RILSAN®

TECHNICAL DATA SHEET

RILSAN® BESN BLACK P024 TL

POLYAMIDE 11 PELLET

RILSAN® BESN BLACK P024 CTL is a polyamide 11 extrusion grade produced from a renewable & sustainable source (castor oil). This impact-modified grade is specially designed for low extractible mono or multi-layer automotive fuel line applications.

Designation : ISO 16396 - PA 11-I, EG1HL, C18-010

DESIGNATION

PA11-I

MAIN APPLICATIONS

- Auto - Water Cooling Circuit
- Auto - In Tank & Fuel Venting Lines
- Auto - Gasoline Lines

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Tensile modulus, 23°C (73°F), 1 mm/min	1250 / 1190 MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	38 / 35 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	5 / 6 %	ISO 527-1/-2
Stress at 50% strain, 23°C (73°F), 50 mm/min	35 / 35 MPa	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	35 / 35 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 50 / > 50 %	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	1150 / 1070 MPa	ISO 178
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 / No break	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	80 / 81 kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	21 / 21 kJ/m2	ISO 179 1eA

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

THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melting temperature, 10°C/min	182 °C	ISO 11357-1/-3

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OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Specific gravity, 23°C (73°F)	1.02 g/cm³	ISO 1183-1

PACKAGING

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