

Product Data Sheet

Corro-Coat PE-SDF Super Durable Series 2003 and 2006

Product Description Corro-Coat PE-SDF Super Durable polyester TGIC powder coatings Series 2003 and 2006 are especially formulated to satisfy the highest requirements of the building industry for aesthetic performance, UV light resistance and humidity resistance. Their outstanding gloss retention and resistance to colour change properties are combined with optimum functional properties to ensure the highest levels of protection.

Application Areas Corro-Coat PE-SDF Super Durable Series 2003 and 2006 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.

Pre-treatment The overall quality of the coating system is largely dependent on the type and quality of the pre-treatment. The recommended type of pre-treatment is:

| | |
|-------------------------|---|
| Aluminium | Chromate conversion |
| Final rinse (deionized) | The last running water from the object should be tested at 20°C. The readings obtained should measure below 30µS/cm. |

Suitable chrome-free pre-treatments for Aluminium are also recommended. Due to the variety of chrome-free pre-treatments available today, only the approved systems from Qualicoat and GSB should be used. Detailed advice should be sought from the pre-treatment supplier.

Curing Schedules 15 minutes at 180°C object temperature
10 minutes at 200°C object temperature
8 minutes at 210°C object temperature

Colour Selection A selected range of RAL colours are available to order. In addition, Corro-Coat PE-SDF Super Durable Series 2003 and 2006 are available in the special colour collection ColourBeats, as well as the Cool Shades Collection - a selection of colours with heat-reflective properties. Corro-Coat PE-SDF Super Durable Series 2006 is available only in metallic finishes.

Other colours can be made available subject to technical appraisal.

Powder Application Corro-Coat PE-SDF Super Durable Series 2003 and 2006 are available for Corona or Tribo charging equipment

Product Warranty Corro-Coat PE-SDF Super Durable Series 2003 and 2006 are backed by a 25-year product warranty system when used on architectural aluminium substrates, subject to terms and condition

Storage Conditions 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 production date.

Maintenance Please refer to "Powder Coated Façades' Maintenance" document.

Approvals Please consult your local Jotun Powder Coatings' production unit.

Technical Data

The technical data provided below are typical for Corro-Coat PE-SDF Super Durable Series 2003 and 2006 applied to 0.8mm chromated aluminium panels (60 to 90 micron film thickness). Typical values when tested have not necessarily been recently revised.

| Description | Norm | Series 2003 | Series 2006 |
|--|---|--|-------------|
| Gloss* | EN ISO 2813 (60°) | 35 ± 7 | 65 ± 7 |
| Adhesion | EN ISO 2409 (2mm) | Cross-cut rating Gt0 (100% adhesion). | |
| Impact resistance | EN ISO 6272 /ASTM D2794 (impactor diameter 15.9 mm) | Passes 2.5 Nm without detachment after tape pull test.** | |
| Cupping test | EN ISO 1520 | Passes 2mm indentation without cracking. Passes 5mm indentation without detachment after tape pull test.** | |
| Flexibility | EN ISO 1519 | Passes 12 mm cylindrical Mandrel bend test without cracking. Passes 5mm cylindrical Mandrel bend test without detachment after tape pull test.** | |
| Film hardness | EN ISO 2815 | Indentation resistance according to Buchholz: >80. | |
| Mortar resistance | EN 12206-1 | The mortar must be easy to remove without leaving any residues. | |
| Drilling, milling and sawing test | | No flaking of coating. | |
| Neutral salt spray resistance | ASTM B117 | No blistering or loss of gloss after 3,000 hours. | |
| Humidity resistance containing SO ₂ | EN ISO 3231 (0.2 l SO ₂) | No infiltration exceeding 1mm on both sides of the scratch after 30 cycles. | |
| Humidity resistance | EN ISO 6270-2 | No infiltration exceeding 1mm on both sides of the scratch after 3,000 hours. | |
| Acetic acid salt spray resistance | ISO 9227 | After 1,000 hours testing – maximum 16 mm ² infiltration over a scratch length of 10cm. | |
| Accelerated weathering | DIN EN ISO 11507 (UVB-313) | 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 | |
| Accelerated weathering | DIN EN ISO 11507 (UVA - 340) | Cycle: 8 hours at 60°C UV and 4 hours at 45°C condensation. No chalking, excellent gloss retention and colour stability after 3,000 hours testing. | |
| Natural weathering test | ISO 2810 (South Florida, 27°N) | No chalking, excellent gloss retention and colour stability after 36 months exposure (angle of 5° to South). | |
| Flame spread index | ASTM E 84-06a | Class 1 or A | |
| Smoke development | ASTM E 84-06a | Class 1 or A | |
| Total Solar Reflectance*** | ASTM C 1549 | Series 2003 and 2006: TSR ≥ 0.25 | |

* 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).

** According to Qualicoat Class 2 test procedures.

*** Only applicable to Corro-Coat PE-SDF Super Durable Series 2003 and 2006 for the colours featured in the 'Cool Shades Collection'

Note: The information on this Product Data Sheet is given to the best of the manufacturer's knowledge, based on laboratory testing and practical experience. However, as the product is often used under conditions beyond the manufacturer's control, only the quality of the product itself can be guaranteed. Jotun Powder Coatings reserves the right without notice to alter or change the content of this Product Data Sheet.

Jotun Powder Coatings. Revised May 2011.

THIS PRODUCT DATA SHEET SUPERSEDES ALL PREVIOUSLY ISSUED VERSIONS.