

# Material Datasheet

## PLA

PLA is the most commonly used material in 3D Printing. It's biodegradable and very strong. The perfect choice for printing large objects thanks to its low thermal expansion (little to no warping) and for printing tiny parts because of its low melting temperature.

### Common Applications

- Test and calibration items
- Dimensionally accurate assemblies
- Decorative Parts
- Cosplay Props

Physical Properties	Standard	Unit	Typical Value
<b>Density</b>	ASTM D792	g/cm <sup>3</sup>	1.24
<b>Melt Flow Index</b>	ASTM D1238	g/10 min	2(190°C/2.16Kg)

Mechanical Properties	Standard	Unit	Typical Value
<b>Tensile Strength</b>	ASTM D882	MPa	60
<b>Elongation at Break</b>	ASTM D882	%	29
<b>Flexural Strength</b>	ASTM D790	MPa	84
<b>Flexural Modulus</b>	ASTM D790	MPa	3642
<b>Izod Impact Strength</b>	ASTM D256	KJ/m <sup>2</sup>	7

Thermal Properties	Standard	Unit	Typical Value
<b>Glass Transition Temperature (Tg)</b>	ASTM D3418	°C	55-60