

\*\* RULON® is the registered trademark of

## **SAINT - GOBAIN**

**Rulon® LR** - This is a maroon colored bearing best known for its versatile design properties. It is compatible with most hardened steel substances. Mild steel is acceptable; harder running surfaces are better. Rulon has a practically unicersal chemical inertness. Of the chemicals encountered in commercial practive, only molten sodium and flourine, at elevated temperatures and pressures, show any signs of attack.

**Rulon® J** - This is the best Rulon grade for aluminum and soft mating surfaces. Rulon® J provides the lowest coefficient of friction of all Rulons, and provides good wear and abrasion resistance. Because this grade is "all plastic", it can be run on non-ferrous and non-metallic mating surfaces such as 316 Stainless, brass, and other plastics. It is used in both bearing and seal applications, but is generally not suitable for use in alkaline or oxidizing acid solutions. DULL GOLD in color.

**Rulon® K** - Light tan in color and predominantly used as a seal for high temperatures. Material strength improves as temperatures increase with applications at 500°F continuous possible. Good flexibility, chemical resistance and very low coefficient of friction.

## **APPLICATIONS INCLUDE:**

 $\cdot \mbox{ Seals For High Temperatures} \cdot \mbox{ Bearings} \cdot \mbox{ Bushings} \cdot \mbox{ Cams} \cdot \mbox{ Cam Followers} \cdot \mbox{ Gears} \cdot \mbox{ Guides} \cdot \mbox{ Insulators} \cdot \mbox{ Liners} \cdot \mbox{ Rollers} \cdot \mbox{ Seals} \cdot \mbox{ Sleeves} \cdot \mbox{ Thrust Washers} \cdot \mbox{ Valve Seats} \cdot \mbox{ Wear Surfaces}$ 

GENERAL PROPERTIES	ASTM or UL Test	RULON® LR Typical Values	<b>RULON® J</b> Typical Values
COLOUR		Maroon	Light Brown
PHYSICAL			
Specific Gravity (g/cm³)	D792	2.25	1.95
Water Absorption, 24 hrs (%)	D570	0	0
MECHANICAL			
Tensile Strength (psi)	D4894	2,700	2,725
Tensile Elongation at Yield (%)	D4894	235	235
Hardness, Shore D	D2240	60-70	60-70
IZOD Notched Impact (ft-lb/in)	D256	-	-
THERMAL			
Coeff. of Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	D696	-	-
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	D2214	2.3	1.7
ELECTRICAL			
Dielectric Strength (V/mil) short time, .08" thk	D149	900	200
Dielectric Constant at 1 MHz	D150	2.5	2.4
Dissipation Factor at 1 MHz	D149	0.001-0.004	0.0015
Surface Resistivity (ohm/sq)	D257	$2 \times 10^{13}$	6.3 x 10 <sup>18</sup>
Volume Resistivity (ohm-cm) at 50% RH	D257	1 x 10 <sup>15</sup>	8.2 x 10 <sup>18</sup>
RECOMMENDED OPERATING LIMITS			
Maximum Load (psi)	-	1,000	750
Maximum Velocity with No Pressure (ft/min)	-	400	400
Maximum PV Rating (psi x ft/min)		10,000	7,500
Maximum Operating Temp (°F / °C)	-	550 / 288	550 / 288
Minimum Operating Temp (°F / °C)	-	-400 / -240	-450 / -268
Minimum Mating Surface Hardness (Rockwell)	-	C35	B25
Maximum Load (psi)  Maximum Velocity with No Pressure (ff/min)  Maximum PV Rating (psi x ff/min)  Maximum Operating Temp (°F / °C)  Minimum Operating Temp (°F / °C)	- - - -	400 10,000 550 / 288 -400 / -240	400 7,500 550 / 288 -450 / -26

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.