

TECHNICAL DATA SHEET

RILSAN® BZM 7 O TL

POLYAMIDE 11 PELLET

RILSAN® BZM 7 O TL is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This natural glass fiber reinforced grade is designed for injection molding and is used in sport & consumer applications.

Designation : ISO 16396 - PA11, GF7, M1G1HLR, C18-030

TYPE

PA11-GF7

MAIN APPLICATIONS

- Footwear - Outsole/Components
- Outdoor - Equipment - Growth
- Outdoor - Equipment/Bicycle/Racket
- Other Sport Equipment
- Industry - Distribution
- Auto - Fluid Connectors

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized
- Light Stabilized

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Shrinkage, Parallel (t+24h)	1.0	%	ISO 294-4
Shrinkage, Normal (t+24h)	0.8	%	ISO 294-4
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	20	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Flexural modulus, 23°C (73°F)	- / 1500	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	1860 / 1860	MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 48	MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 7	%	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	- / 31	%	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 22	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 12	kJ/m2	ISO 179 1eA
Hardness, Shore D, 15 s	- / 71		ISO 868

*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

RILSAN® BZM 7 0 TL

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Specific gravity, 23°C (73°F)	1.07	g/cm ³	ISO 1183-1
Bio-based carbon content, Measured	93	%	ASTM D6866

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

DIAGRAMS

