

# Material Properties

## Glass Fiber and Molybdenum Disulfide Filled PTFE

### Material code: 1015

It is used for bushings, bearings, and sealing elements where low creep properties with good seal ability and low wear rates are desirable.

Physical Properties	ASTM Method	Typical Values
Specific Gravity	D792	2.27 gr/cm <sup>3</sup>
Water Absorption (24 hrs. @ 74°F)	D570	0.02 %
Color	N/A	Blue Grey
<b>Mechanical Properties</b>		
Tensile Strength	D1708	3600 psi
Elongation	D1708	
• At Break		200%
Flexural Strength	D790	2550 psi
Flexural Modulus	D790	130,000 psi
Compressive Strength	D695	1800 psi
Compressive Modulus	D695	90,000 psi
Hardness	Shore D	60
<b>Tribological Properties</b>		
Coefficient of friction	D3702	
• Static		0.36
• Dynamic		0.33
Wear rate (PV: 20,000 psi-fpm)	D3702	0.9 uin/min
<b>Thermal Properties</b>		
Coefficient of Linear Thermal Expansion (78-400°F)	D696	39 10 <sup>-6</sup> °F
Heat Deflection Temperature (F/C @ 264 psi)	D648	150°F
Glass Transition Temperature (T <sub>g</sub> )	D3418	266°F
Melting Point		621°F
Continuous Service Temperature (Max @ no load)		500°F
<b>Electrical Properties</b>		
Volume Resistivity (ohm-cm) @ 50% RH	D257	10 <sup>15</sup> ohm-cm
Dielectric Strength	D149	KV/mm
Dielectric Constant	D150	2.4 Hz, 200°F

**Note:** Property values should be interpreted as typical rather than minimum value. All technical information and recommendations are presented in good faith, and based upon laboratory and real-world tests believe to be reliable and practical. However, K.C. Seals, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customers' responsibility to determine product suitability to any given application.

