

TECHNICAL DATA SHEET

RILSAN® BESN G9 TL

POLYAMIDE 11 PELLET

RILSAN® BESN G9 TL is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This black grade with improved friction properties is designed for tube extrusion.

Designation : ISO 16396 - PA11, CDx, EG1HLS, C22-020

DESIGNATION

PA11

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized
- Lubricants

RHEOLOGICAL PROPERTIES

| 속성 | 값 | 테스트 표준 |
|---|--------------------------|----------|
| Melt volume flow rate (MVR), 235°C / 2.16 kg (455°F / 4.4 lb) | 1 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) | No Break / No Break | ISO 179 1eU |
| Charpy unnotched impact strength, -30°C (-22°F) | - / No Break | ISO 179 1eU |
| Nominal strain at break, 23°C (73°F), 50 mm/min | - / > 50 % | ISO 527-1/-2 |
| Yield strain, 23°C (73°F), 50 mm/min | - / 5 % | ISO 527-1/-2 |
| Yield stress, 23°C (73°F), 50 mm/min | 46 / 46 MPa | ISO 527-1/-2 |
| Tensile modulus, 23°C (73°F), 1 mm/min | 2130 / 2130 MPa | ISO 527-1/-2 |
| Charpy notched impact strength, 23°C (73°F) | - / 7 kJ/m ² | ISO 179 1eA |
| Charpy notched impact strength, -30°C (-22°F) | - / 6 kJ/m ² | ISO 179 1eA |
| Flexural modulus, 23°C (73°F) | - / 1790 MPa | ISO 178 |

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

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| 속성 | 값 | 테스트 표준 |
|--|--------|----------------|
| Vicat softening temperature, 50N at 50°C/h | 162 °C | ISO 306 |
| Heat deflection temperature, 0.45 MPa | 168 °C | ISO 75-1/-2 |
| Heat deflection temperature, 1.8 MPa | 56 °C | ISO 75-1/-2 |
| Melting temperature, 10°C/min | 186 °C | ISO 11357-1/-3 |

THERMAL PROPERTIES/ELECTRICAL PROPERTIES

| 속성 | DRY / COND VALUE* | 테스트 표준 |
|--|--------------------|---------------|
| Surface resistivity, 23°C (73,4°F) | - / 6.0E+13 ohm/sq | IEC 62631-3-2 |
| Volumic (transversal) resistivity, 23°C (73,4°F) | - / 5.0E+11 ohm/m | IEC 62631-3-1 |
| Comparative tracking index, 23°C (73,4°F) | - / 600 | IEC 60112 |
| Dielectric stress, 23°C (73,4°F) | - / 55 | IEC 60243-1 |

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COND: Conditionned.

OTHER PROPERTIES

| 속성 | 값 | 테스트 표준 |
|---|------------------------|------------|
| Water absorption, 23°C (73°F), immersion, equilibrium | 1.7 % | ISO 62 |
| Specific gravity, 23°C (73°F) | 1.09 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:

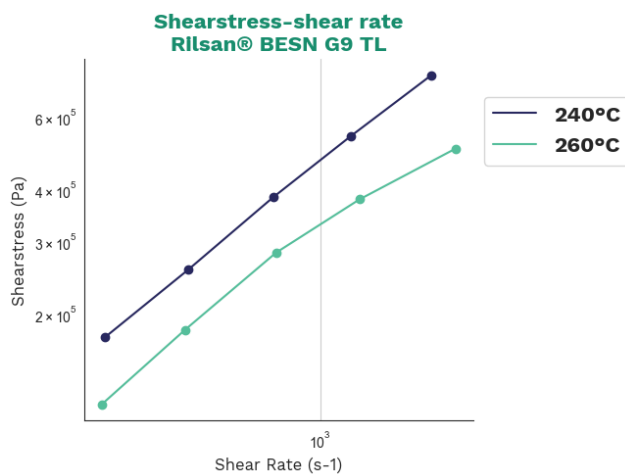
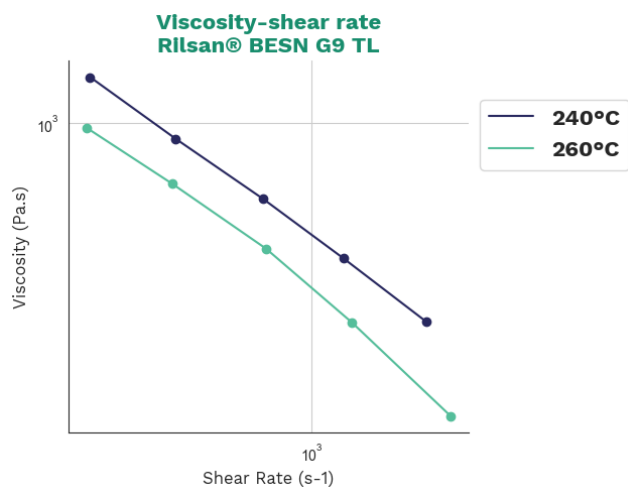
- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 230°C / 250°C / 270°C (445°F / 480°F / 520°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Bio-based
- Low oligomers

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DIAGRAMS



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