

RILSAN® CLEAR G 830 Rnew

Rilsan® Clear G 830 Rnew is a high performance transparent copolyamide, partially based on renewable resources. This grade has been specially designed for injection molding applications, ideally suited for optic as high end eyewear frames.

MAIN CHARACTERISTICS

Property	Typical Value	Unit	Test method
Renewable Carbon (calculation)	53-55	%	ASTM D6866
Density	1.01	g/cm ³	ISO 1183
Water Absorption at Equilibrium At 23°C and 50% R.H.	1.3	%	ISO 62
Water Absorption After 24 h at 23°C in water	3.3	%	
Heat Deflection Temperature Under 0.45 MPa	110	°C	ISO 75
Under 1.80 MPa	95	°C	
Glass Transition Temperature (Tg)	135	°C	ISO 11357
Transparency (560 nm, 2 mm)	91.5	%	ASTM D 1003-97
Shrinkage (after 24 h, 4 mm, mold at 40°C) //	0.46	%	Internal method
⊥	0.51	%	
Hardness (*) Instantaneous	83	Shore D	ISO 868
After 15 s	81	Shore D	
Tensile Test (*) Stress at Yield	55	MPa	
Strain at Yield	7	%	ISO 527
Stress at Break	60	MPa	
Strain at Break	> 150	%	
Tensile Modulus (*)	1690	MPa	ISO 527
Flexural Modulus (*)	1530	MPa	ISO 178
Charpy Impact (*) Unnotched 23°C	No break	kJ/m ²	
Unnotched -30°C	No break	kJ/m ²	ISO 179
V-notched 23°C	11	kJ/m ²	
V-notched -30°C	10	kJ/m ²	

(*) Samples conditioned 15 days at 23°C - 50 % R.H.

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MAIN APPLICATIONS

- Sun, optical, reading glass frames.
- Mobile phone covers.
- Headphone frames.

PROCESSING CONDITIONS

Conditions	Typical values
Injection Melt Temperature (Min / Recommended / Max)	250°C / 280°C / 300°C
Mold Temperature	20 – 80°C
Drying (only necessary for bags opened for more than two hours) Time Temperature	4 - 6 hours 90°C

PACKAGING

This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

SHELF LIFE

Two years from the date of delivery. For any use above this limit, please refer to our technical services.

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See Safety Data Sheet for Health & Safety Considerations.