Guard Endure D S

PRODUCT DESCRIPTION

The product is a range of powder coating designed to provide superior scratch and mar resistance with benefit of operational efficiency. The product meets the industry standard with regards to all other mechanical and chemical properties.

Application areas

This product is recommended for interior use only.

Typical application areas:
Office furniture
Home furniture
Commercial furniture

POWDER PROPERTIES

Property	Standard	Result
Specific gravity	Calculated	Typically 1.6 ± 0.2 g/cm3

Storage

Keep in a dry cool area. Maximum temperature 25 °C. Maximum relative humidity 60 %. If stored longer than 12 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.

Powder application

Curing schedule	Object temperature	Time
Guard Endure D0 S	200 °C	10 minutes
Guard Endure D8 S	180 °C	10 minutes

Other curing schedules can be created upon technical approval.

Recommended film thickness (µm): ≥ 55

Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

Colour

The product is available in white and light colours mainly. Other colours are available upon technical approval. The product colour range is entirely lead free.

Gloss

EN ISO 2813 (60°) 15-59

Other gloss levels are available upon technical approval.

Finish

Smooth

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).

PERFORMANCE

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

Substrate	Iron-phosphated cold rolled steel
Substrate thickness (mm)	0.8
Film thickness (µm)	55-70

Typical values when tested.

Property	Standard	Result
Adhesion	EN ISO 2409	Cross-cut rating Gt0 (100 % adhesion)
Pencil hardness test	ASTM D3363-05 (Derwent Graphic)	Scratch hardness: ≥ 2 H Gouge hardness: ≥ 4 H
Scratch resistance	ISO 1518-1/SIS 83 91 17	≤ 0.5 mm wide scratch at 5N load having a hemispherical hard-metal tip of radius 0.5 mm
Film hardness	EN ISO 2815	Indentation resistance according to Buchholz: ≥ 80
Rub abrasion mar resistance	ASTM D6279 (3M Wetordry polishing paper 281Q-9MIC)	Under dry conditions, maximum 50% gloss change (at 60 ° degree)
Cupping test	EN ISO 1520	Indentation depth in excess of 6 mm without film cracking
Impact resistance	ASTM D2794 (5/8 '' ball) (inch-pounds, front and reverse)	More than 40/20 inch-pounds without film cracking
Resistance to neutral salt spray	ISO 9227 ISO 4628-2 ISO 4628-8	No blistering and maximum 1 mm corrosion creep from scribe after 240 hours
Resistance to humid atmospheres	ISO 6270-2 ISO 4628-2 ISO 4628-8	No blistering and maximum 2 mm corrosion creep from scribe after 504 hours

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. In addition, all Jotun Powder Coatings' products do not contain intentionally added lead.

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.