

TECHNICAL DATA SHEET

RILSAN® PA11 ESY ORANGE 7705

POLYAMIDE 11 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.

TYPE

PA11

MAIN APPLICATIONS

- Powder Coating - Electrical Application

DELIVERY FORM

- Powder

TRANSFORMATION PROCESSES

- Electrostatic spraying

ADDITIVES

- Heat Stabilized

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Hardness, Shore D, 23°C (73°F)	- / 71		ISO 868
Hardness, Persoz, 23°C (73°F)	- / 270		ISO 1522
Taber abrasion, Wheel CS 17, load 1 kg, 1000 cycles	- / 25	mg	ISO 9352

*DRY: Dry As Molded (DAM) if pellet / Dry if powder.
COND: Conditionned.

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Vicat softening temperature, 50N at 50°C/h	181	°C	ISO 306
Melting temperature, 10°C/min	183-188	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Dielectric constant, 23°C (73°F)	- / 3.7		
Surface resistivity, 23°C (73°F)	- / 2.4E+14	Ohm/sq	IEC 62631-3-2
Comparative tracking index, 23°C (73°F)	- / 600		IEC 60112

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OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Covering efficiency (100 µm)	0.12	kg/m ²	Internal Arkema
Water absorption, 24h	≤ 1	%	ISO 62
Median particles (D50)	30	µm	ISO 13320
Approximate RAL number	2003		
Salt spray test	Good adhesion after 2000 hours		ISO 9227
Specific gravity of coating, 20°C (68°F)	1.25	g/cm ³	ISO 1183-1
Particle Size Distribution (PSD) (Fine particles < 20 µm)	20	%	ISO 13320
Particle Size Distribution (PSD) (Coarse particles > 100 µm)	1	%	ISO 13320
Apparent density, Non compacted	0.44		ISO 1068
Apparent density, Compacted	0.62		ISO 1068

PACKAGING

Available packaging:

- 20 kg / 44 lb bags

SHELF LIFE

Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

SPECIAL CHARACTERISTICS

- Bio-based