

TECHNICAL DATA SHEET

RILSAN® BMNO P20 TLD

POLYAMIDE 11 PELLET

RILSAN® BMNO P20 TLD is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This natural plasticized grade is designed for injection molding

Designation : ISO 16396 - PA11-P, M1G1HLR, C12-005

DESIGNATION

PA11-P

MAIN APPLICATIONS

- Outdoor - Equipment/Bicycle/Racket
- Accessories
- Industry - Distribution

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized
- Light Stabilized
- Plasticizer
- Release agent

RHEOLOGICAL PROPERTIES

プロパティ	価値	テスト基準
Shrinkage, Parallel (t+24h)	1.3 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.4 %	ISO 294-4
Melt volume flow rate (MVR), 235°C / 2.16 kg (455°F / 4.4 lb)	32 cm ³ /10min	ISO 1133

MECHANICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Hardness, Shore D, 15 s	- / 61	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	- / 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	- / 30 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 32 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	545 / - MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 7 kJ/m ²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 420 MPa	ISO 178

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

THERMAL PROPERTIES

プロパティ	価値	テスト基準
Vicat softening temperature, 50N at 50°C/h	145 °C	ISO 306
Heat deflection temperature, 0.45 MPa	135 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	47 °C	ISO 75-1/-2
Melting temperature, 10°C/min	186 °C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Surface resistivity, 23°C (73,4°F)	- / 2.0E+12 ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 1.0E+10 ohm/m	IEC 62631-3-1
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112
Dielectric stress, 23°C (73,4°F)	- / 26	IEC 60243-1
Relative permittivity, 100Hz	- / 7	IEC 60250
Relative permittivity, 1Mhz	- / 3	IEC 60250
Dissipation factor, 100Hz	- / 1900	IEC 60250
Dissipation factor, 1Mhz	- / 1900	IEC 60250

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OTHER PROPERTIES

プロパティ	価値	テスト基準
Water absorption, 23°C(73°F), immersion, equilibrium	1.8 %	ISO 62
Specific gravity, 23°C (73°F)	1.05 g/cm ³	ISO 1183-1

包装

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

- 25 kg / 55 lb bags

賞味期限

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:

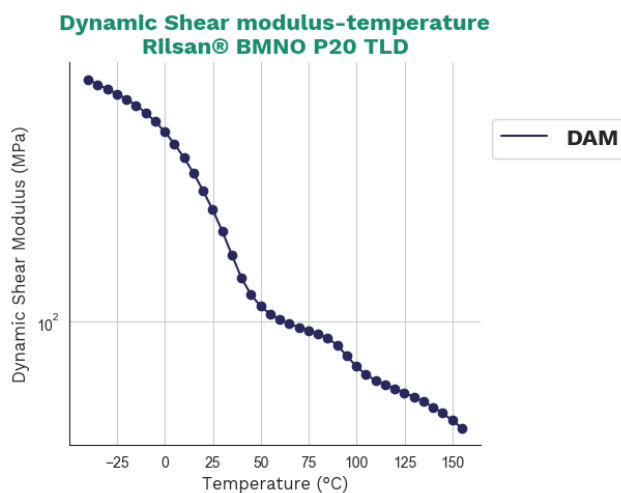
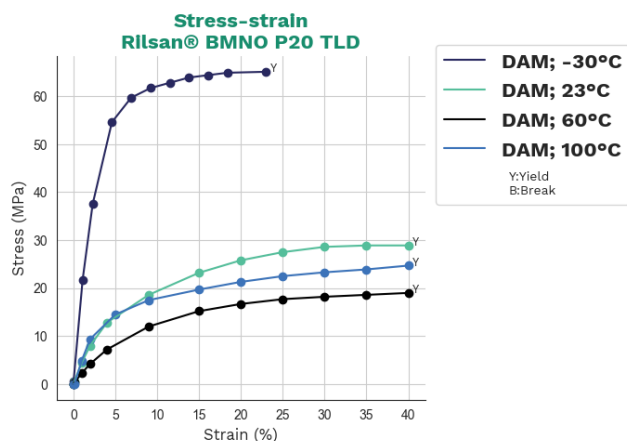
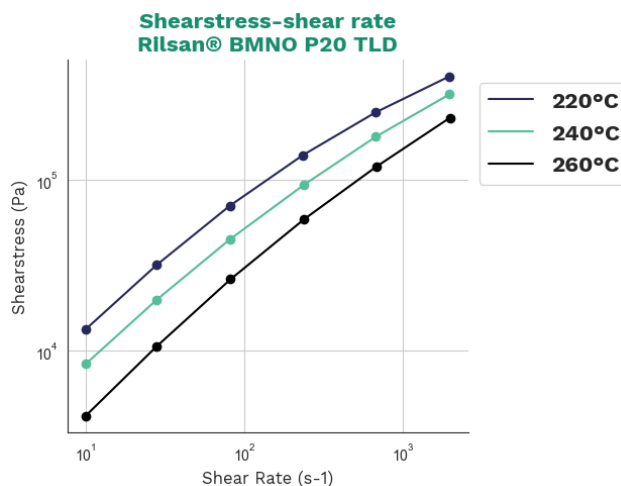
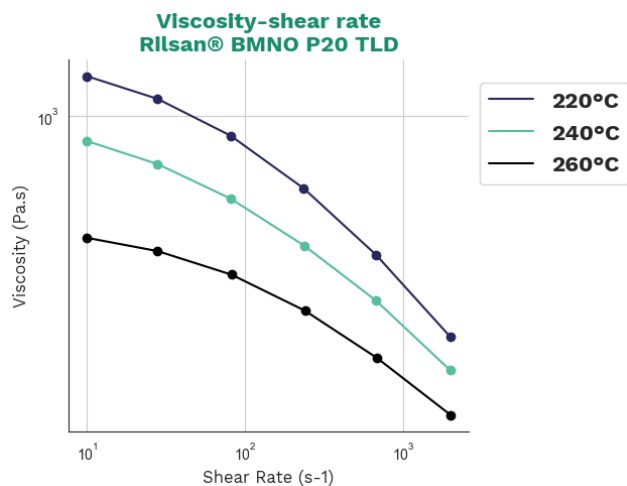
- 典型的な溶融温度 (最小 / 推奨 / 最大) - 射出成形: 230°C / 250°C / 270°C (445°F / 480°F / 520°F)
- 典型的な金型温度 - 射出成形: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

RILSAN® BMNO P20 TLD

SPECIAL CHARACTERISTICS

- Bio-based
- Low oligomers

DIAGRAMS



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