Reveal Sand

PRODUCT DESCRIPTION

Reveal Sand is a low temperature cure powder coating specifically developed for the Medium Density Fibreboard (MDF) furniture industry. Additionally, the product is suitable for metal parts. It gives the powder coated MDF surface a matte to semigloss fine textured finish that meets the mechanical and chemical resistance requirements of the general furniture industry.

For optimum results, the product is to be used in combination with Primax Base.

Application areas

This product is recommended for interior use only.

Typical application areas:
Kitchen cabinets
Bathroom furniture
Office furniture
Home furniture
Children's furniture
Shop fittings

POWDER PROPERTIES

Property	Standard	Result
Specific gravity	Calculated	Typically 1.60 ± 0.20 g/cm^3

Storage

Keep in a dry cool area. Storage time 6 months at maximum temperature ≤ 17 °C. Maximum relative humidity 60%. When transporting, the product must be kept at a temperature of ≤ 17 °C.

APPLICATION

Pretreatment

The overall quality of the coating system is largely dependent on the type of MDF, the quality of the substrate preparation and the coating application line. Since there are many grades of MDF available in the market which can differ in moisture content and resistance, density profile, internal bond strength etc., it is recommended that the coater determines which grade of MDF will best achieve the desired quality according to powder application procedures.

The MDF surface must be clean and free from dust, grease, adhesive and loose MDF fibres. The MDF may need to be sanded in order to homogenize the surface to be coated. The edges should also be rounded and made smooth (minimum 1.5 degrees radius). For best results, the moisture content of the MDF should be between 5 and 7 %.

MDF board should have a certain level of conductivity in order to attract and hold the electrostatically charged powder coating particles. In order to ensure that correct coating properties are achieved, preconditioning of the board to secure the correct moisture content will be necessary. This will enable good earthing to be achieved and therefore ensure the correct level of surface conductivity for coating. If in doubt, please seek advice from your Jotun technical service advisor.

When handling more porous MDF boards, alternative surface and edge preparation techniques such as thermo-

This Technical Data Sheet supersedes those previously issued.
The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

smoothing and/or edge banding may be considered.

Powder application

Infrared heating or a combination of infrared and convection heating is recommended.

A fully cured film has to be reached in order to assure film properties. An inadequately cured film may end in film failure, e.g. edge cracking, especially when the board is subjected to environments with different humidity content.

When used together, Reveal Sand as a topcoat, and Primax Base, as a primer/sealer, the total curing schedule used to cure both layers can be minimized. Indeed, the first layer does not need to be entirely cured before the second layer is being applied. A 2-minute cure for example of the first layer followed by another 5-minute cure when the second layer is applied is usually enough to have the total system cured and have the MDF benefit from a proper sealing and finish.

Curing schedule	Object temperature	Time
Primax Base	130 °C	3 minutes
Reveal Sand	135 °C	5 minutes

Note! The exact curing conditions are dependent on the curing oven configuration, condition, and the substrate.

Recommended film thickness (µm):
Primax Base 50 - 100 microns
Reveal Sand 80 - 100 microns
Total system 130- 200 microns

Equipment

Suitable for Corona charging equipment.

APPEARANCE

Colour The product is available in a wide variety of RAL and NCS colours (including sparkling and metallics).

Gloss ISO 2823 (60°) 5-25

Finish Available in textured and metallic 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).

Higher gloss values are available upon technical approval.

PERFORMANCE

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

Substrate	Suitable MDF board
Substrate thickness (mm)	18
Film thickness (µm)	130-200*

Typical values when tested.

Property	Standard	Result
Chemical resistance	DIN 68861-1	Pass, Resistance group 1B
Scratch resistance	ISO 1518-1	≤ 0.5 mm wide scratch at 3 N load having a hemispherical hard-metal tip of radius 0.5 mm
Dry heat	EN 12722	Rating 5 (no change) at 70 °C

This Technical Data Sheet supersedes those previously issued.

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

Wet heat	EN 12721	Rating 5 (no change) at 85 °C
Water	EN 12720	Minimum rating 4 (Class R4 16 hours)
Fat (liquid paraffin)	EN 12720	Minimum rating 4 (Class R4 24 hours)
Coffee	EN 12720	Minimum rating 4 (Class R4 1 hour)
Water resistance test	Ledro swelling test - 48 hours	Pass

** For a two-coat system where Primax Base constitutes 50-100 microns.*

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, and disposal is easy and safe. In addition, all Jotun Powder Coatings' products do not contain intentionally added lead.

Green Building Standards

The declared product contributes to Green Building Standard credits by meeting the following specific requirements:

LEED®v4.1 (2020) / LEED®v4 (2013)
MR credit: Building product disclosure and optimization
- Environmental Product Declarations. Product-specific Type III EPD (ISO 14025;21930, EN 15804).

BREEAM® International (2021) BREEAM® International (2016)
- Mat 01: Product-specific Type III EPD (ISO 14025;21930, EN 15804).

The EPDs are available at www.epd-norge.no

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 data given 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.

This Technical Data Sheet supersedes those previously issued.

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com