

PETG

1,4-Benzenedicarboxylic acid, 1,4-dimethyl ester, polymer

% by w	Content
> 99 %	Copolymer
< 1 %	Additives

Physical	Test Method	Nominal Value (SI)
Specific Gravity	ASTM D-792	$1.27 \frac{g}{cm^3}$
Water Absorption (24 hr)	ASTM D-570	0.20%
Mechanical		
Tensile Strength		
Yield	ASTM D-638	53.0 MPa
Break	ASTM D-638	26.0 MPa
Tensile Elongation		
Yield	ASTM D-638	5.0 %
Break	ASTM D-638	70 %
Flexural Modulus	ASTM D-790	2150 MPa
Flexural Strength	ASTM D-790	80.0 MPa
Impact		
Notched Izod Impact (23°C)	ASTM D-256	$90 \frac{J}{m}$
Hardness		
Rockwell Hardness (R-Scale)	ASTM D-785	116

Thermal		
Deflection Temperature Under Load		
0.45 MPa, Unannealed	ASTM D-648	74.0 °C
1.8 MPa, Unannealed	ASTM D-648	70.0 °C
Vicat Softening Temperature	ASTM D-1525	83.0 °C
Electrical		
Surface Resistivity	ASTM D257	1.0E+16 ohm
Volume Resistivity	ASTM D-257	1.0E+15 ohm*cm
Dielectric Strength	ASTM D-149	16 kV/mm
Dielectric Constant		
60 Hz	ASTM D-150	2.60
1 MHz	ASTM D-150	2.40
Dissipation Factor		
60 Hz	ASTM D-150	5.0E-3
1 MHz	ASTM D-150	0.023