RULON® 142



Rulon® 142 is a specially formulated dull bluegreen linear bearing material that exhibits low wear, high thermal dissipation, and good dimensional stability characteristics.

Among its many benefits are the virtual elimination of stick-slip, vibration dampening, self-lubrication, uniform friction, long life, ease of application and design diversity.

Rulon® 142 has excellent mechanical properties and is the ideal material for machine tool applications. Its low deformation characteristics limit the amount of misalignment that can occur with other bearing materials.

Strong acids and bases should be avoided, as they may attack the fillers.

Typical Product and Application Description

Products	Applications
Packings Sleeve, flanged and thrust bearings Piston Rings Stamped parts Extruded parts	 Lathes Gibs, guideways Compressors Appliances Rotary tables Motor mounts Linear slides Pipe supports Hydraulic presses
 Machined parts Molded shapes Wear Bands Seal rings	

Design Criteria Rulon 142

Temperature - Typical Range °F (°C)	-400/+550 (-240/288)	
Maximum PV (continuous)(MPa•m/s)	10,000 (0.35)*	
Maximum (continuous bonded)	25,000 (0.88)*	
Maximum P - psi (static)(MPa)	1000 (6.9)*	
Maximum V -SFM (no load)(m/s)	400 (2)	
Shaft Hardness - Minimum	Rc35	
Shaft finish recommended Ra (µ"/µm)	8 - 16 (0.2-0.4)*	
Shaft Material	Mild/Hardened Steel	
ENGINEERING INFORMATION		
Friction - static & dynamic	.0.25 with oil	
Flammability ASTM D635	Non-Flammable	
Chemical Resistance	No acids or bases	
Thermal Conductivity		
BTU/hr/sq. ft./°F/in.	4.8	
Linear Coefficient of (78°-200°F)	Diameter 4.9x10 ⁻⁵ (8.8)*	
Thermal Expansion (26° -93°C)	Length 4.9x10 ⁻⁵ (8.8)*	
Physical Data		
Elongation ASTM D638	200% mold direction	
Tensile Strength ASTM D638(MPa)	3100 psi (21.4)*	
Deformation (1500 psi - 24 hr. RT)	3%	
Specific Gravity	3.16	

A more complete data sheet is available upon request. *Metric measurements in parentheses