

TECHNICAL DATA SHEET

RILSAN® CLEAR G850 RNEW®

AMORPHOUS POLYAMIDE PELLET

RILSAN® CLEAR G850 RNEW® is a high performance transparent amorphous polyamide. It is partially produced from a renewable and sustainable source (castor oil). This grade has been specially designed for injection molding applications, ideally suited for optic as high end eyewear frames.

Designation : ISO 16396 - PA, G1HT, C14-020

TYPE

PA*

MAIN APPLICATIONS

- Footwear - Outsole/Components
- Optics And Oth. Cons. Goods - Others
- Frames
- Accessories
- Laptop / Desktop
- Smartphone / Tablet
- Home Appliance

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized

RHEOLOGICAL PROPERTIES

特性	价值	UNIT	测试标准
Shrinkage, Parallel (t+24h)	0.9	%	ISO 294-4
Shrinkage, Normal (t+24h)	0.9	%	ISO 294-4
Melt volume flow rate (MVR), 275°C / 2.16 kg (527°F / 4.4 lb)	4.4	cm ³ /10min	ISO 1133

MECHANICAL PROPERTIES

特性	DRY / COND VALUE*	UNIT	测试标准
Flexural modulus, 23°C (73°F)	- / 1600	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	1680 / 1640	MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	8.2 / 8.6	%	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	64 / 58	MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 50 / > 50	%	ISO 527-1/-2
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 / No Break		ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	- / 8.5	kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	8.6 / 11.4	kJ/m ²	ISO 179 1eA

RILSAN® CLEAR G850 RNEW®

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

THERMAL PROPERTIES

特性	价值	UNIT	测试标准
Glass transition temperature, 10°C/min	145	°C	ISO 11357-1/-2
Heat deflection temperature, 0.45 MPa	135	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	120	°C	ISO 75-1/-2
, minimum thickness 0.8 mm	HB		IEC 60695-11-10
, minimum thickness 1.5 mm	V-2		IEC 60695-11-10
Yellow card available	YES		

OTHER PROPERTIES

特性	价值	UNIT	测试标准
Bio-based carbon content, Measured	45	%	
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	1.7	%	ISO 62
Water absorption, 23°C(73°F), immersion, equilibrium	4	%	ISO 62
Specific gravity, 23°C (73°F)	1.01	g/cm ³	ISO 1183-1

包装

Available packaging:

- 25 公斤 / 55 磅 袋

保质期

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:

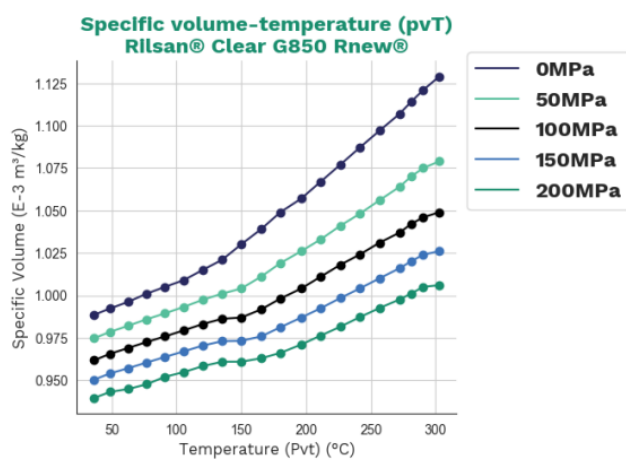
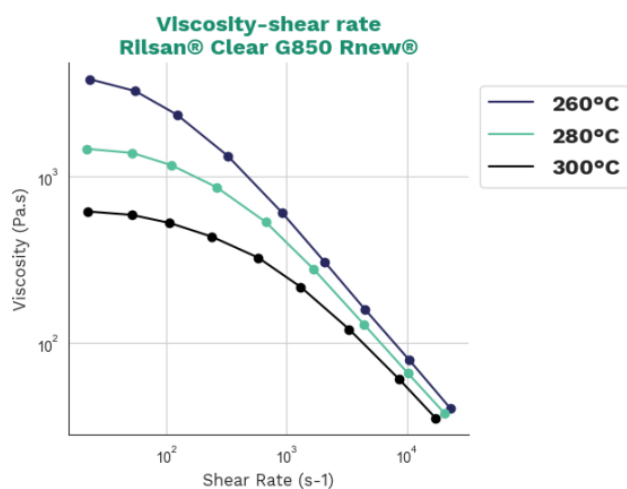
- 典型熔融温度 (最小/推荐/最大) ——注塑成型: 260°C / 280°C / 300°C (500°F / 535°F / 570°F)
- 典型模具温度——注塑成型: 20-80°C (70-175°F)
- Drying time and temperature: 90°C (195°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Bio-based
- Transparent

RILSAN® CLEAR G850 RNEW®

DIAGRAMS



Headquarter: Arkema France
51, Esplanade du Général de Gaulle
92800 Puteaux – France
T +33 (0)1 49 00 80 80

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790

[arkema.com](https://www.arkema.com)

ARKEMA