

TECHNICAL DATA SHEET

RILSAN® BSR 30 BLACK R30 TLD

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(R30)

MAIN APPLICATIONS

- Equipment

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized
- Light Stabilized
- Release agent

RHEOLOGICAL PROPERTIES

特性	价值	UNIT	测试标准
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	5	cm³/10min	ISO 1133
Shrinkage, Parallel (t+24h)	0.05	%	ISO 294-4
Shrinkage, Normal (t+24h)	0.43	%	ISO 294-4

MECHANICAL PROPERTIES

特性	DRY / COND VALUE*	UNIT	测试标准
Flexural modulus, 23°C (73°F)	- / 13000	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	18500 / 18000	MPa	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	184 / 180	MPa	ISO 527-1/-2
Strain at break, 23°C (73°F), 50 mm/min	4 / 4	%	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 19	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 12	kJ/m2	ISO 179 1eA
Charpy unnotched impact strength, 23°C (73°F)	85 / 87	kJ/m2	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	87 / 84	kJ/m2	ISO 179 1eU
(H18/1000g/1000cycles)	20 / -	mg	ISO 9352
Hardness, Shore D, Instantaneous	/ 83		ISO 868
Hardness, Shore D, 15 s	/ 80		ISO 868

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

THERMAL PROPERTIES

特性	价值	UNIT	测试标准
Melting temperature, 10°C/min	184	°C	ISO 11357-1/-3
Heat deflection temperature, 1.8 MPa	178	°C	ISO 75-1/-2

OTHER PROPERTIES

特性	价值	UNIT	测试标准
Specific gravity, 23°C (73°F)	1.17	g/cm³	ISO 1183-1
Water absorption, 23°C(73°F), immersion, equilibrium	1.44	%	ISO 62
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.52	%	ISO 62
Bio-based carbon content, Measured	63	%	

包装

Available packaging:
• 25 公斤 / 55 磅 袋

保质期

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:

- 典型熔融温度 (最小/推荐/最大) ——注塑成型: 240°C / 260°C / 280°C (465°F / 500°F / 535°F)
- 典型模具温度——注塑成型: 30-80°C (85-175°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Bio-based

REGIONAL AVAILABILITY

Asia Pacific, Europe, Northern America