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m3D
Innovating Tomorrow's Materials

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Technical Data Sheet: PETg Copolyester

Description: Our PETG copolyester filament offers excellent balance of strength, toughness, and ease of printing. Compared to PLA, PETG provides higher impact resistance, improved layer adhesion, and greater thermal stability while remaining easy to process on open-frame printers. Its naturally low shrinkage and chemical resistance make it ideal for functional parts, enclosures, jigs, fixtures, and durable prototypes requiring toughness without the warpage of ABS.
This material is FDA approved for food and beverage use.

Physical Properties	Standard	Units	Recorded Value
Density	ISO 1183	g/mL	1.27

Mechanical Properties	Standard	Unit	Recorded Value
Tensile Strength, Break	ISO 527	MPa	50
Elongation at break	ISO 527	%	120
Flexural Strength	ISO 178	MPa	70
Flexural Modulus	ISO 178	MPa	2060
IZOD Impact, charpy	GB/T 1843	kJ/m^2	8

Thermal Properties	Standard	Unit	Recorded Value
Glass Transition Temp. Tg	DSC	°C	73
Heat Deflection Temperature at 0.45 MPa	ISO 75	°C	75

Electrical Properties	Standard	Unit	Recorded Value
Surface Resistance	ASTM D257	Ω / sq	$>10^{13}$

Printer Settings:
Extruder Temperature: 230-245°C
Build Plate Temperature: 75°C
Fan speed: 0-20%
Print Speed: < 1000 mm/s
Max Volumetric Flow: < 25 mm^3 / s on 800 micron nozzles

Notice:
Typical values, not specifications. Performance varies with printer, part geometry, and settings. Users must verify fitness for purpose and comply with regulations. Matter Industries Inc. provides no warranties and assumes no liability.

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