

Physical Properties	Nominal Value	Test Method
Density / Specific Gravity	1.28 to 1.30 g/cm ³	ASTM D792
Water Absorption		
24 hr	0.020 to 0.21 %	ASTM D570
24 hr, 23°C	0.020 to 0.50 %	ISO 62
Saturation	0.17 to 1.7 %	ASTM D570
Saturation, 23°C	0.061 to 0.51 %	ISO 62
Equilibrium, 23°C, 50% RH	0.12 to 0.21 %	ISO 62

Mechanical Properties	Nominal Value	Test Method
Tensile Modulus	2910 to 4190 MPa	ASTM D638
Tensile Strength		
Yield	78.7 to 115 MPa	ASTM D638
Break	35.6 to 98.5 MPa	ASTM D638
Tensile Elongation		
Yield	4.9 to 10 %	ASTM D638
Break	1.5 to 62 %	ASTM D638
Nominal Tensile Strain at Break	8.5 to 51 %	ISO 527-2
Flexural Modulus	3240 to 4670 MPa	ASTM D790
Flexural Strength	96.1 to 185 MPa	ASTM D790
Compressive Modulus	3370 to 3460 MPa	ASTM D695
Compressive Strength	118 to 171 MPa	ASTM D695
Shear Strength	19.9 to 95.4 MPa	ASTM D732
Coefficient of Friction	0.20 to 0.33	ASTM D1894
Wear Factor	40 to 770 10 ⁻⁸ mm ³ /N·m	ASTM D3702

Impact Properties	Nominal Value	Test Method
Charpy Notched Impact Strength	4.8 to 7.0 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	3.5 to 190 kJ/m ²	ISO 179
Notched Izod Impact	41 to 93 J/m	ASTM D256
Unnotched Izod Impact	44 to 2100 J/m	ASTM D4812

Hardness Properties	Nominal Value	Test Method
Rockwell Hardness	89 to 107	ASTM D785
Durometer Hardness	85 to 90	ASTM D2240

Thermal Properties	Nominal Value	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed	205 to 211 °C	ISO 75-2/B
1.8 MPa, Unannealed	146 to 164 °C	ASTM D648

1.8 MPa, Annealed	155 to 162 °C	ASTM D648
Continuous Use Temperature	240 to 264 °C	ASTM D794
Glass Transition Temperature	143 to 150 °C	ASTM E1356
Vicat Softening Temperature	304 to 335 °C	ISO 306
Melting Temperature	334 to 343 °C	DSC
Specific Heat	1290 to 1990 J/kg/°C	ASTM C351
Thermal Conductivity	0.24 to 0.31 W/m/K	ASTM C177

Electrical Properties	Nominal Value	Test Method
Surface Resistivity	1.0E+2 to 1.9E+17 ohms	ASTM D257
Volume Resistivity	10 to 1.9E+16 ohms-cm	ASTM D257
Dielectric Strength	12 to 26 kV/mm	ASTM D149
Dielectric Constant	2.73 to 3.54	ASTM D150
Dissipation Factor	9.0E-4 to 0.076	ASTM D150
Comparative Tracking Index	149 to 200 V	IEC 60112
Insulation Resistance	9.8E+11 to 1.0E+12 ohms	IEC 60167

Electrical Properties	Nominal Value	Test Method
Glow Wire Ignition Temperature	800 to 875 °C	IEC 60695-2-13
Oxygen Index		
--	35 to 40 %	ASTM D2863
--	35 to 38 %	ISO 4589-2

The information provided in this datasheet is based upon average values and is intended for guidance purposed only. Vital Parts assumes no responsibility or liability for the accuracy of the information contained on this datasheet. Product samples are available for the to determine the suitability of the product for any application.