

#### PRODUCT DESCRIPTION

APCOSHIELD FBR series thermosetting Fusion Bonded Epoxy powder coatings provide corrosion protection of steel reinforcing bars. Product provides excellent adhesion to substrate with desired protection. Product is made with superior properties of chemical resistance, higher mechanical impact strength, high flexibility for all size of rebars.

The product meets the specifications as per IS13620 & ASTM A775/A775M

The Product Data Sheet is standard for the APCOSHIELD FBR range products and specific shades within the range can vary. Datasheets for individual products are available.

#### PHYSICAL PROPERTIES

|                  |                                                                                     |
|------------------|-------------------------------------------------------------------------------------|
| Appearance       | Free flow powder                                                                    |
| Specific Gravity | 1.2 - 1.5                                                                           |
| Shelf life       | Six months from the date of manufacturing in dry cool condition below 25°C & 50% RH |

#### FILM PERFORMANCE

| Test description      | Test reference                   | Specification                                                        |
|-----------------------|----------------------------------|----------------------------------------------------------------------|
| Finish                | Visual                           | As per Asian Paints PPG standard                                     |
| Gloss at 60° head     | ASTM D 523                       | Smooth >60 GU                                                        |
| Adhesion              | ASTM D 3359                      | GT-0 (Passes 5B)                                                     |
| Impact resistance     | ASTM G 14                        | 100 kg-cm                                                            |
| Gel time              | CSA Z245.20                      | 8 - 12 seconds at 205 °C                                             |
| Abrasion resistance   | ASTM D 4060                      | <37mg loss CS-10 wheel 1000 gm load 1000 cycles                      |
| Flexibility           | ASTM A 775                       | No cracking - #5 Rebar, 6" diameter Mandrell, 180°C for 15 seconds   |
| Salt Spray resistance | ASTM A 775 / A 775M / ASTM B 117 | <3 mm after 800 Hrs. at 35°C                                         |
| Cathodic disbondment  | ASTM A 775 / A 775M / ASTM G 8   | <4 mm radius after 168 hrs at 24°C                                   |
| Chemical resistance   | ASTM A 775 / A 775M / ASTM G 20  | No blister, no softening, no loss bond and no holidays after 45 days |

**Test conditions:** All tests are carried out under lab conditions on 6 mm Shot blasted CRCA panel & 16 mm shot blasted TMT Rebar preheat at 240-250°C followed by application of APCOSHIELD FBR Fusion Bonded Epoxy Coatings at DFT 200-300 microns.

#### APPLICATION RECOMMENDATION

Recommended to follow Good Manufacturing Practices to achieve optimum results

|                 |                             |
|-----------------|-----------------------------|
| Application DFT | 150-300 micron              |
| Curing Schedule | 220°C to 240°C object temp. |

Thorough cleaning of the application & recovery system required between each change in powder to avoid contaminations & defects. Refer to test certificate of individual product for recommended application DFT and curing schedule.

#### SHELF LIFE AND STORAGE

Shelf life of six months from the date of manufacturing in dry cool condition below 25°C & 50% RH. The cartons should be stacked 1+4 high. Avoid exposure to direct sunlight, heat and humidity. Do not exceed 33°C. Partly used material must be tightly closed after each removal and stored carefully inside the carton to avoid contamination & absorption of moisture.

All material be used in FIFO order (first in first out). Materials that exceed the shelf life should be revalidated prior to use.

#### SAFETY INFORMATION

Please refer Material Safety Data Sheet prior to using the product

*The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current regulations. Use of the product for any purpose other than that specifically recommended in the product data sheet without first obtaining written confirmation from Asian Paints PPG Pvt. Ltd. as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. Always read the MSDS and the Technical Data Sheet for this product. We do not control the quality or the condition of the substrate or the many factors affecting the use and application of the product.*

*Unless agreed in writing, Asian Paints PPG Pvt. Ltd. do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. The information contained in this data sheet is subject to modification from time to time in the light of experience and continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.*

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