TriStar

Engineered Plastic Solutions™

Rulon Materials Comparison Chart

		LR	J	641	W2	123	488	957	XL	F	142	945	1045	1337	1410	1439
Rulon Grades	Color	Maroon	Gold	White	Black	Black	Turq.	Green	Tan	Green	Turq.	Black	Gold	Tan	Gold	White
Performance*	Max Load "P" (psi) MPa	1,000 6.9	750 5.2	1,000 6.9	1,000 6.9	1,000 6.9	1,000 6.9	1,000 6.9	1,200 8.3	1,000 6.9	1,000 6.9	1,000 6.9	1,000 6.9	1,000 6.9	750 5.2	1,000 6.9
	Max Speed "V" (fpm) m/s	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0	400 2.0
	Max "PV" (psi-fpm) (Mpa • m/s)	10,000 0.35	7,500 0.26	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	10,000 0.35	7,500 0.26	10,000 0.35
Mating Surface Steel & Stainless Steel	Rb 25 & higher		X	X	X	X	X	X	X	X			X	X	X	X
	Rc 35 & higher	X									X	X				
	Rc 50 & higher															
	Painted metal and porcelain						X	X								
	Aluminum		X						X							
Environment	FDA compliant			X		X								X		X
	Steam	X		X	X	X	X	X	X		X	X		X	X	X
	Wet	X		X	X	X	X	X	X	X	X	X	X	X	X	X
	Dry	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Vacuum	X	X	X			X	X	X	X	X		X	X	X	X
Relative Rating 1=Low, 5=High	Coefficient of friction	4	1	1	2	2	3	2	1	2	2	4	1	1	1	3
	Creep resistance	4	3	4	4	4	4	4	4	4	5	5	2	2	2	4
	Insulative prop.	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Comments		Our Standard Rulon bearing grade. High Creep and Abrasion resistance	Lowest Coefficient of Friction of Rulon series. Excellent insulator.	Widely used in the food process industry.	Very good operation in wet environments.	Good thermal and electrostatic dissipation.	Temperature (dry) oven bearings. Excellent abrasion resistance.	Low friction/w ear against coated metal or porcelain surfaces.	The best Rulon against aluminum surfaces.	Standard tape liner material for Rulon composite bearings.	Extensively used in machine tool guide ways.	Extremely low deformation under load and high impact resistance.	FDA compliant. Excellent chemical resistance.	A standard material for compressor piston flip seals.	A standard material for compressor piston flip seals.	Ideal for submerged applications.

The list above is only a partial list of available formulations of Rulon.
PV data may be exceeded based on specific application requirements. Ask to speak to a TriStar Application Engineer.
RATINGS above are relative within Rulon family ONLY.
For Rulon materials, coefficient of friction decreases with increasing load, and wear decreases with increasing surface hardness.
For PTFE based materials, wear in steam and wet environments is higher than in dry environments.
Saint-Gobain offers enhanced Rulon grades which minimize this effect.
Most Rulon products have excellent chemical compatability. Data available upon request.