

## Manifattura Cattaneo RULONÂ® LR Polytetrafluoroethylene

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE

### Material Notes:

Manifattura Cattaneo products are available in semi-finished forms such as bars, profiles, sheets and plates. Information provided by Manifattura Cattaneo s.p.a.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Manifattura-Cattaneo-RULON-LR-Polytetrafluoroethylene.php](http://www.lookpolymers.com/polymer_Manifattura-Cattaneo-RULON-LR-Polytetrafluoroethylene.php)

Physical Properties	Metric	English	Comments
Density	2.25 g/cc	0.0813 lb/inÂ³	ASTM D792
Moisture Absorption at Equilibrium	0.00 % @Temperature 23.0 Â°C	0.00 % @Temperature 73.4 Â°F	50% RH; ASTM D570
Water Absorption at Saturation	0.015 %	0.015 %	ASTM D570
Deformation	3.0 % @Time 86400 sec, Pressure 100 MPa	3.0 % @Time 24.0 hour, Pressure 14500 psi	ASTM D621

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60 - 65	60 - 65	ASTM D 2240
Tensile Strength at Break	10.3 MPa	1490 psi	ASTM D638
Elongation at Break	150 %	150 %	ASTM D638
Compressive Yield Strength	3.60 MPa @Strain 1.00 %, Time 3.60e+6 sec	522 psi @Strain 1.00 %, Time 1000 hour	ASTM D695
Compressive Modulus	0.440 GPa	63.8 ksi	ASTM D695
Izod Impact, Notched (ISO)	320 kJ/mÂ²	152 ft-lb/inÂ²	ASTM D256
Coefficient of Friction, Dynamic	0.25	0.25	on polished steel; MPC Test
Coefficient of Friction, Static	0.15	0.15	on polished steel; MPC Test
K Factor (Wear Factor)	0.050	0.050	Âµm/s. PV = 0.1 MPa-m/s; max P = 6.9 MPa; MPC Test
Limiting Pressure Velocity	0.350 MPa-m/sec	9990 psi-ft/min	without lubrication; MPC Test

Thermal Properties	Metric	English	Comments
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Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	106 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	58.9 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	
	@Temperature 23.0 - 100 $\text{Å}^\circ\text{C}$	@Temperature 73.4 - 212 $\text{Å}^\circ\text{F}$	
CTE, linear, Transverse to Flow	92.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	51.1 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	
	@Temperature 23.0 $\text{Å}^\circ\text{C}$	@Temperature 73.4 $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.330 W/m-K	2.29 BTU-in/hr-ft $\text{Å}^2\cdot\text{Å}^\circ\text{F}$	ASTM D177
Maximum Service Temperature, Air	288 $\text{Å}^\circ\text{C}$	550 $\text{Å}^\circ\text{F}$	
Minimum Service Temperature, Air	-240 $\text{Å}^\circ\text{C}$	-400 $\text{Å}^\circ\text{F}$	
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+17 ohm-cm	1.00e+17 ohm-cm	ASTM D257
Surface Resistance	2.00e+13 ohm	2.00e+13 ohm	ASTM D257
Dielectric Constant	2.5	2.5	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	15.7 kV/mm	399 kV/in	ASTM D149
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Dielectric Loss Index	0.0010 - 0.0040	0.0010 - 0.0040	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Compliance Properties	Metric	English	Comments
FDA	No	No	

Descriptive Properties	Value	Comments
Color	Red Rust	
UV Resistance	Y	

## Contact Songhan Plastic Technology Co.,Ltd.

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