

MATERIAL DATASHEET

RULON® LR

Features: Maroon, compatible with most hardened steel substrates, chemical inertness

Benefits: Long life and reliability in continuous non-lubricated applications

Working Temperature Range: -240° to +288°C [-400° to +550°F]

Properties	Test Methods	Typical Values	Units
PHYSICAL			
Specific Gravity	ASTM D792	2.25	--
Hardness	ASTM D2240	60 – 70	Shore D
Water Absorption, 24hr	ASTM D570	0	%
MECHANICAL			
Tensile Strength	ASTM D4894	18.6 [2700]	MPa [psi]
Elongation	ASTM D4894	235	%
Tensile Modulus	ASTM D4894	0.34 [0.5]	GPa [psi x 10 ⁵]
Compressive Stress @ 1% Strain	ASTM D695	5.2 [750]	MPa [psi]
Compressive Modulus	ASTM D695	0.55 [0.8]	GPa [psi x 10 ⁵]
Flexural Stress @ 1% Strain	ASTM D790	3.8 [550]	MPa [psi]
Flexural Modulus	ASTM D790	0.41 [0.6]	GPa [psi x 10 ⁵]
Deformation under load, 1500 psi & RT	ASTM D621	3	%
THERMAL			
Thermal Conductivity	ASTM D2214	0.33 [2.3]	W/m·°C [BTU·in/hr·ft ² ·°F]
Flammability	ASTM D635	Non-flammable	m/s [in/min]
ELECTRICAL			
Volume Resistivity	ASTM D257	1 x 10 ¹⁵	Ohm·cm
Surface Resistivity	ASTM D257	2 x 10 ¹³	Ohm·sq
Dielectric Constant (Freq. = 1 MHz)	ASTM D150	2.5	-
Dielectric Strength (2.5 mm [0.010"] thick)	ASTM D149	35.5 [900]	MV/m [V/mil]
Dissipation Factor (Freq. = 1 MHz)	ASTM D149	0.001 - 0.004	-
TRIBOLOGICAL			
Coefficient of Friction	-	0.15 – 0.25	-
OPERATING LIMITS MATING SURFACE			
Maximum Pressure	-	6.9 [1000]	MPa [psi]
Maximum Velocity (no pressure)	-	2 [400]	m/s [ft/min]
Maximum PV	-	0.35 [10,000]	MPa x m/s [psi x ft/min]
Rockwell / Brinnell Scale	-	35 / 327 (Minimum)	Minimum

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