



TDS Rev 1.0

Technical Data Sheet: BioGuard™ Antibacterial PLA 3D Filament

Physical Properties	Standard	Unit	Typical Value
Density	ISO 1183	g/cc	1.26

Mechanical Properties	Standard	Unit	Typical Value
Tensile Strength, Break	ISO 527	MPa	58
Tensile Modulus	ISO 527	MPa	2910
Tensile Elongation, Break	ISO 527	%	7
Flexural Strength	ISO 178	MPa	118
Flexural Modulus	ISO 178	MPa	3200

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 ¹³

Printed Specimen Conditions
Printer: Open Source FDM/FFF
Nozzle: 0.4mm
Layer Height: 0.25mm
Infill: 100%, +/- 45°
Extrusion Temp: 215°C
Bed Temp: 23°C
Specimen Orientation: XY Flat

www.3dxttech.com

Disclaimer: The technical data contained on this data sheet is furnished without charge or obligation and accepted at the recipient's sole risk. This data should not be used to establish specifications limits or used alone as the basis of design. The data provided is not intended to substitute any testing that may be required to determine fitness for any specific use.