

PETg 0800 ESD Filament

Jabil Engineered Materials PETg 0800 ESD is an easy processing, electrostatic dissipative (ESD) product for printing parts that require protection from electrostatic discharge. This product has high strength and stiffness with a good balance of properties in XY and Z directions and the added benefit of ESD for jigs, fixtures and tooling that needs to safely handle electronic components.

ADVANTAGES

Applications include jigs, fixtures and tooling, housings and components where permanent static dissipation is required. Produces tough parts with excellent surface quality and minimal warp.

STORAGE AND USE

PETg is a hygroscopic material, meaning it will absorb moisture from the atmosphere, affecting visual quality and mechanical properties. For best results, print and store filament in a dry environment. If necessary, dry filament in an oven at 65 °C (150 °F) for 6 – 12 hours.



PROPERTIES

MECHANICAL PROPERTIES¹

	Test Condition	Typical Value	Method
Tensile Modulus (MPa)	XY coupons, Ambient	1895	ASTM D638, Type I
Tensile Elongation at Break (%)	XY coupons, Ambient	7.9	ASTM D638, Type I
Ultimate Tensile Strength (MPa)	XY coupons, Ambient	38.8	ASTM D638, Type I
Flexural Modulus (MPa)	XY coupons, Ambient	2050	ASTM D790
Flexural Strength (MPa)	XY coupons, Ambient	71.6	ASTM D790
Izod Impact, Notched (J/m)	XY coupons, Ambient	48.5	ASTM D256
Izod Impact, Un-notched (J/m)	XY coupons, Ambient	415.9	ASTM D256

¹Testing conducted on coupons printed at a temperature of 270°C, ±45° infill, 0.15 mm layer height and 3 wall contours. Typical values are for reference only.

THERMAL PROPERTIES²

	Test Condition	Typical Value	Method
Heat Deflection Temperature (°C)	0.455 Mpa	67.4	DMA

²Testing conducted on coupons printed at a temperature of 270 °C, ±45° infill, 0.15 mm layer height and 3 wall contours. Typical values are for reference only.

OTHER PHYSICAL PROPERTIES

	Test Condition	Typical Value	Method
Density (g/cm ³)	Ambient	1.26	ASTM D792
Surface Resistivity (ohm/sq)	Ambient	≤E9	ANSI/ESD STM11.11

DIMENSIONAL PROPERTIES

	Test Condition	Typical Value	Method
Diameter: Mean, Indiv. Axis (mm)	In-line, 100% inspection	1.75±0.05 2.85±0.05	Laser Micrometer

Disclaimer: The information in this technical data sheet, including material properties, are obtained from testing representative samples under carefully controlled conditions and are provided for reference only. Material properties may be impacted by storage, handling, processing equipment/parameters, and product design, among other factors. The information is not a substitute for user testing to determine fitness for any specific use and the user is responsible for ensuring safe and lawful use of the product.

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