

PETG 3D Filament Material

Technical Data

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.27 g/cm ³	ASTM D792
Water Absorption (24 hr)	0.20 %	ASTM D570
Color b - Hunter ⁴	< 1.00	ASTM E308
Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield	53.0 MPa	
Break	26.0 MPa	
Tensile Elongation ⁵		ASTM D638
Yield	5.0 %	
Break	70 %	
Flexural Modulus	2150 MPa	ASTM D790
Flexural Strength ⁶	80.0 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C)	90 J/m	ASTM D256
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	116	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed	74.0 °C	
1.8 MPa, Unannealed	70.0 °C	
Vicat Softening Temperature	83.0 °C	ASTM D1525 ⁷
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+16 ohm	ASTM D257
Volume Resistivity	1.0E+15 ohm·cm	ASTM D257
Dielectric Strength ⁸	16 kV/mm	ASTM D149
Dielectric Constant		ASTM D150
1 kHz	2.60	
1 MHz	2.40	
Dissipation Factor		ASTM D150
1 kHz	5.0E-3	
1 MHz	0.023	
Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
1.00 mm	HB	
1.50 mm	HB	
3.00 mm	V-2	
Optical	Nominal Value Unit	Test Method
Gloss (60°)	159	ASTM E308
Refractive Index	1.570	ASTM D542
Transmittance	89.0 %	ASTM D1003
Haze	< 1.0 %	ASTM D1003