

## TECHNICAL DATA SHEET

# RILSAN® BZM 30 O T3L

## POLYAMIDE 11 PELLET

RILSAN® BZM 30 O T3L 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. It has a superior color stability, which makes particularly adapted to consumer applications.

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

### TYPE

PA11-GF30

### MAIN APPLICATIONS

- Footwear - Outsole/Components
- Footwear - Insole/Midsole/Foam
- 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)                               | 0.2   | %         | 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) | 4.9   | 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  |
| Charpy unnotched impact strength, 23°C (73°F)   | - / 91            | kJ/m2 | ISO 179 1eU   |
| Charpy unnotched impact strength, -30°C (-22°F) | - / 98            | kJ/m2 | ISO 179 1eU   |
| Charpy notched impact strength, 23°C (73°F)     | - / 26            | kJ/m2 | ISO 179 1eA   |
| Charpy notched impact strength, -30°C (-22°F)   | - / 18            | kJ/m2 | ISO 179 1eA   |
| Hardness, Shore D, 15 s                         | - / 78            |       | 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 | 188   | °C   | ISO 11357-1/-3 |

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## OTHER PROPERTIES

| PROPERTIES                                                 | VALUE | UNIT              | TEST STANDARD |
|------------------------------------------------------------|-------|-------------------|---------------|
| Specific gravity, 23°C (73°F)                              | 1.24  | g/cm <sup>3</sup> | ISO 1183-1    |
| Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR | 0.5   | %                 | ISO 62        |
| Water absorption, 23°C (73°F), immersion, equilibrium      | 1.4   | %                 | 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.

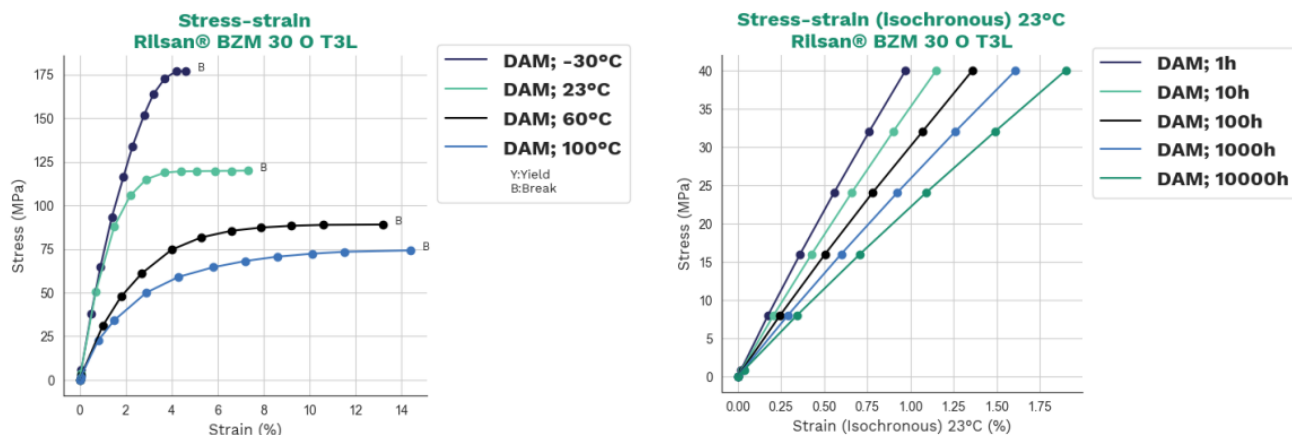
## PROCESSING CONDITIONS:

- 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

## DIAGRAMS



# RILSAN® BZM 30 O T3L

