



## RULON® (Filled PTFE)

### Characteristics

- \* Low Coefficient of Friction
- \* High Compression Strength
- \* Superior Corrosion and Abrasion Resistance
- \* Broad Temperature Use Range - 400° F to + 500° F
- \* Bearings and Seals Can Operate With or Without Lubricants

### Description

**Rulon** is a PTFE based material reinforced with proprietary compounds. These compounds offer improved tensile and compressive strength, abrasion resistance when running without lubricants, and excel in corrosive environments.

**Rulon AR** ( Maroon in color ) - Best combination of flexibility and load carrying properties

**Rulon J** ( Gold in color ) - Lowest coefficient of friction of all Rulons

**Rulon LR** ( Maroon in color ) - High Wear Resistance, Chemically Inert, Superior Electrical Properties

**Rulon 641** ( White in color ) - FDA Compliant, designed for food applications

### Forms Available

- ROD .250 to 2.500 " diameter, Lengths to 12 feet  
 BUSHING id's 1.00" and over, od's up to 14"  
 PLATE .125" to 1.000" thick, Widths to 24", Lengths to 24"

### Typical Property Values

#### MECHANICAL @ 73°F

		Rulon® AR	Rulon® J	Rulon® LR	Rulon® 641
Density		0.08	0.07	0.08	0.08
Tensile Strength	psi	2,000	2,000	1,500	2,000
Tensile Modulus of Elasticity	psi				
Tensile Elongation ( at Break )	%	175	180	150	175
Flexural Strength	psi				
Flexural Modulus of Elasticity	psi				
Shear Strength	psi				
Compressive Strength, 10% Deformation	psi				
Compressive Modulus of Elasticity	psi				
Shore Hardness	D Scale	60 - 75	60	60 - 75	60
Izod Impact Strength, Notched	ft-lbs/in. of notch	6.00		6.00	
Coefficient of Friction, Dynamic ( Dry vs. Steel )					
Limiting PV ( 4 :1 Safety Factor Applied )	ft.lbs/in. <sup>2</sup> min				
Wear Factor	in <sup>3</sup> -min/ft.lbs. hr.				
Water Absorption 24 hrs	% by wt.				
<b>THERMAL</b>					
Coefficient of Linear Expansion ( -40°F to 300°F )	in./in./°F				
Heat Deflection Temperature @264 psi	°F				
Melting Point ( Crystalline )	°F				
Continuous Service Temperature in Air	°F	500	500	500	500
Thermal Conductivity	°F	2.30	1.70	2.30	2.60
<b>ELECTRICAL</b>					
Dielectric Strength, Short Term	Volts/mil	400 - 500	200	400 - 500	
Surface Resistivity	Ohms/Sq.	2 x 10 <sup>13</sup>		2 x 10 <sup>13</sup>	
Dielectric Constant	1 MHz	2.50	2.40	2.50	
Dissipation Factor	1 MHz	0.003	0.001	0.003	

( Properties listed above are provided for reference only, they should not be used for design specifications or quality control , Rulon is a registered Trademark of St. Gobain )