



TIVAR DrySlide

Lubricant filled, electro static dissipative, UV stabilized UHMW

Physical Properties	Metric	English	Comments
Specific Gravity	0.94 g/cc	0.034 lb/in ³	ASTM D792
Water Absorption	Max 0.01 %	Max 0.01 %	Immersion, 24hr; ASTM D570(2)
Water Absorption at Saturation	Max 0.01 %	Max 0.01 %	Immersion; ASTM D570(2)

Mechanical Properties

Hardness, Shore D	64	64	ASTM D2240
Tensile Strength, Ultimate	33.1 MPa	4800 psi	ASTM D638
Elongation at Break	200 %	200 %	ASTM D638
Tensile Modulus	0.8 GPa	116 ksi	ASTM D638
Flexural Modulus	0.731 GPa	106 ksi	ASTM D790
Flexural Yield Strength	21.4 MPa	3100 psi	ASTM D790
Compressive Strength	20 MPa	2900 psi	10% Def., 73°F; ASTM D695
Compressive Modulus	0.552 GPa	80 ksi	ASTM D695
Coefficient of Friction	0.08	0.08	Dry vs. Steel; QTM55007
Limiting Pressure Velocity	0.0701 MPa-m/sec	2000 psi-ft/min	4:1 safety factor; QTM 55007
Izod Impact, Notched	NB	NB	ASTM D256 Type A

Electrical Properties

Surface Resistivity per Square	100000 - 1e+009 ohm	100000 - 1e+009 ohm	ASTM D257
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Thermal Properties

CTE, linear 68°F	342 µm/m-°C	190 µin/in-°F	(-40°F to 300°F); ASTM E831
Melting Point	135 °C	275 °F	Crystalline, Peak; ASTM D3418
Maximum Service Temperature, Air	82.2 °C	180 °F	Long Term
Deflection Temperature at 1.8 MPa (264 psi)	46.7 °C	116 °F	ASTM D648
Flammability, UL94 (Estimated Rating)	HB	HB	1/8 inch

Qualitative Processing Properties

Compliance - FDA	Not Compliant	
Machinability	3	1-10, 1=Easier to Machine
Service in Alcohols	Acceptable	
Service in Aliphatic Hydrocarbons	Acceptable	
Service in Aromatic Hydrocarbons	Unacceptable	
Service in Chlorinated Solvents	Acceptable	
Service in Ethers	Limited	
Service in Ketones	Limited	
Service in Strong Acids	Limited	
Service in Strong Alkalies	Acceptable	
Service in Sunlight	Limited	
Service in Weak Acids	Acceptable	
Service in Weak Alkalies	Acceptable	

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