

## Guard Endure E S H

### PRODUCT DESCRIPTION

Guard Endure E S H is a range of TGIC-free powder coatings specifically developed to have superior scratch resistance to help keep coated items looking flawless 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 Endure E8 H	180 °C	10 minutes

Other curing schedules can be created upon technical approval.

Recommended film thickness ( $\mu\text{m}$ ):  $\geq 50$

#### Equipment

Suitable for Corona or Tribo charging equipment.

### APPEARANCE

<b>Colour</b>	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.	
<b>Gloss</b>	EN ISO 2813 (60°) E8 H	20-69
<b>Finish</b>	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)	50-70

Typical values when tested.

Property	Standard	Result
<b>Adhesion</b>	ISO 2409	Cross-cut rating Gt0 (100 % adhesion)
<b>Pencil hardness test</b>	ASTM D3363-05 (Derwent Graphic)	Scratch hardness : $\geq$ 2H Gouge hardness : $\geq$ 4H
<b>Cupping test</b>	ISO 1520	$\geq$ 6 mm
<b>Impact resistance</b>	ASTM D2794 (5/8 " ball) (inch-pounds, front and reverse) E8 H	60/60
<b>Scratch resistance</b>	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
<b>Resistance to neutral salt spray</b>	ISO 9227	No blistering and maximum 2 mm corrosion creep from scribe after 504 hours
<b>Resistance to humid atmospheres</b>	ISO 6270-2	No blistering and maximum 2 mm corrosion creep from scribe after 504 hours
<b>Accelerated weathering</b>	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 200 hours testing.

## 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.

# Technical Data Sheet

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