

TECHNICAL DATA SHEET

RILSAN® BSR 30

POLYAMIDE 11 PELLET

RILSAN® BSR 30 is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This black reinforced grade is designed for injection molding and is used to produce automotive fittings or quick connectors, the incorporation of carbon fiber leading to a very rigid and tough product with electrostatic discharge (ESD) performance.

Designation : ISO 16396 - PA11, CF30, M1G1HLR, C11-140

TYPE

PA11-CF30

MAIN APPLICATIONS

- Winter Sports - Ski Boots
- Footwear - Outsole/Components

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized
- Light Stabilized
- Release agent

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	12	cm ³ /10min	ISO 1133
Shrinkage, Parallel (t+24h)	0.03	%	ISO 294-4
Shrinkage, Normal (t+24h)	0.6	%	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Flexural modulus, 23°C (73°F)	- / 11100	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	- / 16300	MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 20	kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 12	kJ/m ²	ISO 179 1eA

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

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	188	°C	ISO 11357-1/-3

RILSAN® BSR 30

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Bio-based carbon content, Measured	62	%	ASTM D6866
Specific gravity, 23°C (73°F)	1.15	g/cm³	ISO 1183-1

PACKAGING

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: 260°C / 275°C / 290°C (500°F / 525°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
- Electrostatic discharge (ESD)
- Low oligomers