

RULON® W2



Rulon® W2 is a black PTFE-based material developed for use in fresh-water applications. It exhibits low friction and excellent wear characteristics (one of the lowest wear rates in fresh water) as well as good thermal dissipation, preventing shaft distress. Its properties are enhanced when wet.

Rulon® W2 is DWGV (European) certified for applications in contact with drinking water.

It is compatible with most metal substrates and soft mating surfaces. Rulon W2 is a good alternative to Rulon J when superior chemical resistance is needed. However, it should not be used on very soft mating surfaces or where electrical insulation is desired.

TYPICAL PRODUCT AND APPLICATION DESCRIPTION

PRODUCTS	APPLICATIONS
<ul style="list-style-type: none"> Automatically molded bearings & components Sleeve, flanged and thrust bearings Piston Rings Stamped and formed seals Extruded shapes Machined parts Molded shapes 	<ul style="list-style-type: none"> Pumps Mixers Compressors Appliances Automotive Fresh water submerged Thrust bearings Plating tanks Wear bands Ovens

DESIGN CRITERIA RULON W2

Temperature - Typical Range °F	-400/+550
Maximum PV (continuous)(MPa•m/s)	10,000 (0.35)*
Maximum P - psi (static)(MPa)	1,000 (6.9)*
Maximum V -SFM (no load)(m/s)	400 (2)*
Shaft Hardness - Minimum	Rb25
Shaft finish recommended Ra (μ"/μm)	8 - 16 (0.2-0.4)*
Shaft Material	Hard, mild and stainless steels
ENGINEERING INFORMATION	
Friction - static & dynamic	.15 - .30
Water Absorption ASTM D570	0%
Flammability ASTM D635	Non-Flammable
Chemical Resistance	Inert
Thermal Conductivity BTU/hr/sq. ft./°F/in.	4.5
Linear Coefficient of Thermal Expansion (78°-200°F) (26°-93°C)	Diameter 4.7x10 ⁻⁵ (8.5)* Length 6.0x10 ⁻⁵ (10.8)*
(78°-300°F) (26°-149°C)	Diameter 4.9x10 ⁻⁵ (8.8)* Length 6.3x10 ⁻⁵ (11.3)*
PHYSICAL DATA	
Elongation ASTM D638	70%
Tensile Strength ASTM D638(MPa)	1800 PSI (12.4)*
Deformation (1500 psi - 24 hr. RT)	3%
Specific Gravity	2.10

A more complete data sheet is available upon request.

*Metric measurements in parentheses