

Reveal Electron D

PRODUCT DESCRIPTION

The product is a hybrid powder coating. It is developed to provide static dissipative property with protective and functional properties. Reveal Electron protects equipments by allowing built-up charges to flow to ground slower than conductive materials. The product offers excellent mechanical and chemical performance with good flow and finish.

Application areas

This product is recommended for interior use only.

Typical application areas:

- Metal workbenches
- Work surfaces
- Shelving and racking
- Storage organizers
- Electronic enclosures
- Filing cabinets
- Casted parts of grain machines

POWDER PROPERTIES

Property	Standard	Result
Specific gravity	ISO 8130	1.5 ± 0.15 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 is recommended.

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

- Steel
- Zinc coated steel
- Final rinse (deionized)

Pretreatment

- Iron or zinc phosphate or nanoceramic conversion
- Zinc phosphate, chromate or nanoceramic conversion
- The last running water from the object should be tested at 20 °C. The readings obtained should measure below 30 µS/cm.

Powder application

This product can be formulated for curing temperatures from 160 °C to 200 °C object temperature.

Recommended film thickness (µm): 50-90

Higher film thickness results in higher surface resistance that avoids charges which regularly flow to ground. Please be in line with specified film thickness.

Surface resistance can change according to different colors. Please contact the sales or technical person from Jotun for details.

Equipment

Suitable for Corona charging equipment.

APPEARANCE

Colour	The product is available in a light /dark grey assortment of custom-made colours, including dirty white whose L value is <90. Many RAL and NCS colors can be designed upon request.	
Gloss	ISO 2813 (for smooth finishes)	60-90
Finish	Smooth and fine textured finishes.	

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).

As per the formulation design, small dots can appear on the surface.

PERFORMANCE

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

Substrate	Iron-phosphated panel
Substrate thickness (mm)	0.8
Film thickness (µm)	50-90

Typical values when tested.

Property	Standard	Result
Cupping test (Erichssen)	EN ISO 1520	Passes 5 mm without film cracking
Bend test	ASTM D522 (Method A, conical mandrel)	≤ 3 mm
Impact resistance	ASTM D2794 (5/8 " ball)	60/60 inch-pounds (front and reverse)
Adhesion (Cross-cut test)	ISO 2409	Cross-cut rating Gt0 (100 % adhesion)
Film hardness	EN ISO 2815	Indentation resistance according to Buchholz: > 80
Scratch hardness test	ISO 4586-2	> 1.0 N
Resistance to neutral salt spray	ASTM B117	No blistering and maximum 3 mm corrosion creep from scratch after 504 hours
Resistance to humid atmospheres	ISO 6270-2	No blistering, maximum 2 mm corrosion creep from scratch.
ESD Property - Surface resistivity	Standard	Result

Technical Data Sheet

Reveal Electron D



Jotun Protects Property

Film thickness under test	ISO 2808	50-90 µm
Measurement instrument	ASTM D257 -F 740 SURFACE RESISTANCE CHECKER	N/A
Surface resistance	ASTM D257	10x10 ⁵ - 10x10 ¹¹ depending on colour
Voltage	ASTM D257	100 V

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.