a minimum anchor profile of 50 µm.

**CONCRETE** - Light abrasive blasting is best to remove all previous coatings, chalk and surface glaze or laitance. After blasting, small holes or voids in cast concrete wall or overhead surfaces should be filled with a suitable material such as Nu-Klad 114A epoxy filler compound before applying Amercoat 352GF.

**IMPORTANT** - Apply Amercoat 352GF as soon as possible after surface preparation to prevent recontamination. Do not leave blasted steel uncoated overnight. In case of contamination remove contaminants. Spot blast 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** - Amercoat 352GF is a solvent-free epoxy coating which is applied by standard airless equipment with surge tanks filters removed, using a Graco Silver Gun 0.8 mm (0.031 inch) reverse tip, or larger. Pump should be equipped with 3/8" internal diameter high pressure spray hose to improve spray characteristics, the use of an in-line heater is recommended.

\* pumpratio of 45 : 1 or higher

**PLURAL COMPONENT SPRAY** - Two component metering, mixing and spraying fixed 2:1 ratio apparatus such as Graco Hydra Cat airless unit, using a 0.8mm (0.031 inch) tip or larger. Calibrations are made by adjusting the air pressure on the material feed pressure pots.

**MIXER** - Use power mixer, such as "Jiffy Mud and Resin Mixer" (as supplied by Goldblatt), powered by an air motor or an explosion proof electric motor. Optimum material temperatures are between 20 and 25°C (68 and 77°F). At lower temperatures spray properties are affected, at higher temperatures the working time decreases. If material has been stored below 20°C/68°F, warm to minimum 20°C/68°F before mixing.

## Application Data Summary

Like all high performance coatings, Amercoat 352GF must be applied as recommended to obtain the maximum performance. To obtain the maximum performance for which this product 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.

## Application Data

|                                    |   |
|------------------------------------|---|
| Substrate .....                    | steel and concrete                        |
| Application methods .....          | airless spray or plural component spray * |
| Potlife (at 20°C/68°F) .....       | 1½ hours                                  |
| Induction time .....               | not applicable                            |
| Drying Times<br>(in hours) °C/°F . | 10/50 20/68 30/86                         |
| dry to touch.....                  | 16 10 8                                   |
| dry through .....                  | 60 24 12                                  |
| before immersion                   |   |
| service .....                      | 14 days 7 days 4 days                     |

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

### Environmental Conditions

(during application, drying and curing)

|                            |            |             |
|----------------------------|------------|-------------|
| Air temperature: .....     | 15 to 50°C | 59 to 122°F |
| Surface temperature: ..... | 15 to 50°C | 59 to 122°F |

To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above dew point. Never apply coatings under adverse environmental conditions. Ensure good ventilation when applied in confined areas.

|                                 |       |       |       |
|---------------------------------|-------|-------|-------|
| Recoat times<br>(in days) °C/°F | 10/50 | 20/68 | 30/86 |
| maximum .....                   | 10    | 7     | 5     |

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 depends on coating system to be used. Consult your PPG representative for specific recommendations.

|               |                |
|---------------|----------------|
| Thinner ..... | not applicable |
| Cleaner ..... | Amercoat 12    |

\* Equipment choice depends on site and project conditions.

# Amercoat 352GF

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## Application Procedure

Amercoat 352GFR is packaged in two component in the proper proportions:

Resin                   6.67 l in 10 l can  
Cure                    3.33 l in 5 l can

1. Flush equipment with recommended cleaner.
  2. Stir both resin and cure to an even consistency with a power mixer. Add cure to resin and continue mixing until a uniform consistency is achieved.
  3. Apply in a wet coat in even parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
  4. Higher temperatures shorten the potlife. Lower temperatures affect sprayability.
  5. Ventilation with clean air is required during application. Before recoating and curing to dry film, no condensation is allowed.
  6. Check film thickness using a wet film thickness gauge. If less than specified, apply additional material. Total dry film thickness must not exceed 1500 µm.
  7. Do not thin for any reason!!
  8. For immersion service, check for bare areas, pinholes and holidays with a non-destructive wet sponge holiday detector of less than 100 Volts, such as Tinker and Razor Model M1. Apply additional Amercoat 352GF to areas requiring touch-up.
  9. Potlife is 1½ hour at 20°C/68°F. Due to potlife limitations, cleaning of equipment must start as soon as possible after application is completed. Never mix more material than can be sprayed in 30 minutes.
- # Note that in hot climates for single component airless the material temperature should be 20 to 25°C (68 to 77°F) prior to mixing otherwise potlife becomes very short. Residues of mixed material can develop very high temperatures and must be discarded to avoid excessive heat build up in the can (e.g. by pouring out in thin layers).

## Shipping Data

### Packaging

resin ..... 6.67 l in 10 l can  
cure ..... 3.33 l in 5 l can

### Shipping weight

resin ..... approx. 11.5 kg  
cure ..... approx. 4.0 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

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

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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.

PPG Coatings Europe BV

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