

TECHNICAL DATA SHEET

RILSAN® CLEAR G820 RNEW®

AMORPHOUS POLYAMIDE PELLET

RILSAN® CLEAR G820 RNEW® is a high performance transparent polyamide with outstanding chemical resistance and stress cracking resistance. It is partially produced from a renewable and sustainable source (castor oil). This grade has been designed for injection molding applications.

Designation : ISO 16396 - PA, M1G1HT, C14-020

DESIGNATION

PA*

MAIN APPLICATIONS

- Frames
- Accessories
- Laptop / Desktop
- Smartphone / Tablet
- Others
- Home Appliance
- Industry - Others
- Industry - Distribution

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized

RHEOLOGICAL PROPERTIES

プロパティ	価値	テスト基準
Shrinkage, Parallel (t+24h)	0.6 %	ISO 294-4
Shrinkage, Normal (t+24h)	0.7 %	ISO 294-4
Melt volume flow rate (MVR), 275°C / 2.16 kg (527°F / 4.4 lb)	8 cm³/10min	ISO 1133

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MECHANICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Hardness, Shore D, 15 s	- / 76	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	- / 7 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 66 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	- / 1670 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 6 kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 9 kJ/m2	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1585 MPa	ISO 178

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

THERMAL PROPERTIES

プロパティ	価値	テスト基準
Glass transition temperature, 10°C/min	101 °C	ISO 11357-1/-2
Heat deflection temperature, 0.45 MPa	85 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	73 °C	ISO 75-1/-2

OTHER PROPERTIES

プロパティ	価値	テスト基準
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	1.2 %	ISO 62
Bio-based carbon content, Measured	62 %	ASTM D6866
Water absorption, 23°C(73°F), immersion, equilibrium	2.5 %	ISO 62
Specific gravity, 23°C (73°F)	1 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: 260°C / 280°C / 300°C (500°F / 535°F / 570°F)
- 典型的な金型温度 - 射出成形: 20-80°C (70-175°F)
- Drying time and temperature: 80°C (175°F) / 4-6 hours

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SPECIAL CHARACTERISTICS

- Bio-based
- Transparent

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