



TDS Rev 3.0

**Technical Data Sheet: Firewire™ Flame Retardant ABS 3D Filament**

Physical Properties	Standard	Unit	Typical Value
Density	ISO 1183	g/cc	1.18

Mechanical Properties	Standard	Unit	Typical Value
Tensile Strength, Break	ISO 527	MPa	45
Tensile Modulus	ISO 527	MPa	1990
Tensile Elongation, Break	ISO 527	%	4
Flexural Strength	ISO 178	MPa	80
Flexural Modulus	ISO 178	MPa	2250

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	DSC	°C	105
Deflection Temperature at 0.45 MPa (66psi)	ISO 75	°C	95

Fire Testing*	Standard	Unit	Typical Value
Flamability Rating (*Base Resin)	UL 94	-	V-0 @1.5mm

Printed Specimen Conditions
Printer: Open Source FDM/FFF
Nozzle: 0.4mm
Layer Height: 0.25mm
Infill: 100%, +/- 45°
Extrusion Temp: 235°C
Bed Temp: 110°C
Specimen Orientation: XY Flat

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