

# RILSAN®

## FINE POWDERS

# ESY ORANGE 7705

+135-3858-6433 (GuangDong)  
+188-1699-6168 (ShangHai)  
+852-6957-5415 (HongKong)

### Powder ESY ORANGE 7705 - Rilsan® POLYAMIDE 11 (PA11) Powder

RILSAN® fine powders are specialty polyamide powders obtained from renewable resources. RILSAN® ESY range is designed for coating metal parts using the electrostatic spraying process. They provide superior protection against wear, impact, corrosion, chemicals as well as graffiti. Please consult Arkema literature for application method and recommendations. RILSAN® ESY ORANGE 7705 provides good electrical insulation, even at low thickness. It can be used in electrical applications such as busbar coatings.

| PROPERTIES                              | VALUE             | UNIT              | TEST STANDARD |
|---|-------------------|-------------------|---------------|
| <b>THERMAL PROPERTIES</b>               |                   |                   |               |
| Vicat Softening Temperature, 50°C/h 50N | 181               | °C                | ISO 306       |
|   | 358               | °F                |               |
| <b>ELECTRICAL PROPERTIES</b>            |                   |                   |               |
| Dielectric Constant, 1 kHz              | 3.7               | -                 | ASTM D150     |
| Dissipation Factor, 100 kHz             | ≤0.01             | -                 | ASTM D150     |
| Surface Resistivity, 73 °F              | 2.4E14            | Ohm per square    | ASTM D257     |
| Dielectric (Electric) Strength          | 56                | kV/mm             | IEC 60243-1   |
|   | 1420              | kV/in             |               |
| Comparative Tracking Index              | 600               | -                 | IEC 60112     |
| <b>POWDER PROPERTIES</b>                |                   |                   |               |
| Color                                   | Orange            | -                 | -             |
| Particle Size Distribution, ≤ 20µm      | 20                | %                 | ISO 13320     |
| Particle Size Distribution, ≥ 100µm     | 1                 | %                 | ISO 13320     |
| Particle Size Distribution, Median Size | 30                | µm                | ISO 13320     |
|   | 0.00118           | in                |               |
| Melting Temperature                     | 183 - 188         | °C                | ISO 1218      |
|   | 361 - 370         | °F                |               |
| Vicat Point                             | 181               | °C                | ISO 306       |
|   | 358               | °F                |               |
| Non Tapped Density                      | 0.44              | -                 | ISO 1068      |
| Tapped Density                          | 0.62              | -                 | ISO 1068      |
| <b>POWDER COATING PROPERTIES</b>        |                   |                   |               |
| Recommended Coating Thickness           | 125 - 175         | µm                | -             |
|   | 0.00492 - 0.00689 | in                |               |
| Covering Efficiency , 100µm             | 0.12              | kg/m <sup>2</sup> | -             |
| Specific Gravity of Coating, 20°C       | 1.25              | -                 | ISO 1183      |
| Persoz Hardness                         | 270               | -                 | ISO 1522      |

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|  |                                |       |             |
|--|--------------------------------|-------|-------------|
| Pencil Hardness  | B                              | -     | ECCA T4     |
| Shore D Hardness   | 71                             | -     | ISO 868     |
| Water Absorption, 24h  | ≤1                             | %     | ISO 62-1    |
| Abrasion Resistance, Wheel CS 17, load 1 kg, 1000 cycles               | 25                             | mg    | ISO 9352    |
| Dielectric Strength  | 50                             | kV/mm | IEC 60243-1 |
|  | 1270                           | V/mil |             |
| Dissipation Factor, 25 °C, 1MHz  | 0.01                           | -     | ASTM D150   |
| Dielectric Constant  | 3.7                            | -     | ASTM D150   |
| Surface Resistivity  | 2.4E14                         | W     | ASTM D257   |
| Fire Resistance on coated panel  | V-0                            | -     | UL 94       |
| Salt spray test according to surface preparation recommended by ARKEMA | Good adhesion after 2000 hours | -     | ISO 9227    |

### MAIN APPLICATIONS

- Metal Coating
- General Purpose
- Electrical applications - Busbars

### PACKAGING

This grade is delivered in 20kg bag.

### SHELF LIFE

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

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| <h3>PROCESSING</h3> <p>Coating, Electrostatic Spray</p>  |  |
| <h3>DELIVERY FORM</h3> <p>Powder</p>   |  |
| <h3>REGIONAL AVAILABILITY</h3> <p>North America, Europe, Asia Pacific, South and Central America, Near East/Africa</p> |  |
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