

APCOSHIELD IH

PC02

POWDER COATINGS

Product Data Sheet



PRODUCT DESCRIPTION

APCOSHIELD IH series thermosetting Epoxy-Polyester Hybrid powder coatings provide a combination of good mechanical and corrosion resistance properties and can be custom formulated with finishes from high gloss to Matt, texture & structure to meet coating specifications. Also available in High Edge Corrosion Protection, Low Temperature Cure and Fast Cure technology.

APCOSHIELD IH range products are suitable for indoor applications.

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

PHYSICAL PROPERTIES

Appearance	Free flow powder
Specific Gravity	1.4 - 1.7
Shelf life	Six months from the date of manufacturing in dry cool condition below 30°C & 60% RH

FILM PERFORMANCE

Test description	Test reference	Specification
Finish	Visual	As per Asian Paints PPG standard
Gloss at 60° head	ASTM D 523	Smooth Matt 0-30 GU Smooth Semi-gloss 30-80 GU Smooth Glossy >80 GU
Adhesion	ASTM D 3359	GT-0 (Passes 5B)
Impact resistance	ASTM D 2794	40-120 kg-cm
Scratch hardness	ASTM D 2197	2-3 KG
Pencil Hardness	ASTM D 3363	H-2H
Cylindrical Mandrel	ASTM D 522B	5mm
Erichsen Cupping	DIN 53156	5mm
Salt Spray Resistance	ASTM B 117	500 Hrs. pass 3mm Scribe Creep
Humidity Resistance	ASTM D 2247	500 Hrs. No blisters

Test conditions: All tests are carried under laboratory conditions on 0.8mm standard Tri-cationic Phosphated CRCA test panels with coating weight of 2-3.5 gm/sq.mt followed by powder coating at DFT 50-70µ for smooth & texture finish and at DFT 70-100µ for structure finish and cured at 180°C object temp. for 10 min.

APPLICATION RECOMMENDATION

Pre-treatment	All substrates are to be cleaned & should be free from grease, oil & dust. A suitable chromate conversion coating is recommended for Aluminum substrate. Passivated Tri-cationic phosphating process with coating weight of 2-3.5 g/m ² or nano pre-treatment is recommended for steel and GPSP substrate.
Application type	Corona Electrostatic spray
Application voltage	60-90 KV and can be customized basis the application line
Earthing	Proper & good
Compress air	Free from moisture, oil, dust & other impurities through flat jet spray nozzle
Application DFT	50-70 microns for smooth, texture finishes, 60-80 microns for metallic & 70-100 microns for structure finishes
Curing Schedule	180°C object temp. for 10 min.
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 30°C & 60% RH. The cartons should be stacked 1+4 high. Avoid exposure to direct sunlight, heat and high humidity. 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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