

Ultra Shine D

PRODUCT DESCRIPTION

The product is a new generation powder coating designed using a bonding process to exhibit an outstanding bright metallic chrome appearance. This product is a recyclable powder coating that will allow for exquisite design with beautiful aesthetics while meeting stringent industry requirements.

Ultra Shine is recommended to be used as part of a system and over-coated with a clear coat, Reveal Lite, to avoid any damage that could occur in aggressive environments such as fingerprints, scratching, marring and high humidity.

Application areas

When used with the right clear coat, this product is suitable for interior and exterior use.

Typical application areas:
Office furniture
Home furniture
Commercial furniture

POWDER PROPERTIES

Property	Standard	Result
Specific gravity		1.2 ± 0.1 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.

Powder application

Please consult our application guidelines for metallic powder coatings.

Partial cure of the primer is recommended to enhance inter-coat adhesion between primer and a topcoat following the below schedule.

Curing schedule	Object temperature	Time
Ultra Shine D8 (Partial cure)	180 °C	8 minutes*
Ultra Shine D0 (Partial cure)	180 °C	8 minutes*

* Ultra Shine should be over coated with Reveal Lite. The system should be cured in accordance to the recommended curing schedules of Reveal Lite.

Other curing schedules can be created upon technical approval.

Recommended film thickness (µm): 70-100

Equipment

Suitable for Corona charging equipment.

APPEARANCE

Colour The product is available in metallic chrome effect. This product is entirely lead free.

Finish Smooth

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) 70-100

Typical values when tested.

Property	Standard	Result
Second layer curing (Reveal Lite clear coat)	Dual coat*	200 °C/10 minutes
Cupping test (Erichssen)	ISO 1520	≥ 5 mm
Bend test	ASTM D522 (Method A, conical mandrel) Single coat Dual coat*	NA ≤ 4 mm
Impact resistance (front/reverse)	ASTM D2794 (5/8 " ball) Single coat Dual coat*	60/60 inch-pounds 40/20 inch-pounds
Adhesion (Cross-cut test)	ISO 2409 Single coat Dual coat*	Gt 0 (2 mm) Gt 0 (3 mm)
Pencil hardness test	ASTM D3363-05 Single coat Dual coat*	F H
Scratch resistance	ISO 1518-1/SIS 83 91 17 Ultra Shine D8 Ultra Shine D0 Dual coat*	≤ 0.5 mm wide scratch at 1 N load ≤ 0.5 mm wide scratch at 3 N load ≤ 0.5 mm wide scratch at 3 N load
Resistance to detergent	Modified ASTM D 2248-01a (2% washing machine detergent) Single coat Dual coat*	NA No change after 96 hours exposure in 70 °C
Resistance to neutral salt spray	ASTM B117 Single coat Dual coat*	NA No blistering and maximum 1 mm corrosion creep from scratch after 720 hours

Resistance to humid atmospheres	DIN 50017 Single coat Dual coat*	NA No blistering, maximum 2 mm corrosion creep from scratch, maximum colour change $dE \leq 1.0$ after 720 hours
QUV A	ISO 16474-3:2013 (Lamp: UVA-340 Cycle 8 hours at 60 UV and 4 hours at 45 °C condensation) Single coat Dual coat*	NA No chalking, excellent gloss retention after 240 hours

* Overcoated with Reveal Lite E0 F.

Recommendations

Ultra Shine D contains leafing metallic particles which settle at the very top layer of the coating and make the surface sensitive to aggressive environments (chemicals, humidity) and mechanical stresses (scratching, marring). Thus, it is highly recommended to protect **Ultra Shine D** with **Reveal Lite E0 F** to avoid any irreversible damages.

The surface of **Ultra Shine D** should be kept clean, dry and grease-free prior to be over-coated with **Reveal Lite E0 F**.

Application of the second layer (Clear-coat) should be done as soon as possible.

Over-curing of **Ultra Shine D** might lead to reduced inter-coat adhesion and should be verified at customer's line. Special care should be taken when using a gas-fired oven with direct heating.

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.