

TECHNICAL DATA SHEET RILSAN® KNO

POLYAMIDE 11 PELLET

RILSAN® KNO is a polyamide 11 resin. It is produced from a renewable & sustainable source (castor oil). This natural grade is specially designed for injection molding.

DESIGNATION

PA11

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Shrinkage, Parallel (t+24h)	1.1 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.1 %	ISO 294-4

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Hardness, Shore D, 15 s	- / 73	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	No Break / -	ISO 179 1eU
Nominal strain at break, 23°C (73°F), 50 mm/min	- / > 50 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 4 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 37 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	- / 1250 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 11 kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 13 kJ/m ²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1110 MPa	ISO 178

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

속성	값	테스트 표준
Melting temperature, 10°C/min	189 °C	ISO 11357-1/-3

OTHER PROPERTIES

속성	값	테스트 표준
Bio-based carbon content, Measured	98 %	ASTM D6866
Specific gravity, 23°C (73°F)	1.03 g/cm ³	ISO 1183-1

PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 26 kg / 55 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.

PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 250°C / 270°C / 290°C (480°F / 520°F / 555°F)
- Typical mold temperature - Injection molding: 40-90°C (105-195°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Bio-based

Headquarter: Arkema France
420, rue d'Estienne d'Orves
92705 Colombes Cedex – France
T +33 (0)1 49 00 80 80