



Technical Data Sheet: ESD-PLA

Material Description:

3DXSTAT ESD-PLA provides electrostatic dissipation to protect delicate equipment and electronics from static buildup. With the low warpage behavior of PLA coupled with the dimensional reinforcement of carbon nanotubes, parts can be printed without a heated chamber, making it accessible to use with virtually any desktop printer. For low-heat applications where budget is vital, 3DXSTAT ESD-PLA delivers technical performance without breaking the bank.

Mechanical Property	Testing Standard	Orientation	Unit	Typical Value
Tensile Strength	ASTM D638	Vertical	MPa	23
Tensile Modulus	ASTM D638		GPa	2.5
Tensile Strength	ASTM D638	Flat	MPa	41
Tensile Modulus	ASTM D638		GPa	3.1
Tensile Strength	ASTM D638	Edge	MPa	38.7
Tensile Modulus	ASTM D638		GPa	2.9
Flexural Strength	ASTM D790	Edge	MPa	51.4
Flexural Modulus	ASTM D790		GPa	2.8
Izod Impact, Unnotched	ASTM D256	Flat	KJ/m ²	8.21

Thermal Properties	Testing Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	DSC	°C	60
Deflection Temperature at 0.45 MPa (66psi)	ISO 75	°C	55

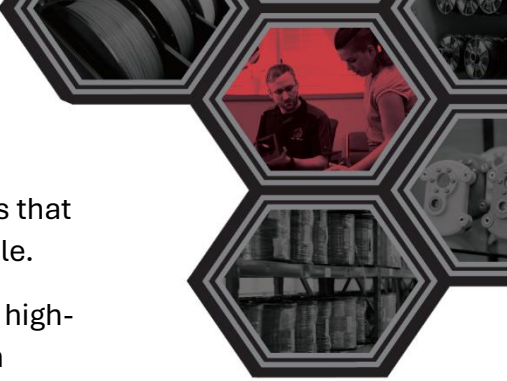
Note: Testing data provided in this document was generated by an independent, third-party lab to ensure an unbiased performance evaluation.



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Mission: To inspire creators by delivering innovative manufacturing solutions that empower professionals to solve complex challenges once thought impossible.

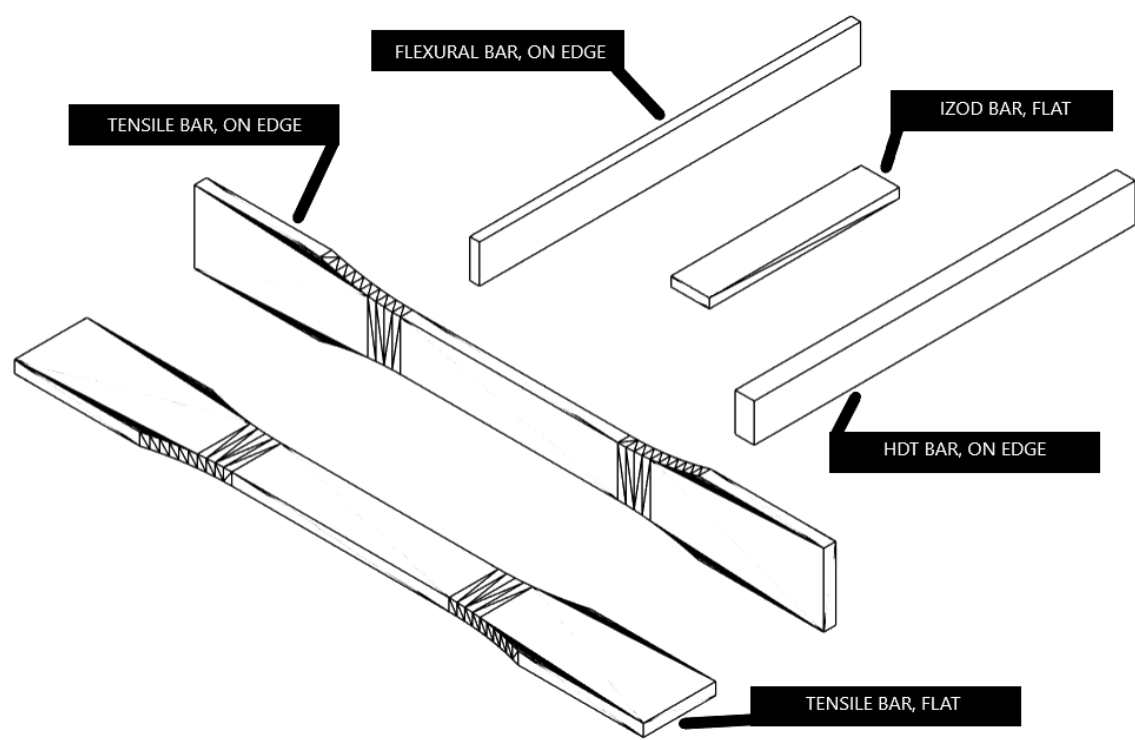
Vision: Become a trusted partner for demanding applications by developing high-performance materials that fuel sustainable design and engineering, with an unwavering commitment to continuous improvement.



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

Electrical Properties	Testing Standard	Unit	Typical Value
Surface Resistivity	ASTM D257	Ohm (Ω)	>10 ⁴ - <10 ⁹

Printer	Nozzle Temp (°C)	Bed Temp (°C)	Print Speed (mm/s)	Layer Height (mm)	Infill
Bambu P1S	240	55	246	0.20	Solid



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 for any testing that may be required to determine fitness for any specific use.

