

MATERIAL DATASHEET

RULON® W2

Features: Black, Low friction and excellent wear characteristics

Benefits: Compatible with most metal substrates and soft mating surfaces

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

Properties	Test Methods	Typical Values	Units
PHYSICAL			
Specific Gravity	ASTM D792	2.1	--
Hardness	ASTM D2240	60 – 70	Shore D
Water Absorption, 24hr	ASTM D570	0	%
MECHANICAL			
Tensile Strength	ASTM D4894	14.5 [2,100]	MPa [psi]
Elongation	ASTM D4894	70	%
Compressive Stress @ 1% Strain	ASTM D695	7.5 [1090]	MPa [psi]
Compressive Modulus	ASTM D695	0.8 [1.1]	GPa [psi x 10 ⁵]
Flexural Stress @ 1% Strain	ASTM D790	8.1 [1175]	MPa [psi]
Flexural Modulus	ASTM D790	0.8 [1.1]	GPa [psi x 10 ⁵]
Deformation under load, 2000 psi & RT	ASTM D621	1.5	%
THERMAL			
Flammability	ASTM D635	Non-flammable	m/s [in/min]
Linear Coefficient of Thermal expansion 26°to 149°C [78°to 300°F] Diameter	ASTM D696	13.6/11.9 [7.6/6.6]	m/m/°C x 10 ⁻⁵ [in/in/°F x 10 ⁻⁵]
ELECTRICAL			
Volume Resistivity	ASTM D257	7.9 x 10 ⁷	Ohm·cm
Surface Resistivity	ASTM D257	3.6 x 10 ⁷	Ohm·sq
TRIBOLOGICAL			
Coefficient of Friction	-	0.20 - 0.50	-
OPERATING LIMITS MATING SURFACE			
Maximum Pressure	-	6.9 [1,000]	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	-	Rb25 / 64	Minimum

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