

Saint-Gobain Rulon® J Grade Bearing/Seal PTFE

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE

Material Notes:

Description: Rulon® is the Saint-Gobain trade name for their family of proprietary PTFE compounds. This family of materials offers the combination of high compressive strength, low coefficient of friction, and excellent abrasion and corrosion resistance while running without lubrication. They are used in bearing and seal applications from temperature extremes of 400°F to over 500°F with and without additional lubricants. A unique property of Rulon® is the absence of stick slip, that is, erratic low-speed motion. PTFE = polytetrafluoroethylene

J Grade Bearing/Seal PTFE: Rulon J provides the lowest coefficient of friction of all Rulons, and provides good wear and abrasion resistance even against aluminum and soft mating surfaces. Gold in color. Suitable for use in environments of dry or vacuum type. Mating surface of steel/stainless steel Rc 25 and higher, or aluminum. Material has electrical and thermal insulation properties. Markets for J grade include Agricultural, Appliances, Automotive, Document Processing Equipment, Industrial, Transportation. Information provided by Saint Gobain Performance Products.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Saint-Gobain-Rulon-J-Grade-BearingSeal-PTFE.php

Physical Properties	Metric	English	Comments
Density	1.95 g/cc	0.0704 lb/in ³	ASTM D792
Water Absorption	0.00 % @Time 86400 sec	0.00 % @Time 24.0 hour	Immersion
Water Absorption at Saturation	0.00 %	0.00 %	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60	60	
Tensile Strength	13.8 MPa	2000 psi	ASTM D638
Elongation at Break	180 %	180 %	ASTM D638
Compressive Yield Strength	5.17 MPa	750 psi	Max load under tribological use
Coefficient of Friction, Dynamic	0.12 - 0.20	0.12 - 0.20	Dry vs. Steel
Coefficient of Friction, Static	0.12 - 0.20	0.12 - 0.20	Dry vs. Steel
Limiting Pressure Velocity	0.263 MPa-m/sec	7500 psi-ft/min	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	117 µm/m-°C @Temperature 25.6 - 93.3 °C	65.0 µin/in-°F @Temperature 78.0 - 200 °F	Length

Thermal Properties	122 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ Metric	68.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ English	Comments Length
	@Temperature 25.6 - 149 $^\circ\text{C}$	@Temperature 78.0 - 300 $^\circ\text{F}$	
CTE, linear, Transverse to Flow	88.2 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	49.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	Diameter
	@Temperature 25.6 - 93.3 $^\circ\text{C}$	@Temperature 78.0 - 200 $^\circ\text{F}$	
	93.6 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	52.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	Diameter
	@Temperature 25.6 - 149 $^\circ\text{C}$	@Temperature 78.0 - 300 $^\circ\text{F}$	
Thermal Conductivity	0.288 W/m-K	2.00 BTU-in/hr-ft ² - $^\circ\text{F}$	
Maximum Service Temperature, Air	288 $^\circ\text{C}$	550 $^\circ\text{F}$	
Minimum Service Temperature, Air	-268 $^\circ\text{C}$	-450 $^\circ\text{F}$	

Electrical Properties	Metric	English	Comments
Volume Resistivity	8.20e+18 ohm-cm	8.20e+18 ohm-cm	
Surface Resistance	6.30e+18 ohm	6.30e+18 ohm	
Dielectric Constant	2.4	2.4	
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	7.87 kV/mm	200 kV/in	Short Term
Dissipation Factor	0.0015	0.0015	
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Descriptive Properties	Value	Comments
Color	Gold	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China