Rapid Epoxy Polyester

The information given in this datasheet is generic for the range Rapid Epoxy Polyester. Specific products within the range can vary from the generic. For these products, individual product datasheets are available.

**Product Description:**
Rapid Epoxy Polyester is a series of hybrid powder coatings specifically formulated for use on mild Steel & Aluminum components. Providing surpasses the performance of all leading powders. It offers gloss retention and resistance to colour change combined with maximum film integrity to ensure long term cosmetic and functional protection.

**Powder Properties:**
- **Chemical type**: Epoxy-polyester
- **Particle size**: Suitable for electrostatic spray
- **Gloss**: Visually
- **Specific gravity**: 1.2 – 1.9 g/cm³ depending on colour
- **Storage**: Dry cool conditions below 30°C peak temperature
- **Shelf life**: 12 months below 30°C peak temperature
- **Stoving schedule**: 10-12 minutes at 180°C

**Test Conditions:**
The results shown below are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only. Actual product performance will depend upon the circumstances under which the product is used.

<table>
<thead>
<tr>
<th>Substrate</th>
<th>M.S (0.5-0.8mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-treatment</td>
<td>Phosphating</td>
</tr>
<tr>
<td>Film Thickness</td>
<td>60-80microns</td>
</tr>
<tr>
<td>Stoving</td>
<td>10 minutes at 180°C (object temperature)</td>
</tr>
</tbody>
</table>

**Mechanical Tests:**
- **Dry Adhesion**: ISO2409 Pass Gt 0
- **Enrichen Cupping**: ISO1520 and Pass
- **Dry Film Hardness**: ISO2815 (Buchholz) Pass > 80
- **Impact**: ASTM D2794 and Pass
- **Flexibility**: ISO1519 and Pass

**Chemical and Durability Tests:**
- **Salt Spray**: ISO7253 Pass at 1000 hours - no corrosion more than 1.6mm from scribe.
- **Isopropyl Alcohol**: 15 Cycle pass
- **Constant Humidity**: ISO6270 Pass at 1000 hours – no corrosion area > 1mm from scribe
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<table>
<thead>
<tr>
<th>Chemical Resistance</th>
<th>Generally good resistance to acids, alkalis and oils at Normal temperatures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour Stability at Elevated temperatures</td>
<td>Average</td>
</tr>
</tbody>
</table>

**Pretreatment:** For maximum protection it is essential to pre-treat components prior to the Application of Powder. Components should receive a full multi-stage pre-treatment to clean and condition the substrate. Detailed advice should be sought from the pre-treatment supplier.

**Application:** Rapid powders can be applied by manual or automatic electrostatic spray equipment. For solid shades, unused powder can be reclaimed using suitable equipment and recycled through the coating system. For mixed colours and certain special effect finishes, advice must be sought from the manufacturer, as to the suitability or otherwise of the product for recycling. Certain special effect finishes may not be suitable for recycling. For all mixed colour/special effect systems, advice must be sought as to the correct mixing ratio for virgin/reclaim powder.

**Safety Precautions:** Please consult the Material Safety Datasheet (MSDS)