

Steelguard FM 2570

Thin film intumescent coating

Product Data/ Application Instructions

- Fast drying solvent based thin film intumescent
- Up to 2 hours fire protection of structural steel
- Rapid drying providing reduced times to handling
- Works on site application
- No sealer coat required for dry internal C1 service conditions (ISO 12944)

Typical Uses

Intumescent fire protection for internal and external structural steel. Fast drying material intended for off-site application using manual airless spray equipment. Allows for rapid job completion, early resistance to mechanical damage and faster throughput of coated steelwork. Also suitable for on-site application.

Approvals

Steelguard FM 2570 has been tested to National and International standards for cellulosic fire exposure (ISO 834) and subsequently assessed and certified in accordance with various National requirements. Please contact your PPG Protective and Marine Coatings representative for latest information relating to local market requirements and approvals. For given projects PPG Protective and Marine Coatings can provide customers with loading data and material consumption calculations stipulated by required fire protection, steel section designation and local requirements. Standard loading tables can be made available where applicable.



APPROVED PRODUCT
CF 542

Physical Data

Appearance when dry	matt	
Colour	white	
Components	1	
Volume solids	67±3%	
VOC*	UK PG6/23(92) Appendix 3 . 394 g/l	
Curing mechanism	solvent release	
Loading requirements.....	In order to establish the dft required to give the specified fire resistance, reference should be made to the products Hp/A (A/V) values or limiting temperature tables. Contact your PPG representative for full details.	
Dry film thickness (µm)	250 400 500 700 1000	
Wet film thickness (µm)	373 597 746 1045 1493	
Theoretical coverage (m ² /l)	2.68 1.68 1.34 0.96 0.67	
	(wet film thicknesses quoted are theoretical for one airless spray coat)	
Specific gravity	1.27 kg/l	
Flashpoint		
(closed cup)	°C	°F
Steelguard FM 2570	26	79
Amercoat 12	24	75

* 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.

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Overcoating

The standard recommended topcoat for Steelguard FM 2570 is Steelguard 2458.

For service in dry INTERNAL C1 conditions there is no requirement for a topcoat. Where a coloured finish is required Steelguard FM 2570 should be topcoated with Steelguard 2458, at a recommended dft of 50 microns for C1 environments.

For service in EXTERNAL conditions or areas other than dry internal C1 conditions, Steelguard FM 2570 must be sealed with an approved topcoat. Consult your PPG representative for recommended topcoat dft requirements. Steelguard FM 2570 must be protected from pooling water, hot humid environments or immersed conditions at all times.

Surface Preparation

Applied over a blasted and suitably primed steel substrate. The surface must be dry and free of dust, salts, grease and other contaminants immediately before coating. The primer used should be applied in accordance with the specific technical data sheet instructions, and must be approved by PPG to ensure compatibility with the Steelguard FM 2570. The total dry film thickness of primer coats should not exceed 150 microns.

The surface must be dry and free of dust, salts, grease and other contaminants immediately before coating.

Stir thoroughly before use until the product is uniform throughout. A power mixer should be used.

Application Methods

AIRLESS SPRAY - Use a pump capable of producing a minimum pressure at the tip of 2800 psi (200 kg/cm²). Tip size 19-25 thou' (0.48-0.63mm).

BRUSH – Suitable only for small areas such as repairs. Apply evenly using a clean, well-loaded brush at up to 300microns dft per coat. Allow at least 4 hours drying at 20°C/68°F between coats.

Application Data

Substrate primed steel
Application methods airless spray, brush (small areas only)

Potlife (at 20°C/68°F) not applicable

Environmental Conditions

Relative humidity: up to 80%
Surface temperature: minimum 5°C/41°F
..... maximum 30°C/86°F

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

Drying Characteristics

Drying times will vary considerably depending on ambient conditions, Hp/A (A/V) of section being coated and applied film thickness. As a guide, at 20°C/68°F the applied coating will be touch dry in approximately 1 hour, recoatable in approximately 4 hours and hard dry after 48 hours.

Thinner not normally necessary
Amercoat 65 can be used when needed (up to 5% by volume),

However wet/ dry film measurement result will differ & lower max film build as result will have to be considered

Cleaner Amercoat 12

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Application Procedure:

1. Flush equipment with recommended cleaner before use.
2. Stir to an even consistency with a power mixer.
3. Thinning is normally not required for airless spray.
4. For airless spray apply a wet even coat in parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
5. Give special attention to welds, rough spots, sharp edges and corners, rivets, bolts, etc.
6. Application at 600 µm wet film thickness will normally provide 400 µm dry film.
7. 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.
8. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas either by spray or brush with Steelguard FM 2570.
9. 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.
10. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift.

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

Shipping Data

Pack size	20 litres
Shipping weight	approx. 27 kg (20 l)
Shelf life	12 months when stored indoors in unopened, original containers at 5 to 30°C (41 to 86°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

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

PPG's liability on any claim of any kind, including claims based upon PPG's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim.

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

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

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.



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Marine Coatings**



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