



TDS Rev 1.0

**Technical Data Sheet: ECOMAX® Tough PLA 3D Printing Filament**

Physical Properties	Standard	Unit	Typical Value
Density	ISO 1183	g/cc	1.22

Mechanical Properties	Standard	Unit	Typical Value
Tensile Strength, Break	ISO 527	MPa	53
Tensile Modulus	ISO 527	MPa	2272
Tensile Elongation, Break	ISO 527	%	65
Flexural Strength	ISO 178	MPa	98
Flexural Modulus	ISO 178	MPa	2875

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	DSC	°C	55
Deflection Temperature at 0.45 MPa (66psi)	ISO 75	°C	80

Electrical Property	Standard	Unit	Typical Value
Surface Resistance	ASTM D257	Ohm/sq	>10 <sup>13</sup>

Printed Specimen Conditions
Printer: Open Source FDM/FFF
Nozzle: 0.4mm
Layer Height: 0.25mm
Infill: 100%, +/- 45°
Extrusion Temp: 220°C
Bed Temp: 23°C
Specimen Orientation: XY Flat

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