

# RILSAN® D40 NATURAL

RILSAN® D40 NAT is a polyamide 11 powder obtained from renewable resources with an average diameter of 27 - 31 µm.

RILSAN® D is a range of high performance fine polyamide powders used as multifunctional additives in coatings and varnishes.

The introduction of RILSAN® polyamide powders in formulations is easy thanks to their good dispersion capacity, their reduced impact on rheology and their low density.

RILSAN® polyamide powders are surface modifiers, specifically designed for texture creation.

Abrasion, scratch, impact resistances and flexibility of coatings, inks and varnishes can be significantly improved using RILSAN® polyamide powders.

| PROPERTIES                                 | VALUE             | UNIT  | TEST STANDARD   |
|--------------------------------------------|-------------------|-------|-----------------|
| THERMAL PROPERTIES                         |                   |       |                 |
| Melting Temperature, 10°C/min              | 185               | °C    | ISO 11357-1/-3  |
| Vicat Softening Temperature, 50°C/h 50N    | 160               | °C    | ISO 306         |
|                                            | 320               | °F    |                 |
| Burning Behav. at 1.5 mm Nominal Thickness | HB                | class | IEC 60695-11-10 |
| Thickness Tested                           | 1.6               | mm    | -               |
|                                            | 0.0630            | in    |                 |
| Burning Behav. at Thickness h              | V-2               | class | IEC 60695-11-10 |
| Thickness Tested                           | 3.2               | mm    | -               |
|                                            | 0.1260            | in    |                 |
| ELECTRICAL PROPERTIES                      |                   |       |                 |
| Volume Resistivity                         | 1E12              | Ohm*m | IEC 60093       |
| Surface Resistivity                        | 1E14              | Ohm   | IEC 60093       |
| Dielectric (Electric) Strength             | 30                | kV/mm | IEC 60243-1     |
|                                            | 762               | kV/in |                 |
| OTHER PROPERTIES                           |                   |       |                 |
| Water Absorption                           | 1.9               | %     | Sim. to ISO 62  |
| Density                                    | 1040              | kg/m³ | ISO 1183        |
|                                            | 1.04              | g/cm³ |                 |
| POWDER PROPERTIES                          |                   |       |                 |
| Particle Size Distribution, Median Size    | 27 - 31           | µm    | ISO 13320       |
|                                            | 0.00106 - 0.00122 | in    |                 |
| Melting Temperature                        | 186               | °C    | ISO 1218        |
|                                            | 367               | °F    |                 |
| Non Tapped Density                         | 0.37              | -     | ISO 1068        |

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## POWDER COATING PROPERTIES

|                                   |      |   |          |
|-----------------------------------|------|---|----------|
| Specific Gravity of Coating, 20°C | 1.04 | - | ISO 1183 |
| Water Absorption, 24h             | ≤1   | % | ISO 62-1 |

## APPLICATION PROPERTIES

- **Texturing agent (rough texture)** Texture depends on amount of Orgasol® polyamide powder, dry coating thickness and conditions of curing.
- **Abrasion & Scratch resistance improvement** reinforces the mechanical properties of the coating
- **Compatible with most resins used in coating industry** suitable for solvent-based, water-based and 100% solid UV-curable systems
- **Compliant with FDA regulations (FDA 177-1500 and FDA 175-300)**

## MAIN APPLICATIONS:

- Coil coating
- Wood coating
- Plastic coating

## PACKAGING

This grade is delivered in 20kg bag.

## SHELF LIFE

Five years from the date of delivery. For any use after this limit, please refer to our technical services.

## PROCESSING

Coating

## DELIVERY FORM

Powder

## REGIONAL AVAILABILITY

North America, Europe, Asia Pacific, South and Central America, Near East/Africa