

Poly lactid+ (PLA+)

General

PLA+ is an impact-resistant and heat-optimized PLA. The appropriate additives make purefil PLA+ significantly more impact-resistant than standard PLA. The heat resistance has also been optimized. PLA+ thus achieves comparable properties to ABS. However, PLA+ is just as easy to print as standard PLA.

The additives also optimize biodegradability.

The PLA+ filament probably has the best surface structure of all filaments with a very pleasant soft-touch surface. The matte look makes 3D printed parts look very high-quality.

The only disadvantage compared to standard PLA is the poorer UV resistance.

The material meets the composition requirements of the European Regulation No. 10/2011 on plastic materials for food contact.

advantageous

- extremely impact-resistant
- better biodegradability than standard PLA
- higher heat resistance
- matte look
- soft touch surface

disadvantageous

- poorer UV resistance than standard PLA

Processing data

Printing temperature

210-250 °C

Heated bed temperature

70-90°C

Drying temperature

60°C

Drying time

2-4h

Technical specifications

Shrinkage	-	%
MFR (ISO 1133)	6.6	g/10min
Yield stress (ISO 527-3)	54	MPa
Elongation at yield (ISO 527-3)	13	%
Elongation at break (ISO 527-3)	84	%
Tensile modulus (ISO 527-3)	2840	MPa
Heat deflection temperature 0.45 MPa (ISO 75-1/-2)	90	°C
Vicat softening temperature B50 (ISO 306)	-	°C
Thermal conductivity 23°C	-	W/(K*m)
Flammability (UL 94)	HB	
Density (ISO 1183)	1.25	g/cm ³