

TECHNICAL DATA SHEET

RILSAN® BESN BLACK TL

POLYAMIDE 11 PELLET

RILSAN® BESN BLACK TL is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This grade is designed for tube extrusion.

Designation : ISO 16396 - PA11, EG1HL, C22-010

DESIGNATION

PA11

MAIN APPLICATIONS

- Hoses & Tubes
- Industry - Distribution
- Auto - Gasoline Lines
- Auto - Others Extrusion
- Auto - Metal Tube Coating

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Sheet Extrusion
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Charpy unnotched impact strength, 23°C (73°F)	- / 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	- / 5 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	41 / 41 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	1420 / 1420 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 10 kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 12 kJ/m ²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1280 MPa	ISO 178

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

THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melting temperature, 10°C/min	186 °C	ISO 11357-1/-3

OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Water absorption, 23°C (73°F), immersion, equilibrium	1.9 %	ISO 62
Specific gravity, 23°C (73°F)	1.02 g/cm ³	ISO 1183-1

RILSAN® BESN BLACK TL

PACKAGING

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

- 20 kg / 44 lb bags
- 25 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: 230°C / 250°C / 270°C (445°F / 480°F / 520°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Bio-based
- Low oligomers

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