

# Rulon® W2

The following table is a list of typical physical property values for Rulon® W2

Properties	ASTM	Units [Metric]	Value [Metric]
<b>GENERAL</b>			
Specific Gravity	D792	—	2.10
Hardness Shore D	D2240	—	60
Water Absorption	D570	%	0
<b>MECHANICAL</b>			
Tensile Strength	D4894	psi [MPa]	1,800 [12.4]
Elongation	D4894	%	70
Compressive Stress @ 1% strain (Mold Direction)	D695	psi [MPa]	850 [5.9]
Compressive Stress @ 1% strain (Cross Direction)	D695	psi [MPa]	900 [6.2]
Deformation under load 1500 psi, 24 Hrs. RT	D621	%	3.0
<b>THERMAL</b>			
Thermal Conductivity	Cenco-Fitch	BTU in/hr ft <sup>2</sup> °F [W/m.K]	4.5 [0.65]
Flammability	D635	In/min [m/s]	Non-flammable
<b>RECOMMENDED OPERATING LIMITS</b>			
Maximum Pressure (P)	—	psi [MPa]	1,000 [6.9]
Maximum Velocity (V) with no pressure	—	ft/min [m/s]	400 [2]
Maximum PV (P x V)	—	psi x ft/min [MPa x m/s]	10,000 [0.35]
<b>Minimum Mating Surface Hardness</b>			
Rockwell Scale	—	—	Rb25
Brinnell Scale	—	—	64
<b>Tribological</b>			
Friction – static & dynamic	—	—	0.15 – 0.30

Coefficient of Thermal Expansion		x 10 <sup>-5</sup> m/m°C		x 10 <sup>-5</sup> in/in/°F	
ASTM D696		Cross Direction	Molded Direction	Cross Direction	Molded Direction
78 to 200 °F	26 to 93 °C	8.4	10.8	4.7	6.0
78 to 300 °F	26 to 149 °C	8.8	11.3	4.9	6.3
78 to 400 °F	26 to 204 °C	9.5	12.6	5.3	7.0
78 to 500 °F	26 to 260 °C	11.1	15.4	6.2	8.6

Cross Direction: Parallel to length of molded or extruded rod or tube.  
Molded Direction: Perpendicular to length of molded or extruded rod or tube.

**NOTE:** The data listed here falls within the normal range of properties but should not be used to establish specification limits nor used alone as the basis of design. Saint-Gobain Performance Plastics assumes no obligation or liability for any advice furnished by it or for results obtained with respect to the products.

## Features / Benefits

- Low friction and excellent wear characteristics
- Compatible with most metal substrates and soft mating surfaces.

## Working Temperature Range

- - 400 °F to + 550 °F  
[- 240 °C to + 288 °C]

## Color

- Black

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