

## 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

### MAIN APPLICATIONS

- Industry - Distribution
- Auto - Fluid Connectors

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

- Injection Molding

## RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
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 <sup>3</sup> /10min	ISO 1133

## MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Hardness, Shore D, 15 s	- / 71	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	- / 96 kJ/m <sup>2</sup>	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	- / 96 kJ/m <sup>2</sup>	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 <sup>2</sup>	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 5 kJ/m <sup>2</sup>	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1600 MPa	ISO 178

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

## THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
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

# RILSAN® BUM 30 O

## ELECTRICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
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

PROPERTIES	VALUE	TEST STANDARD
Water absorption, 23°C (73°F), immersion, equilibrium	1.3 %	ISO 62
Specific gravity, 23°C (73°F)	1.23 g/cm <sup>3</sup>	ISO 1183-1

## PACKAGING

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

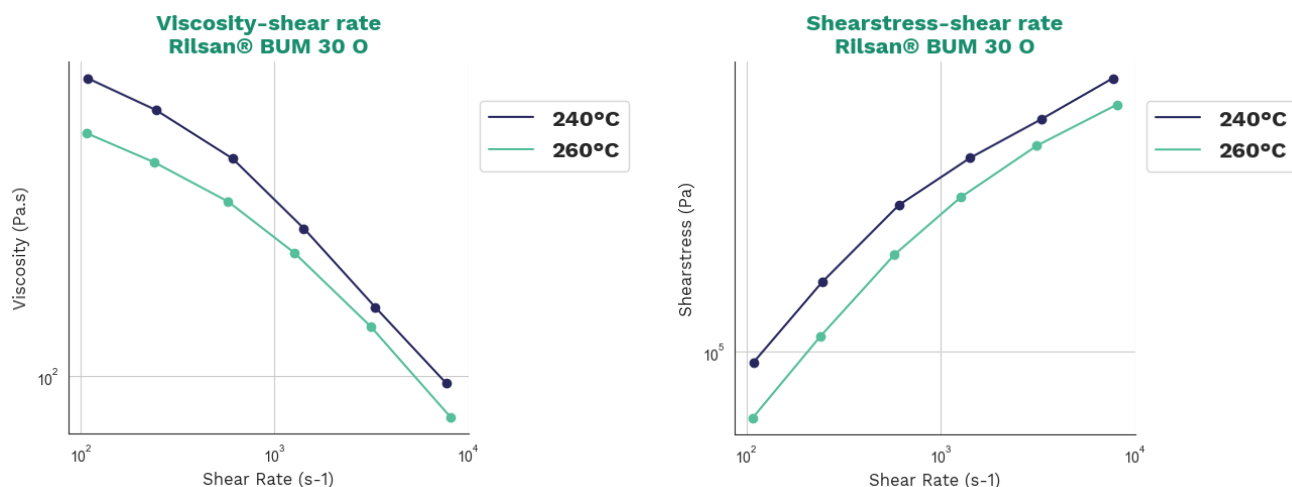
## PROCESSING CONDITIONS:

- 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

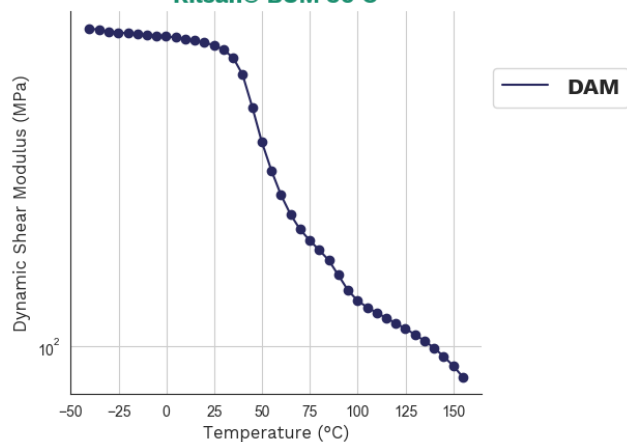
- Bio-based
- Low oligomers

## DIAGRAMS



# RILSAN® BUM 30 O

Dynamic Shear modulus-temperature  
Rilsan® BUM 30 O



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