

Physical Properties	Nominal Value	Test Method
Density / Specific Gravity	1.32 to 1.51 g/cm ³	ASTM D792
Water Absorption		
24 hr	0.040 to 1.9 %	ASTM D570
24 hr, 23°C	0.040 to 0.41 %	ISO 62
Equilibrium	0.20 to 0.50 %	ASTM D570

Mechanical Properties	Nominal Value	Test Method
Tensile Modulus	6890 to 10500 MPa	ASTM D638
Tensile Strength		
Yield	48.1 to 57.9 MPa	ASTM D638
--	54.8 to 88.4 MPa	ISO 527-2
Flexural Modulus	6370 to 16700 MPa	ISO 178
Flexural Strength		
--	68.9 to 203 MPa	ASTM D790
--	77.6 to 123 MPa	ISO 178
Compressive Strength		
--	45.2 to 314 MPa	ASTM D695
--	186 to 232 MPa	ISO 604

Impact Properties	Nominal Value	Test Method
Charpy Notched Impact Strength	1.6 to 6.0 kJ/m ²	ISO 179
Notched Izod Impact	15 to 71 J/m	ASTM D256
Unnotched Izod Impact	16 to 22 J/m	ASTM D4812

Hardness Properties	Nominal Value	Test Method
Rockwell Hardness		
--	42 to 112	ASTM D785
--	105 to 112	ISO 2039-2

Thermal Properties	Nominal Value	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed	150 to 194 °C	ASTM D648
Melting Temperature	63.4 to 136 °C	
RTI Elec	113 to 160 °C	UL 746B
RTI Str	123 to 150 °C	UL 746B

Electrical Properties	Nominal Value	Test Method
Volume Resistivity		
--	1.1E+10 to 2.5E+13 ohms-cm	ASTM D257

--	8.4E+11 to 1.0E+13 ohms-cm	IEC 60093
Dielectric Strength		
--	7.4 to 15 kV/mm	ASTM D149
--	10 to 12 kV/mm	IEC 60243-1
Dielectric Constant	4.39 to 7.15	ASTM D150
Dissipation Factor	0.038 to 0.095	ASTM D150
Arc Resistance	31.1 to 182 sec	ASTM D495
Comparative Tracking Index (CTI)	139 to 500 V	UL 746A
Comparative Tracking Index	180 to 225 V	IEC 60112
High Amp Arc Ignition (HAI)	195 to 200	UL 746A
High Voltage Arc Tracking Rate (HVTR)	1.90 to 24.0 mm/min	UL 746A
Hot-wire Ignition (HWI)	7.6 to 300 sec	UL 746A
Insulation Resistance	3.5E+6 to 1.0E+11 ohms	IEC 60167

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.