

TECHNICAL DATA SHEET

RILSAN® BZM 30 BLACK TL

POLYAMIDE 11 PELLET

RILSAN® BZM 30 BLACK TL is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This glass fiber reinforced grade is designed for injection molding and is a market reference to produce air brake or automotive fittings & quick connectors.

Designation : ISO 16396 - PA11, GF30, M1G1HLR, C18-070

TYPE

PA11-GF30

MAIN APPLICATIONS

- Industry - Others
- Industry - Distribution
- Auto - Fluid Connectors
- Heavy Truck - Air Brake Connectors

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized
- Light Stabilized

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Shrinkage, Parallel (t+24h)	0.3	%	ISO 294-4
Shrinkage, Normal (t+24h)	0.7	%	ISO 294-4
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	7	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Tensile modulus, 23°C (73°F), 1 mm/min	6300 / 6300	MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	6 / 7.5	%	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 5640	MPa	ISO 178
Charpy unnotched impact strength, 23°C (73°F)	- / 74	kJ/m2	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	- / 83	kJ/m2	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	- / 20	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 11	kJ/m2	ISO 179 1eA
Hardness, Shore D, 15 s	- / 74		ISO 868

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

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THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	189	°C	ISO 11357-1/-3
Yellow card available	YES		
Burning behavior, minimum thickness 1.5 mm	HB		IEC 60695-11-10
Burning behavior, minimum thickness 3.0 mm	HB		IEC 60695-11-10
Burning behavior, minimum thickness 6.0 mm	HB		IEC 60695-11-10

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Specific gravity, 23°C (73°F)	1.25	g/cm ³	ISO 1183-1
Water absorption, 23°C (73°F), immersion, equilibrium	1.3	%	ISO 62

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: 250°C / 270°C / 290°C (480°F / 520°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
- Low oligomers