

RILSAN® CLEAR G170 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 applications:

- Medical perfusion tube accessorie.
- Breathing mask.

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

MAIN CHARACTERISTICS

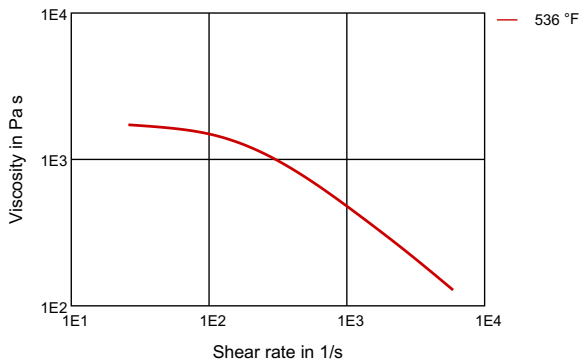
PROPERTIES	DRY / COND	UNIT	TEST STANDARD
Melt volume-flow rate, MVR	2 / *	cm ³ /10min	ISO 1133
Temperature	527 / *	°F	-
Load	4.76 / *	lb	-
Molding shrinkage, parallel	0.7 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
Tensile Modulus	305000 / 293000	psi	ISO 527-1/-2
Yield stress	11000 / 10700	psi	ISO 527-1/-2
Yield strain	8 / 9	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	ISO 527-1/-2
Charpy impact strength, +23°C	- / N	ftlb/in ²	ISO 179/1eU
Charpy impact strength, -30°C	N / N	ftlb/in ²	ISO 179/1eU
Charpy notched impact strength, +23°C	- / 6.18	ftlb/in ²	ISO 179/1eA
Charpy notched impact strength, -30°C	- / 6.18	ftlb/in ²	ISO 179/1eA
Glass transition temperature, 10°C/min	334 / *	°F	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	277 / *	°F	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	302 / *	°F	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	320 / *	°F	ISO 306
Coeff. of linear therm. expansion, parallel	70 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.0630 / *	in	-
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.0315 / *	in	-
Oxygen index	26 / *	%	ISO 4589-1/-2
Volume resistivity	- / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E12	Ohm	IEC 60093
Electric strength	- / 1270	kV/in	IEC 60243-1

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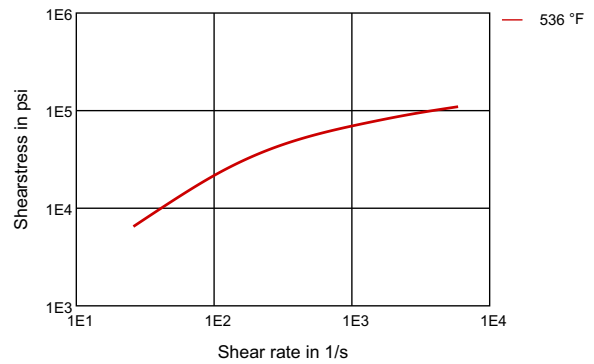
Comparative tracking index	* / 600	-	IEC 60112
Water absorption	3.8 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1.05 / 1.05	g/cm ³	ISO 1183
Luminous transmittance	91	%	ISO 13468-1, -2
Injection Molding, melt temperature	518	°F	ISO 294
Injection Molding, mold temperature	140	°F	ISO 10724
Injection Molding, pressure at hold	2760	psi	ISO 294
Shore D hardness, 15s	79 / *	-	ISO 7619-1

Diagrams

Viscosity-shear rate



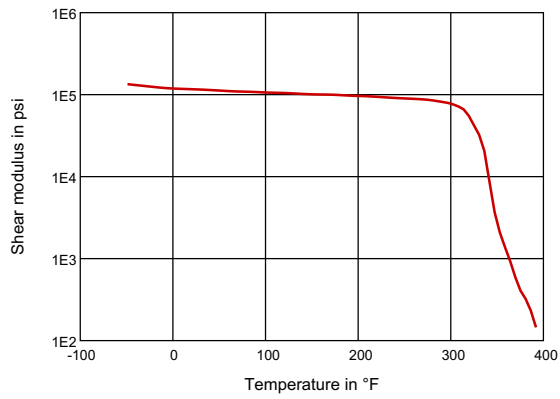
Shearstress-shear rate

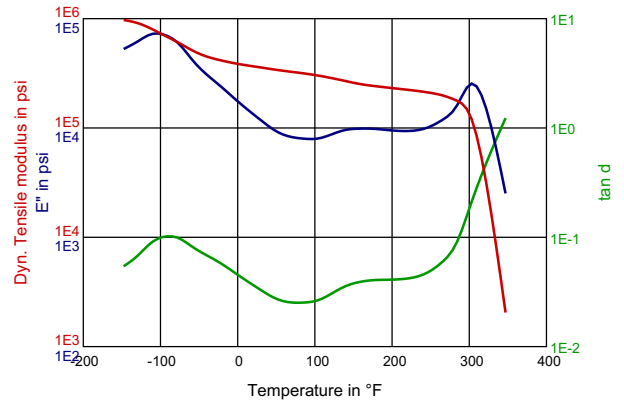


Dynamic Shear modulus-temperature

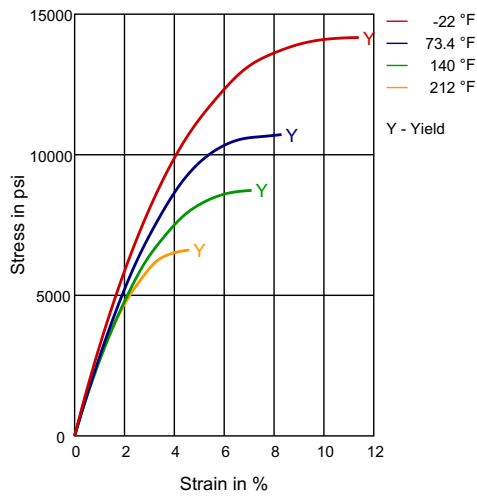
Dynamic Tensile modulus-temperature

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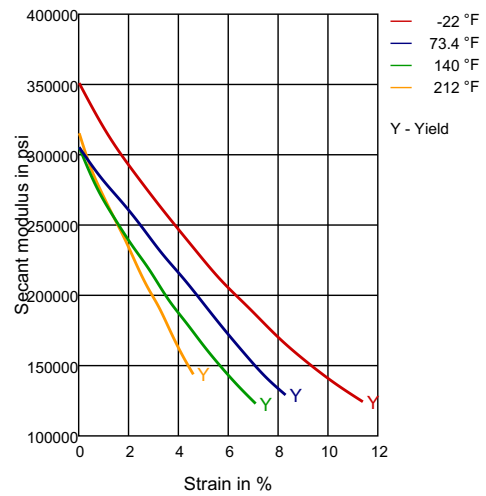




Stress-strain



Secant modulus-strain



Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 270°C / 280°C / 290°C
- Drying time and temperature (only for bags opened for more than two hours): 4 - 6 hours at 90°C

Processing

Injection Molding, Other Extrusion

Delivery form

Pellets

Special Characteristics

Transparent

Regional Availability

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

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