

# PPG STEELGUARD® 751

## DESCRIPTION

One component thin-film solvent-borne intumescent coating for fire protection of structural steelwork

## PRINCIPAL CHARACTERISTICS

- Tested and assessed to EN 13381-8, BS 476-20/21 and AS 1530.4 for up to 120 minutes protection to cellulosic fires
- Tested and assessed to GB14907 for up to 150 minutes protection to cellulosic fires
- Off-site or on-site application
- Up to 1500 µm (60.0 mils) DFT in a single coat
- Suitable for C1 to C4 internal and external environments (ISO 12944); for dry internal (C1) environments no topcoat is required
- Weather resistant up to 12 months without topcoat provided the coating has been applied in accordance with PPG STEELGUARD Application guidelines and is not subject to running or pooling water, high humidity or immersion conditions
- CE marked product, ETA 22/0574
- Assessed to EAD 350402-00-1106 for all durability classifications

## BASIC DATA AT 20°C (68°F)

| Data for product                      |   |
|---------------------------------------|---|
| <b>Number of components</b>           | One   |
| <b>Mass density</b>                   | 1.35 kg/l (11.27 lb/US gal)   |
| <b>Volume solids</b>                  | 75 ± 3%   |
| <b>VOC (Supplied)</b>                 | Directive 2010/75/EU, SED: max. 257.0 g/kg<br>UK PG 6/23(92) Appendix 3: max. 330.0 g/l (approx. 2.8 lb/US gal)<br>EUR Directive: 2004/42/IIA(i)(500) 370 g/l |
| <b>Recommended dry film thickness</b> | 200 - 1500 µm (8.0 - 60.0 mils) per coat  |
| <b>Theoretical spreading rate</b>     | 1.07 m <sup>2</sup> /l for 700 µm (43 ft <sup>2</sup> /US gal for 28.0 mils)  |
| <b>Dry to touch</b>                   | 30 minutes  |
| <b>Overcoating Interval</b>           | Minimum: 6 hours<br>Maximum: Unlimited  |
| <b>Shelf life</b>                     | At least 18 months when stored cool and dry   |

Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time
- The required dry film thickness must be in accordance with the approval certification



# PPG STEELGUARD® 751

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Approved primer must be sound, dry and free from any contamination
- 

### **Substrate temperature and application conditions**

- Substrate temperature during application and curing should be between 5°C (41°F) and 40°C (104°F)
  - Substrate temperature during application and curing should be at least 3°C (37°F) above dew point
  - Ambient temperature during application and curing should be between 5°C (41°F) and 40°C (104°F)
  - Relative humidity during application and curing should not exceed 85%
- 

## INSTRUCTIONS FOR USE

- Stir thoroughly until homogeneous and free of lumps
  - Adding too much thinner results in reduced sag resistance and slower cure
- 

### **Airless spray**

#### **Recommended thinner**

THINNER 21-06 (normally no thinner required)

#### **Volume of thinner**

0 – 5%

#### **Nozzle angle**

20° – 50°, depending on shape of steel parts

#### **Nozzle orifice**

Approx. 0.48 – 0.64 mm (0.019 – 0.025 in)

#### **Nozzle pressure**

20.0 MPa (approx. 200 bar; 2901 p.s.i.)

#### Notes:

- External fluid uptake pipe filter is recommended
  - All filters, including surge bottle and gun filters to be removed
- 

### **Brush/roller**

- For small areas only (touch up and repair)

#### **Recommended thinner**

No thinner should be added

---

# PPG STEELGUARD® 751

## ADDITIONAL DATA

| Spreading rate and film thickness |  |
|-----------------------------------|--|
| DFT                               | Theoretical spreading rate                           |
| 200 µm (8.0 mils)                 | 3.75 m <sup>2</sup> /l (150 ft <sup>2</sup> /US gal) |
| 400 µm (16.0 mils)                | 1.88 m <sup>2</sup> /l (75 ft <sup>2</sup> /US gal)  |
| 700 µm (28.0 mils)                | 1.07 m <sup>2</sup> /l (43 ft <sup>2</sup> /US gal)  |
| 1000 µm (40.0 mils)               | 0.75 m <sup>2</sup> /l (30 ft <sup>2</sup> /US gal)  |
| 1500 µm (60.0 mils)               | 0.50 m <sup>2</sup> /l (20 ft <sup>2</sup> /US gal)  |

Note:

- Maximum DFT when brushing: 300 µm (12.0 mils)

| Overcoating interval for DFT up to 700 µm (28.0 mils) |          |            |             |             |             |             |
|---|----------|------------|-------------|-------------|-------------|-------------|
| Overcoating with...                                   | Interval | 5°C (41°F) | 10°C (50°F) | 15°C (59°F) | 20°C (68°F) | 30°C (86°F) |
| itself  | Minimum  | 12 hours   | 10 hours    | 8 hours     | 6 hours     | 4 hours     |
|   | Maximum  | Unlimited  | Unlimited   | Unlimited   | Unlimited   | Unlimited   |
| STEELGUARD 2458                                       | Minimum  | 4 hours    | 2 hours     | 1.5 hours   | 1 hour      | 45 minutes  |
|   | Maximum  | Unlimited  | Unlimited   | Unlimited   | Unlimited   | Unlimited   |
| other approved topcoats                               | Minimum  | 5 days     | 3 days      | 60 hours    | 48 hours    | 36 hours    |
|   | Maximum  | Unlimited  | Unlimited   | Unlimited   | Unlimited   | Unlimited   |

Notes:

- All overcoating times have been measured at an intumescent WFT of 1000 µm (approx. 700 µm DFT) under controlled temperature and relative humidity below 85%. Higher thicknesses will take longer to cure.
- The system should be dry to handle and coating thickness gauge should not to leave an indentation on the surface prior to applying subsequent coats. Curing time(s)/overcoating interval(s) may be extended at higher applied DFT's and/or there is a change in environmental conditions.
- Prior to application of a topcoat, the applicator must ensure that the specified dry film thickness has been achieved

# PPG STEELGUARD® 751

| Curing time for DFT up to 700 µm (28.0 mils) |              |
|--|--------------|
| Substrate temperature                        | Dry to touch |
| 5°C (41°F)                                   | 2 hours      |
| 10°C (50°F)                                  | 1.5 hours    |
| 15°C (59°F)                                  | 1 hour       |
| 20°C (68°F)                                  | 30 minutes   |
| 30°C (86°F)                                  | 20 minutes   |

Note:

- All curing times have been measured at an intumescent WFT of 1000 µm (approx. 700 µm DFT) under controlled temperature and relative humidity below 85%. Higher thicknesses will take longer to cure.

## SAFETY PRECAUTIONS

- See Safety Data Sheet and product label for complete safety and precaution requirements
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

## REFERENCES

- Guide | PPG STEELGUARD | Application guidelines
- System sheet | PPG STEELGUARD | Approved primers
- System sheet | PPG STEELGUARD | Approved topcoats
- Information sheet | Explanation of product data sheets
- System sheet | PPG STEELGUARD | Systems and environments
- Information sheet | PPG Steelguard | FAQ's

## WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. 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 of the product, or one year from the date of the delivery of the product to the Buyer, 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 STEELGUARD® 751

## LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at [www.ppgpmc.com](http://www.ppgpmc.com). The English text of this sheet shall prevail over any translation thereof.

---

