

# RILSAN® CLEAR G 850 Rnew

Rilsan® Clear G 850 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.

Note that this document is a temporary technical data sheet.

## MAIN CHARACTERISTICS

Property	Typical Value	Unit	Test method
Renewable Carbon (calculation)	49-51	%	ASTM D6866
Density	1.01	g/cm <sup>3</sup>	ISO 1183
Glass Transition Temperature (T <sub>g</sub> )	150	°C	ISO 11357
Heat Deflection Temperature Under 0.45 MPa Under 1.80 MPa	135 120	°C °C	ISO 75
Transparency (560 nm, 2 mm)	91.70	%	ASTM D 1003-97
Refractive Index	1.511	-	ISO 489 (A)
Shrinkage (after 24 h, 2 mm, mold at 40°C) // ⊥	0.80 0.89	% %	Internal method
Hardness (*) Instantaneous After 15 s	80 78	Shore D Shore D	ISO 868
Tensile Test (*) Stress at Yield Strain at Yield Stress at Break Strain at Break	51 7.6 58 > 140	MPa % MPa %	ISO 527
Tensile Modulus (*)	1600	MPa	ISO 527
Flexural Modulus (*)	1330	MPa	ISO 527
Charpy Impact (*) Unnotched 23°C Unnotched -30°C V-notched 23°C	No break No break 11	kJ/m <sup>2</sup> kJ/m <sup>2</sup> kJ/m <sup>2</sup>	ISO 179

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

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## MAIN APPLICATIONS

- Sun, optical, reading glass frames.
- Covers of smart phone
- Watch covers
- Household appliance

## PROCESSING CONDITIONS

Conditions	Typical values
<b>Injection</b> Melt Temperature (Min / Recommended / Max)	250°C / 280°C / 300°C
<b>Mold</b> Temperature	20 – 80°C
<b>Drying (only necessary for bags opened for more than two hours)</b> 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.