Jotun Super Durable 2903

PRODUCT DESCRIPTION
This lead-free TGIC-free powder coating is specifically designed to meet stringent requirements of the construction industry. It provides longevity to the projects and building components by ensuring high levels of gloss retention, colour stability and corrosion protection along with aesthetic performance. This powder enables efficient application and provides uniform flow and attractive finish even after recycling.

This product contributes to the Green Buildings Standard credits. Please see section Green Building Standards.

Application areas
These products are highly recommended to meet gloss retention and colour stability requirements. Primary areas of application are architectural aluminium extrusions and claddings.

When screen printing or sealants are used, it is advised to run separate trials to ensure compatibility and to meet the required performance criteria.

POWDER PROPERTIES
Storage
Keep in a dry cool area. Maximum temperature 25 °C. Maximum relative humidity 60 %. Under these mentioned conditions, product shelf life is 12 months from date of manufacture.

APPLICATION
Pretreatment
The overall performance of the coating system is largely dependent on the nature of the substrate and the type and quality of the pretreatment. For optimal results, it is recommended to follow the pretreatment supplier's instructions and recommendations.

The recommended types of pretreatment for the most frequently used substrates are:

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Pretreatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium</td>
<td>Chromate conversion</td>
</tr>
<tr>
<td>Final rinse (deionized)</td>
<td>The last running water from the object should be tested at 20 °C. The readings obtained should measure below 30 µS/cm.</td>
</tr>
</tbody>
</table>

Suitable chrome-free pretreatment for aluminium is also recommended. Due to the variety of chrome-free pretreatments available today, only the approved systems from Qualicoat and GSB should be used. Detailed advice should be sought from the pretreatment supplier.

Curing
Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

Colour

Selected range of RAL colours. This product is also available in the Cool Shades Collection, a selection of colours with heat-reflective properties. Additional colours can be made upon request.

Gloss

EN ISO 2813 (60°) 35±7

If the significant surface is too small or unsuitable for the gloss to be measured with the glossmeter, the gloss should be compared visually with the reference sample (from the same viewing angle).

Gloss measurements of metallic effect coatings can show deviation from original levels specified in this document and visual comparison with the reference sample is recommended.

Gloss range used in TDS and on the label of the metallic effect coatings represents gloss of the base and not of the final finish.

PERFORMANCE

The technical data provided below are typical for this product when applied as follows:

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Chromated aluminium panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substrate thickness (mm)</td>
<td>0.8</td>
</tr>
<tr>
<td>Film thickness (µm)</td>
<td>60-90</td>
</tr>
</tbody>
</table>

Typical values when tested.

<table>
<thead>
<tr>
<th>Property</th>
<th>Standard</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesion</td>
<td>EN ISO 2409 (2 mm)</td>
<td>Gt 0</td>
</tr>
<tr>
<td>Impact resistance*</td>
<td>EN ISO 6272 /ASTM D2794 (impactor diameter 15.9 mm)</td>
<td>Passes 2.5 Nm without detachment after tape pull test.</td>
</tr>
<tr>
<td>Cupping test*</td>
<td>EN ISO 1520</td>
<td>Passes 2 mm indentation without cracking. Passes 5 mm indentation without detachment after tape pull test.</td>
</tr>
<tr>
<td>Flexibility*</td>
<td>EN ISO 1519</td>
<td>Passes 12 mm cylindrical Mandrel bend test without cracking. Passes 5 mm cylindrical Mandrel bend test without detachment after tape pull test.</td>
</tr>
</tbody>
</table>
**Technical Data Sheet**

**Jotun Super Durable 2903**

<table>
<thead>
<tr>
<th><strong>Film hardness</strong></th>
<th>EN ISO 2815</th>
<th>Indentation resistance according to Buchholz: &gt;80</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mortar resistance</strong></td>
<td>EN 12206-1</td>
<td>The mortar must be easy to remove without leaving any residues.</td>
</tr>
<tr>
<td><strong>Drilling, milling and sawing test</strong></td>
<td></td>
<td>No flaking of coating.</td>
</tr>
<tr>
<td><strong>Humidity resistance containing SO₂</strong></td>
<td>EN ISO 3231 (0.2 I SO₂)</td>
<td>No infiltration exceeding 1 mm on both sides of the scratch after 30 cycles.</td>
</tr>
<tr>
<td><strong>Humidity resistance</strong></td>
<td>EN ISO 6270-2</td>
<td>No infiltration exceeding 1 mm on both sides of the scratch after 300 hours.</td>
</tr>
<tr>
<td><strong>Acetic acid salt spray resistance</strong></td>
<td>ISO 9227</td>
<td>After 1000 hours testing – maximum 16 mm² infiltration over a scratch length of 10 cm.</td>
</tr>
<tr>
<td><strong>Accelerated weathering</strong></td>
<td>DIN EN ISO 11507 (UVB-313)</td>
<td>Cycle: 4 hours at 50 °C UV and 4 hours at 40 °C condensation. No chalking, excellent gloss retention and colour stability after 600 hours testing.</td>
</tr>
<tr>
<td><strong>Natural weathering test</strong></td>
<td>ISO 2810 (South Florida, 27°N)</td>
<td>No chalking, excellent gloss retention and colour stability after 36 months exposure (angle of 5 ° to South).</td>
</tr>
<tr>
<td><strong>Total Solar Reflectance</strong></td>
<td>ASTM C 1549</td>
<td>TSR ≥ 0.25</td>
</tr>
</tbody>
</table>

* According to Qualicoat Class 2 test procedures.

**Approvals**

This product is certified according to Qualicoat Class 2 and GSB Master standard, and has weathering performance in line with AAMA 2604.

- Qualicoat: P-1514 (TH), P-1233 (CN), P-0900 (CZ), P-0894 (TR), P-1445 (AE)
- GSB: 168 f (CZ)

**Sustainability**

Powder coating is applied in air-and-powder mix in a strictly controlled factory process using electrostatic gun and a high temperature curing oven to create film. Virtually no VOCs are released in the process compared to traditional liquid paints. Unused or oversprayed powder can be recycled with minimal wastage, and disposal is easy and safe. In addition, all Jotun Powder Coatings' products are lead-free.

**Green Building Standards**

This product contributes to Green Building Standard credits by meeting the following specific requirements:

- LEED®v4 (2013)
  - MR credit: Building product disclosure and optimization
    - Material Ingredients, Option 2: Material Ingredient Optimization, International Alternative Compliance Path - REACH optimization: Fully inventoried chemical ingredients to 100 ppm and not containing substances on the REACH Authorization list – Annex XIV, the Restriction list – Annex XVII and the SVHC candidate list.
    - Environmental Product Declarations. Product-specific Type III EPD (ISO 14025;21930, EN 15804).
  - Option 1: Nonroof and Roof
    - 1.2.a: High-reflectance roof (Steep-sloped roof)
    - 1.2.b: High-reflectance roof (Low-sloped roof)
  - Option 2: Parking under Cover
  The following colours of the Cool Shades Collection comply with:
  - Arc: 1.2.a;2
  - Couronne: 1.2.a;2

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*This Technical Data Sheet supersedes those previously issued.*

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

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Dayspring: 1.2.a;2  
Equinox: 1.2.a;2  
Meridian: 1.2.a;1.2.b;2  
Sepia: 1.2.a;2  
Sun path: 1.2.a;1.2.b;2

BREEAM® International (2016)  
Mat 01: Product-specific Type III EPD (ISO 14025;21930, EN 15804).

The EPDs are available at www.epd-norge.no

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.