

Guard Endure K S H

PRODUCT DESCRIPTION

Guard Endure K S H is a range of TGIC-free powder coatings specifically developed to have improved scratch resistance to help keep coated items looking good for longer. It is available in a variety of colours with a smooth finish. The product meets the industry standard with regards to all other mechanical and chemical properties.

Application areas

This product is recommended for interior and exterior use.

Typical application areas:

Air conditioners
Furniture (Interior/ Exterior)
Metal doors
Industrial racking systems

POWDER PROPERTIES

Property	Standard	Result
Specific gravity	Calculated	Typically $1.6 \pm 0.2 \text{ g/cm}^3$

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 EndureK S 9H	190 °C	10 minutes

Other curing schedules can be created upon technical approval.

Recommended film thickness (μm): ≥ 60

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°) K S 9H	20-60
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	Zinc phosphate cold rolled steel
Substrate thickness (mm)	0.8
Film thickness (µm)	60-90

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 : \geq 2H Gouge hardness : \geq 4H
Cupping test	EN ISO 1520	Passes \geq 6 mm indentation without film cracking
Impact resistance	ASTM D2794 (5/8 " ball) (inch-pounds, front and reverse)	More than 60 / 60 inch-pounds without film cracking
Scratch resistance	ISO 1518-1 / SIS 83 91 17	\leq 0.5 mm wide scratch at 5N load having a hemispherical hard-metal tip of radius 0.5 mm
Resistance to neutral salt spray	ISO 9227 ISO 4628-2 ISO 4628-8	No blistering and maximum 2 mm corrosion creep from scribe after 504 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
Accelerated weathering	ISO 16474-3	Cycle: 4 hours at 50 °C UV and 4 hours at 40 °C condensation. No chalking, good gloss retention and colour stability after 100 hours testing.

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

Technical Data Sheet

Guard Endure K S H



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.