

## Quadrant EPP Quicksilver® Premium Truck Lining (UHMW-PE)

Physical Properties	Metric	English	Comments
Specific Gravity	0.93 g/cc	0.0336 lb/in <sup>3</sup>	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)
<b>Mechanical Properties</b>			
Hardness, Shore D	66	66	ASTM D2240
Tensile Strength, Ultimate	30.3 MPa	4400 psi	ASTM D638
Elongation at Break	230 %	230 %	ASTM D638
Tensile Modulus	0.483 GPa	70 ksi	ASTM D638
Flexural Modulus	0.455 GPa	66 ksi	ASTM D790
Flexural Yield Strength	24.1 MPa	3500 psi	ASTM D790
Compressive Strength	20.7 MPa	3000 psi	10% Def., 73°F; ASTM D695
Compressive Modulus	0.552 GPa	80 ksi	ASTM D695
Shear Strength	33.1 MPa	4800 psi	ASTM D732
Coefficient of Friction	0.09	0.09	Dry vs. Steel; QTM55007
Limiting Pressure Velocity	0.0701 MPa-m/sec	2000 psi-ft/min	4:1 safety factor; QTM 55007
Abrasion	10	10	Sand Slurry; 1018 Steel = 100; ASTM D4020
Izod Impact, Notched	NB	NB	ASTM D256 Type A
<b>Electrical Properties</b>			
Surface Resistivity per Square	Min 1e+013 ohm	Min 1e+013 ohm	ASTM D257
Dielectric Constant	2.3	2.3	1 MHz; ASTM D150
Dissipation Factor	Max 0.0005	Max 0.0005	1 MHz; ASTM D150
<b>Thermal Properties</b>			
CTE, linear 68°F	198 μm/m-°C	110 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

All statements, technical information and recommendations contained in this database are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Quadrant EPP and Automation Creations, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine the suitability of Quadrant EPP's products in any given application.