Nerocoat Product Specifications – Epoxy Powders.

Substrates

Aluminium
Cold rolled Cold Annealed (CRCA) Steel

Surface Preparation

For normal applications – chemical cleaning and surface treatment.
For Aluminium – Chromatising.
For Steel – Iron Phosphate / Low Wt. Zinc phosphate.

Powder Characteristics

Sieve Analysis:

<table>
<thead>
<tr>
<th>Below 32 microns</th>
<th>42 ± 3 %</th>
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</thead>
<tbody>
<tr>
<td>Below 90 microns</td>
<td>&gt; 99%</td>
</tr>
<tr>
<td>Below 125 micron</td>
<td>100 %</td>
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</tbody>
</table>

Performance will vary with colour, baking schedule, substrate type and thickness. The following are typical performance properties when White or Off White Epoxy Powder Coatings are applied to chemically cleaned and surface treated light gauge metal substrate. We suggest each proposed substrate be tested to confirm acceptability.

Performance Properties

Physical Tests:

<table>
<thead>
<tr>
<th>Type</th>
<th>Pure Epoxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>In desired shades</td>
</tr>
<tr>
<td>Gloss @ 60°</td>
<td>Matt: .5 – 20%</td>
</tr>
<tr>
<td></td>
<td>S / G: 45 – 65%</td>
</tr>
<tr>
<td></td>
<td>Glossy: &gt; 90%</td>
</tr>
<tr>
<td>Finish</td>
<td>Available in Smooth, Texture and Structure finishes.</td>
</tr>
<tr>
<td>Hardness (Pencil)</td>
<td>H to 2H</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Passes 6.25 mm</td>
</tr>
<tr>
<td>Adhesion (cross hatch tape test)</td>
<td>Excellent, GT-0 (1mm squares)</td>
</tr>
<tr>
<td>Impact (Direct / Reverse)</td>
<td>100 Kg.cm</td>
</tr>
</tbody>
</table>

Application Conditions

Application Method:
Electrostatic Powder Spray
- 40 to – 120 KV (Kilovolt)

Film Thickness:
For normal usage 50 – 60 microns.

Curing Schedule:
200°C for 10 to 15 minutes (Object Temp.)

Specific Gravity:
1.4 – 1.8 (Depending upon colour).

Theoretical Coverage:
12 Sq.meters per Kg.
At a typical specific gravity of 1.60, and at 50 microns dry film thickness assuming 100% application efficiency.

Storage:
Product has shelf life of 6 months at 25°C and Relative Humidity of 50%. Cooler temperatures and lower humidity are recommended.

Accelerated Tests:

Humidity : 1000Hrs.
No blisters or other failures.

5% Salt Spray : 750 Hrs.
No face rust, 3mm creepage from scribe.
(On CRCA steel, chemically treated)

Water Immersion : 500Hrs. @ 49°C in Distilled water.
No blistering or other changes.
Chemical Resistance Tests:

Epoxy Powder Coatings are highly resistant to a wide variety of solvents and chemicals.

Typical Applications

Dielectric Applications, Wire Goods (Baskets), Electrical Industry Switch Gears, Laboratory Furnitures, Machine Components, Battery Covers and Trays, etc.