

## Quadrant EPP Ketron® PEEK-GF30 LSG

### Material Notes:

KETRON® PEEK-GF30 LSG blue stock shapes are produced from genuine VICTREX® PEEK polymer. This 30% glass fibre reinforced grade combines higher stiffness and creep resistance than KETRON PEEK LSG with a much better dimensional stability. KETRON PEEK-GF30 LSG blue stock shapes have also been successfully type tested for their compliance with both United States Pharmacopeia (USP) and ISO 10993-1 guideline requirements for Biocompatibility Testing of Materials, and they come with full traceability from resin to stock shape. These features, added to an excellent sterilizability by means of steam, dry heat, ethylene oxide, plasma and gamma irradiation, make KETRON PEEK-CA30 LSG stock shapes very suitable for applications in the medical, pharmaceutical and biotechnology markets.

Physical Properties	Metric	English	Comments
Specific Gravity	1.51 g/cc	0.0546 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.05 %	0.05 %	Immersion, 24hr; ISO 62
Water Absorption at Saturation	0.1 %	0.1 %	Immersion, 96hr; ISO 62
<b>Mechanical Properties</b>			
Hardness, Rockwell M	100	100	ISO 2039-2
Tensile Strength, Ultimate	87 MPa	12615 psi	
Elongation at Break	3 %	3 %	ISO 527
Tensile Modulus	7 GPa	1015 ksi	ISO 527
Flexural Yield Strength	155 MPa	22475 psi	ISO 178
Compressive Strength	155 MPa	22475 psi	5% Def.; ISO 604
<b>Electrical Properties</b>			
Surface Resistivity per Square	Min 1e+013 ohm	Min 1e+013 ohm	IEC 60093
Dielectric Constant	3.6	3.6	1 MHz; IEC 60250
Dielectric Strength	24 kV/mm	610 V/mil	IEC 60243
Dissipation Factor	0.002	0.002	1 MHz; IEC 60250
<b>Thermal Properties</b>			
CTE, linear 68°F	30.1 µm/m-°C	16.7 µin/in-°F	(23°C to 150°C)
Thermal Conductivity	0.432 W/m-K	3 BTU-in/hr-ft <sup>2</sup> -°F	
Melting Point	340 °C	644 °F	ISO 11357
Maximum Service Temperature, Air	250 °C	482 °F	Long Term
Deflection Temperature at 1.8 MPa (264 psi)	230 °C	446 °F	
Flammability, UL94 (Estimated Rating)	V-0	V-0	1.5 and 3 mm

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.