

Guard Miles+ D

PRODUCT DESCRIPTION

Guard Miles+ D is a range of powder coatings designed to provide good appearance, optimised hiding and improved mileage performance. It also offers operational efficiency in terms of uniform powder utilisation that could provide increased productivity and energy savings.

No special equipment is required to benefit from Guard Miles+ mileage and hiding properties.

Application areas

This product is recommended for interior use on surfaces exposed to a dry environment.

Typical application areas:

- Refrigerators
- Freezers
- Small kitchen appliances

POWDER PROPERTIES

Property	Standard	Result
Specific gravity	Calculated	Typically 1.6±0.2 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 Miles+ D8	180 °C	10 minutes
	200 °C	5 minutes
Guard Miles+ D6	160 °C	10 minutes
	180 °C	5 minutes

Other curing schedules can be created upon technical approval.

Recommended film thickness (µm): 40-60

Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

Colour	The product is available in Whites and selected colours (browns, greys, blacks and wine red). Other colours are available upon technical approval.	
Gloss	EN ISO 2813 (60°)	75-95
Finish	Suitable for 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).

Other gloss levels are available upon technical approval.

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)	40-60

Typical values when tested.

Property	Standard	Result
Theoretical yield*		Approximately 15 m ² /kg at recommended film thickness of 40 µm.
Cross-cut test	ISO 2409	Cross-cut rating Gt0 (100 % adhesion)
Hiding power	ASTM 1347-06, CIELAB	Colour change when applied on black vs. a white substrate will typically not exceed dE _{Cielab} of 1 at specified film thickness
Pencil hardness test	ASTM D3363-05 (Derwent Graphic)	F
Cupping test	ISO 1520	≥ 6 mm
Flexibility, cylindrical mandrel	ISO 1519	≤ 5 mm
Impact resistance	ASTM D2794 (5/8 " ball) (inch-pounds, front and reverse)	≥ 100
Resistance to food	EN 12720:2009+A1:2013 24 h, liquid	Citric acid - No change 5-10 % vinegar - No change Beer - No change Cola - No change Blackcurrant, orange, tomato juice - No change
Resistance to solvent	EN 12720:2009+A1:2013, 15 seconds	100% Isopropanol - No change 96% Ethanol (Ethyl alcohol) - No change
Resistance to neutral salt spray	ISO 9227	No blistering and maximum 1 mm corrosion creep from scribe after 240 hours
Resistance to humid atmospheres	ISO 6270-2	No blistering and maximum 2 mm corrosion creep from scribe after 504 hours
Light resistance (D8 and D6 only)	ISO 16474-2:2013, Method B, cycle B2	Maximum dE ≤ 1.5 after 144 hours.

* Theoretical yield calculation has been made as a function of total coated area with a uniform film thickness and a 5 % waste for hooks and hangers.

Disclaimer

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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.