

RILSAN® CLEAR G 170 MED

Rilsan® Clear G 170 MED is a high performance transparent polyamide with outstanding thermal resistance. This grade offers the highest quality and is specifically designed to meet the stringent requirements of the medical applications. Upon request letters regarding USP Class VI compliance can be provided.

MAIN CHARACTERISTICS

Property	Typical Value	Unit	Test method
Density	1.05	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	3.2	%	
Glass Transition Temperature (Tg)	168	°C	ISO 11357
Heat Deflection Temperature Under 0.45 MPa	150	°C	ISO 75
Under 1.80 MPa	136	°C	
Transparency (560 nm, 2 mm)	90.8	%	ASTM D 1003-97
Shrinkage (after 24 h, 4 mm, mold at 40°C) //	0.69	%	Internal method
⊥	0.72	%	
Hardness (*) Instantaneous	84	Shore D	ISO 868
After 15 s	79	Shore D	
Tensile Test (*) Stress at Yield	74	MPa	
Strain at Yield	9	%	ISO 527
Stress at Break	58	MPa	
Strain at Break	> 100	%	
Tensile Modulus (*)	2020	MPa	ISO 527
Flexural Modulus (*)	1980	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	13	kJ/m ²	
V-notched -30°C	13	kJ/m ²	

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

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MAIN APPLICATIONS

- Medical perfusion tube accessories.
- Breathing mask.

PROCESSING CONDITIONS

Conditions	Typical values
Injection Melt Temperature (Min / Recommended / Max)	270°C / 290°C / 310°C
Extrusion Melt Temperature (Min / Recommended / Max)	270°C / 280°C / 290°C
Mold Temperature	40 – 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.