

Product datasheet

PLA

PLA is a tough, easy to use high grade PLA type of filament, ideal for 3D printing. Slightly modified, the filament retains the typical features of PLA, but makes it tougher and less brittle. Due to a low shrinkage factor PLA will not deform after cooling. Poly Lactic Acid is a biodegradable plastic made from renewable natural resources and one of the most popular materials for 3D printing



Features:

- Tougher and less brittle compared to regular PLA
- Easy to print at low temperature
- Low warping
- Biodegradable
- Limited smell

Colours:

PLA is available from stock in a large selection of bright colours

Additional info

Due to its low tendency to warp PLA can also be printed without a heated bed. If you have a heated bed the recommended temperature is $\pm 35-60^{\circ}\text{C}$.

PLA can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry ($15-25^{\circ}\text{C}$) and away from UV light. This enhances the shelf life significantly

Dimensions

Size	Ø tolerance	Roundness
1,75mm	$\pm 0,05\text{mm}$	$\geq 95\%$
2,85mm	$\pm 0,10\text{mm}$	$\geq 95\%$

Physical properties

Description	Testmethod	Typical value
Specific gravity	ASTM D1505	1,24 g/cc
MFI	-	6,0 g/10 min
Tensile strength	ASTM D882	110 MPa (MD) 145 MPa (TD)
Elongation at break	ASTM D882	160% (MD) 100% (TD)
Tensile modulus	ASTM D882	3310 MPa (MD) 3860 Mpa (TD)
Impact Strength	-	7,5 KJ/m ²

Thermal properties

Description	Testmethod	Typical value
printing temp.	-	180-210°C
melting temp.	-	210°C \pm 10°C
melting point	ASTM D3418	145-160°C
vicat softening temp.	ISO 306	$\pm 60^{\circ}\text{C}$