Rilsan® Clear G850 Rnew® MED

PA* ARKEMA

Product Texts

PA,,GHT,C14-020

Rilsan® Clear G 850 Rnew® MED is a high performance transparent copolyamide having outstanding purity level, partially based on renewable resources. This grade offers highest quality and is specifically designed to meet the stringent requirements of the medical applications.

According to ASTM D6866, the biobased carbon content is measured at 45%.
Main applications:

- Dental accessories
- Breathing mask
- Medical perfusion tube accessories

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

Shelf Life:
Two years from the delivery. For any use above this limit, please refer to our technical services.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**4.4 / ***	cm³/10min	ISO 1133
Temperature	**275 / ***	°C	-
Load	**2.16 / ***	kg	-
[C] Molding shrinkage, parallel	**0.9 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.9 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**1680 / 1640**	MPa	ISO 527
[C] Yield stress	**64 / 58**	MPa	ISO 527
[C] Yield strain	**8.2 / 8.6**	%	ISO 527
[C] Nominal strain at break	**>50 / >50**	%	ISO 527
[C] Charpy notched impact strength, +23°C	**8.5 / 15**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**8.6 / 11.4**	kJ/m²	ISO 179/1eA
[C] Shore D hardness	**80 / ***	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Glass transition temperature, 10°C/min	**145 / ***	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**120 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**135 / ***	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**4 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.7 / ***	%	Sim. to ISO 62
[C] Density	**1010 / 1010**	kg/m³	ISO 1183
Biobased content	**45**	%	-

[C]: CAMPUS

Rilsan® Clear G850 Rnew® MED

PA* ARKEMA

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**90**	°C	-
Pre-drying - Time	**4 - 6**	h	-
Melt temperature	**250 - 300**	°C	-
Mold temperature	**20 - 80**	°C	-

Characteristics

Processing
Injection Molding, Film Extrusion

Delivery form
Pellets

Special Characteristics
Heat stabilized or stable to heat, Transparent

Certifications
Contains renewable resources

Applications
Medical

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 250°C / 280°C / 300°C
- Typical mold temperature : 20 - 80 °C
- Dyring time and temperature (only for bags opened for more than two hours): 4 - 6 hours at 90°C

Film extrusion

Extrusion Process conditions:

- Typical melt temperature (Min / Recommended / Max) : 250°C / 270°C / 290°C

- Dyring time and temperature (only for bags opened for more than two hours): 4 - 6 hours at 90°C