

TECHNICAL DATA SHEET RILSAN® BUM 30 O

POLYAMIDE 11 PELLET

RILSAN® BUM 30 O is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This natural reinforced grade is designed for injection molding, the incorporation of glass beads yielding a virtually isotropic reinforced product. It is approved for drinking water contact.

Designation : ISO 16396 - PA11, GB30, M1G1HLR, C18-020

DESIGNATION

PA11-GB30

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Shrinkage, Parallel (t+24h)	1.6 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.4 %	ISO 294-4
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	20 cm ³ /10min	ISO 1133

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Hardness, Shore D, 15 s	- / 71	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	- / 96 kJ/m ²	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	- / 96 kJ/m ²	ISO 179 1eU
Tensile modulus, 23°C (73°F), 1 mm/min	1850 / 1850 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 6 kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 5 kJ/m ²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1600 MPa	ISO 178

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

속성	값	테스트 표준
Vicat softening temperature, 50N at 50°C/h	165 °C	ISO 306
Heat deflection temperature, 0.45 MPa	165 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	60 °C	ISO 75-1/-2
Melting temperature, 10°C/min	189 °C	ISO 11357-1/-3

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THERMAL PROPERTIES/ELECTRICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Surface resistivity, 23°C (73,4°F)	- / 1.0E+14 ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 1.0E+12 ohm/m	IEC 62631-3-1
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112
Dielectric stress, 23°C (73,4°F)	- / 40	IEC 60243-1

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

OTHER PROPERTIES

속성	값	테스트 표준
Water absorption, 23°C (73°F), immersion, equilibrium	1.3 %	ISO 62
Specific gravity, 23°C (73°F)	1.23 g/cm ³	ISO 1183-1

PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 26 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

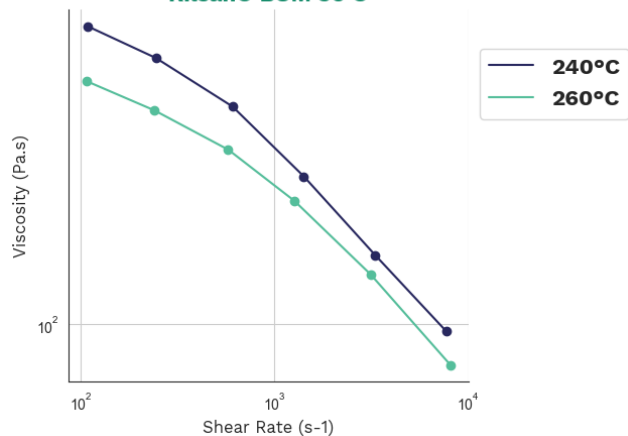
SPECIAL CHARACTERISTICS

- Bio-based
- Low oligomers

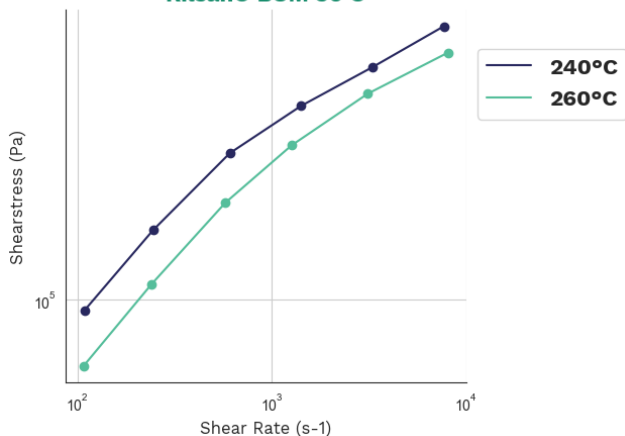
RILSAN® BUM 30 O

DIAGRAMS

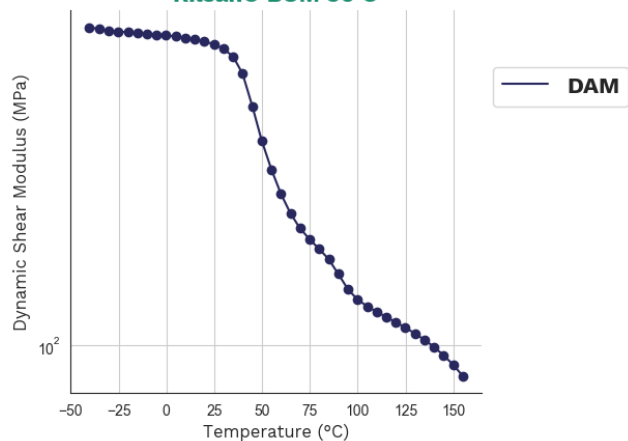
Viscosity-shear rate
Rilsan® BUM 30 O



Shearstress-shear rate
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Dynamic Shear modulus-temperature
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