

TECHNICAL DATA SHEET

RILSAN® BESN BLACK P123 TL

POLYAMIDE 11 PELLET

RILSAN® BESN BLACK P123 TL is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This impact-modified grade is designed for tube extrusion and has improved hydrolysis resistance. It is a market reference to produce automotive cooling & selective catalyst reduction (SCR) lines.

Designation : ISO 16396 - PA 11-I, EG1HL, C18-007

TYPE

PA11-I

MAIN APPLICATIONS

- Auto Battery Cooling
- Auto Enging Cooling
- Auto - SCR Lines & Tanks
- Heavy Truck H2 & Gas Lines And Tanks
- Heavy Truck - Air Brake Lines

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Yield stress, 23°C (73°F), 50 mm/min	23 / 23	MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	25 / 25	%	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 50 / > 50	%	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 100	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 25	kJ/m2	ISO 179 1eA

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

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	189	°C	ISO 11357-1/-3

OTHER PROPERTIES

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

PACKAGING

Available packaging:

- 25 kg / 55 lb bags

RILSAN® BESN BLACK P123 TL

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