

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 Under 1.80 MPa	110 95	°C °C	ISO 75
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 0.51	% %	Internal method
Hardness (*) Instantaneous After 15 s	83 81	Shore D Shore D	
Tensile Test (*) Stress at Yield Strain at Yield Stress at Break Strain at Break	55 7 60 > 150	MPa % MPa %	ISO 527
Tensile Modulus (*)	1690	MPa	
Flexural Modulus (*)	1530	MPa	ISO 178
Charpy Impact (*) Unnotched 23°C Unnotched -30°C V-notched 23°C V-notched -30°C	No break No break 11 10	kJ/m² kJ/m² kJ/m² kJ/m²	ISO 179

(*) 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.