

Jotun Durasol 4003

PRODUCT DESCRIPTION

This lead-free powder coating is designed to withstand the most stringent weather conditions and meet industry requirements for high performance and long lasting attractive finishes. This TGIC-free product combines outstanding gloss retention and colour stability properties and ensures highest corrosion resistance levels. This product is certified according to Qualicoat Class 3 standard in selected colours and has weathering performance in line with AAMA 2605.

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

Application areas

This product is highly recommended for architectural aluminium extrusions and claddings where climatic conditions put severe strain on exterior surface and where advanced corrosion protection, gloss and color retention are essential.

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

Property	Standard	Result
Specific gravity	Calculated	Max. 1.5 g/cm ³

Storage

Keep in a dry cool area. Maximum temperature 25 °C. Maximum relative humidity 60 %. If stored longer than 6 months a quality test must be performed.

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:

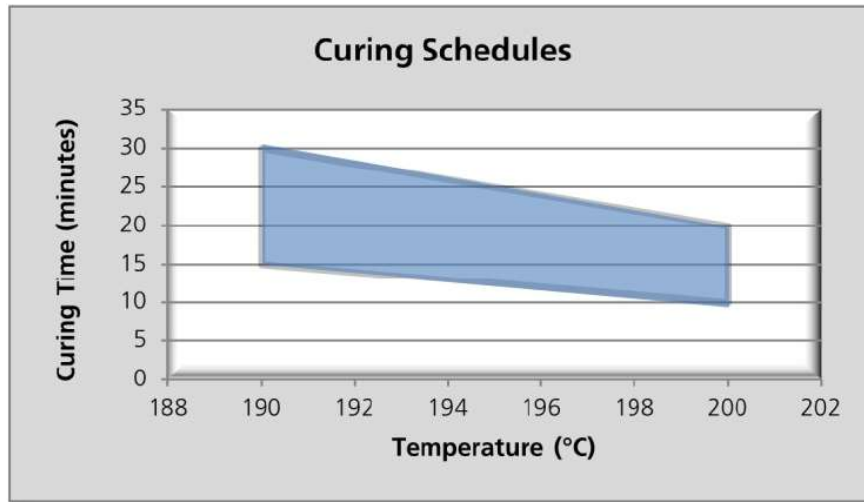
Substrate	Pretreatment
Aluminium	Chromate conversion
Final rinse (deionized)	The last running water from the object should be tested at 20 °C.

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 should be used. Detailed advice should be sought from the pretreatment supplier.

Powder application

Recommended film thickness (µm): 50-70

Curing



Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

Colour

Selected range of specially made and RAL colours. Additional colours can be made upon request.

Gloss

EN ISO 2813 (60°) 20 ± 5

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:

Substrate Chromated aluminium panels
Substrate thickness (mm) 0.8
Film thickness (µm) 50-70

Typical values when tested.

Property	Standard	Result
Adhesion	EN ISO 2409 (2 mm)	Gt 0
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 5 mm indentation without detachment after tape pull test.

Flexibility	EN ISO 1519	Passes 5 mm 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.
Humidity resistance containing SO₂.	EN ISO 3231 (0.2 l SO ₂)	No infiltration exceeding 1 mm on both sides of the scratch after 40 cycles.
Humidity resistance	EN ISO 6270-2	No infiltration exceeding 1 mm on both sides of the scratch after 4000 hours.
Acetic acid salt spray resistance	ISO 9227	After 2000 hours testing – maximum 16 mm ² infiltration over a scratch length of 10 cm.
Natural weathering test	EMMAQUA® (Phoenix, Arizona) ASTM G90, Spray cycle 3	No chalking, excellent gloss retention and colour stability after ~2900 MJ/m ² UV exposure equivalent to 10 years exposure in Florida (angle of 45 to South)
Flame spread index	ASTM E84	Class 1 or A
Smoke Development Index	ASTM E84	Class 1 or A

Approvals

This product is certified according to Qualicoat Class 3 standard in selected colours and has weathering performance in line with AAMA 2605.
Qualicoat: P-1246 (SA)



Additional information

This product may be backed by a 30-year Product Performance Guarantee when applied on extruded architectural aluminum substrate. For further information please contact your local Jotun representative.

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).

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

Technical Data Sheet

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Jotun Protects Property

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.