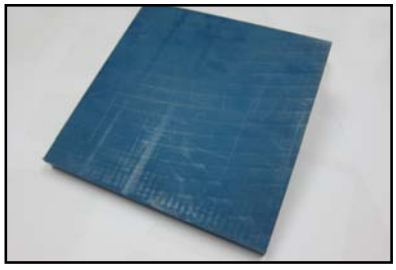
HIGH PERFOMANCE PLASTICS

TECHTRON® HPV PPS

PolyPhenyleneSulfide Bearing Grade / PPS Bearing Grade



** *TECHTRON® is the registered trademark of*

QUADRANT

PRODUCT CAPABILITIES:

STOCK SHAPES
· Sheet : 6mm to 50mm

PRODUCT COLORS:

Deep Blue

ADVANTAGES:

· Internally Lubricated Semi-Crystalline Polymer
· Excellent Wear Resistance
· Load-Bearing Capabilities
· Dimensional Stability when Exposed to Chemicals And High Temperature Environments

APPLICATIONS INCLUDE:

· This is mainly use in applications where PA, POM, PET and other Plastics fall short or where PI, Peek and PAI are over-engineered and a more economical solution must be found.

GENERAL PROPERTIES	ASTM or UL Test	TECHTRON HPV PPS Typical Values
PHYSICAL		
Specific Gravity (g/cm^3)	ISO 1183-1	1.42
Water Absorption, 24 hrs (%)	ISO 62	0.01
MECHANICAL		
Tensile Strength (MPa)	ISO 527-1/-2	78
Tensile Modulus (Mpa)	ISO 527-1/-2	4,000
Tensile Strain at Break (%)	ISO 527-1/-2	3.5
Compressive Stress at 5% Nominal Strain (MPa)	ISO 604	105
Charpy Impact Strength – Unnotched (kJ/m^2)	ISO 179-1/1eU	25
Charpy Impact Strength – Notched (kJ/m^2)	ISO 179-1/1eA	4
Ball Indentation Hardness (N/mm^2)	ISO 2039-1	160
Hardness, Rockwell	ISO 2039-2	M82
THERMAL		
Coeff. of Linear Thermal Expansion (m/[m.k])	-	50 x 10^{-6}
Heat Deflection Temp (°F / °C) @ 1.8 MPa	ISO 75-1/-2	239 / 115
Glass Transition Temp (°F / °C)	ISO 11357-1/-2	-
Melting Temp (°F / °C)	ISO 11357-1/-3	536 / 280
Thermal Conductivity at 23°C (W/[K.m])	-	0.3
Flammability Rating	UL94	V-O
ELECTRICAL		
Electric Strength (kV/mm)	IEC 60243-1	24
Dielectric Dissipation factor tan @ 1 MHz	IEC 60250	0.003
Volume Resistivity (Ohm.cm)	IEC 60093	> 10^{14}
Surface Resistivity (ohm/sq)at 50% RH	EOS/ESD S11.11	> 10^{13}

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.