

# PLA TDS

## Poly lactide

### Product Description

AzureFilm PLA (Polylactide) is a filament with good mechanical properties and excellent printing quality. This filament is suitable for parts that require high strength and stiffness and easy processability (no warping, no irritating smell).

### Properties

Property of 3D printed specimens	Test condition	PLA
Tensile modulus [GPa]	1 mm/min	3,3
Tensile strength [MPa]	50 mm/min	59,0
Strain at break (Tensile) [%]	50 mm/min	4,2
Strain at tensile strength [%]	50 mm/min	3,8
Flexural modulus [GPa]	2 mm/min	2,8
Flexural strength [MPa]	2 mm/min	73,6
Flexural strain at flexural strength [%]	2 mm/min	3,3
Strain at break (Flexural) [%]	2 mm/min	3,3
Charpy unnotched [kJ/m <sup>2</sup> ]	23 °C	10,4

### Test specimens print settings

3D printer: Creality Ender 3	Infill: 20 %	Nozzle temperature: 200 °C
Slicer: Cura	Shells: 2	Bed temperature: 55 °C
Nozzle: 0,4 mm	Layer height: 0,2 mm	Print speed: 50 mm/s

### Printing Recommendations

Nozzle temperature: 200 – 230°C  
 Heated bed: Not required (recommended 50-60 °C)  
 Print speed: 50 – 100 mm/s  
 Build platform: Blue tape, Kapton tape, Glass bed