TECHNICAL DATA SHEET

GLOSSY EPOXY-POLYESTER /HYBRID POWDER COATING
( FH-GH)

INTRODUCTION

FH-GH is a thermosetting powder coating based on epoxy polyester resin with excellent smooth glossy and good flow-out finishes. Its outstanding overbake yellowing resistance and mechanical properties make it a wide range of indoor applications, e.g. domestic appliances, home and office furniture, light fixtures, shelvings, machinery, ceiling panels, switchboards etc.

Texture finish is also available for FH-GH.

GLOSS AND COLOR RANGE

- Gloss levels range from semi gloss to high gloss: 40 - 90% and above depending on the end requirement.
- Full color range is available.

APPLICATION SCHEDULE

- Applied by: Electrostatic spraying devices
- Curing schedule: 15 minutes at 180°C (metal temperature)
- Optimal film thickness: 60 -90 um

POWDER PROPERTIES

- Specific gravity: 1.3 - 1.75 (depend on colors)
- Particle size distribution (Laser Particle size analyser): Less than 5% above 100 um 50 – 65% above 32 um:
  - Average particle size: 35 - 45um

COATING PROPERTIES

- Film thickness (ISO 2178): 60 - 90 μm
- Gloss (ISO 2813, 60°): >40% depending on the end requirement
- Adhesion (ISO 2409): GT= 0
- Pencil hardness (ASTM D3363): HB -H
- Direct and reverse impact (ASTM D2794): > 50kg.cm
- Salt spray Resistance (ASTM B117, 500hrs) (Maximum undercutting, 1mm): No blistering or loss of adhesion
**SUBSTRATES AND PRE-TREATMENT**

In order to obtain optimal anti-corrosion properties, it is recommended to apply a chemical pretreatment prior to powder coating application.

- Ferrous metals (cold rolled steel, cast iron etc.): Iron or zinc phosphatation
- Zinc surfaces (galvanized steel, zinc alloy): Chromatation or zinc phosphatation
- Aluminum alloys: Chromatation

**STORAGE**

- Should be stored under dry conditions with good ventilation at a temperature not exceeding 30 C.
- Storage period recommended should not exceed 6 months, in case exceeding 6 months without affecting their free flowing properties, the powder will still have optimal characteristics.
- Should be protected from excessive heat, humidity, water and contamination with foreign materials such as powder, dust, dirt, etc.
- Any leftover powder should be kept in an appropriate area that is cool and dry. Do not expose to the air too long as the powder properties may deteriorate with the moisture.