Epoxy-Polyester Texture Powder Coatings

The information given in this data sheet is generic for Thermaset Limited Epoxy-Polyester Texture Powder Coatings.

Date: 15/01/2019

Product Code: Generic sheet for the series TLM-xxxx-T

Product Description:
Thermaset Limited offer a range of epoxy-polyester textured powder coatings designed for interior use. This range is specially formulated on selected epoxy and polyester resins and pigments to give a tough decorative finish. The sandpaper textured finish may be used to hide small imperfections in the substrate such as weld marks.

Colours Available:
Thermaset’s Epoxy- Polyester Texture Powder Coatings can be matched to customer supplied samples or to many of the RAL and BS colour ranges.

Substrate Preparation:
For maximum adhesion the substrate must be thoroughly cleaned of grease, rust etc. by shot blasting, solvent or chemical degreasing. For maximum protection it is essential to pretreat the substrate prior to the application of Thermaset Limited Epoxy-Polyester Texture Powder Coating. Aluminium components should receive a full multi-stage chromate conversion coating or similar chrome-free pretreatment to clean and prepare the substrate. Detailed advice should be sought from the pretreatment supplier.
Galvanized steel requires multi-stage pretreatment with either zinc phosphate or chromate conversion. Depending on the type of galvanizing, degassing or use of anti-bubbling additives may be required. Detailed advice should be sought from the pretreatment supplier.
Ferrous substrates require iron or zinc phosphate pretreatment. Detailed advice should be sought from the pretreatment supplier.

Application:
Thermaset Limited Epoxy-Polyester Texture Powder Coatings can be applied by manual or automatic electrostatic spray equipment, an even dry film thickness of 80-90 microns is recommended.

Powder Properties:

<table>
<thead>
<tr>
<th>Type</th>
<th>Thermosetting epoxy-polyester resin system.</th>
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<tbody>
<tr>
<td>60° Gloss (EN ISO 2813)</td>
<td>Visual only, matt sandpaper texture.</td>
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<tr>
<td>Specific Gravity</td>
<td>1.3 to 1.8 g/cm³ depending on colour and texture.</td>
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<td>Particle size</td>
<td>Suitable for electrostatic spray</td>
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<tr>
<td>Stoving schedule</td>
<td>See box label for recommended curing conditions.</td>
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<td></td>
<td>Typical values are;</td>
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<td></td>
<td>10 minutes @ 180°C peak metal temperature</td>
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<tr>
<td>Storage and shelf life</td>
<td>12 months when stored in cool (below 25°C) dry conditions. Open boxes must be resealed.</td>
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Test Conditions:
Unless otherwise specified, all tests have been carried out under laboratory conditions on 0.8mm zinc phosphate steel panels and are given for guidance only. Actual product performance will depend on the circumstances under which the product is used. A powder coating dry film thickness of 80-90 microns was used.

Mechanical Tests:
- Flexibility (cylindrical mandrel): ISO 1519 - Pass minimum 5mm
- Impact: ISO 6272-2 - Pass minimum 25 Kg cm
- Erichsen cupping: ISO 1520 - Pass minimum 5mm
- Adhesion (2mm cross hatch): ISO 2409 - Pass Gt 0

Chemical Tests:
- Constant Humidity: ISO 6270 - Pass 1000 hours.
- Boiling water: 2 hours - No defects or detachments.
- Neutral Salt Fog: ASTM B117 - Pass 250 hours, < 2mm creep from scratch.

Exterior Durability:
Not suitable for constant exterior exposure.

Chemical Resistance:
Generally good resistance to acids, alkalis and oil at normal temperatures.

Health and Safety Precautions:
This product is intended for use only by professional applicators in industrial environments. Consult the relevant Material Safety Data Sheet available from Thermaset.

Restrictions of Hazardous Substances (RoHS):
Thermaset Limited Epoxy-Polyester Texture Powder Coatings range is suitable for use on items covered by Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (Directive 11/65/EU, as amended by EU 2015/863 (RoHS2) and 2017/2102 (RoHS3). Products in the range contain none (or less than the maximum allowed amount) of the following restricted chemicals:- Lead, Mercury, Cadmium, Hexavalent Chromium or their compounds.
Poly-brominated biphenyl (PBB) or Poly-brominated diphenyl ether (PDBE) flame retardants.
Bis(2-ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP)

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