

High Speed Polylactide (PLA)

General

The High Speed PLA was specially developed for 3D printers with printing speeds of up to 600mm/s. The special formulation, which allows the material to melt particularly quickly, drastically reduces printing time. Thanks to the good flow behavior, the printed parts achieve excellent surface quality and accuracy of detail even at very high speeds. Even at speeds of 600mm/s, the nozzle does not get clogged with the purefil High Speed PLA and the layer adhesion of the printed parts is excellent.

The High Speed PLA delivers the same properties as normal PLA at up to 10x printing speed. As a starting material, PLA is generally biodegradable under special conditions. We still recommend disposing of the PLA parts in the trash and not in the garden. This filament meets the composition requirements of the European Regulation No. 10/2011 on plastic materials for food contact.

Advantageous

- High printing speeds possible
- Excellent flow behavior
- Reduction of printing time
- Industrially biodegradable
- Does not fade

disadvantageous

- Can become soft again from 60 degrees
- Rather brittle

Processing data

Printing temperature

180-230 °C

Heated bed temperature

Not required, 50-60°C recommended

Drying temperature

60°C

Drying time

4h

Technical specifications

Shrinkage	0.1	%
MFR (ASTM D1238)	80	g/10min
Yield stress (ASTM D638)	62	MPa
Elongation at yield (ASTM D638)	3.5	%
Elongation at break (ASTM D638)	3.5	%
Tensile modulus (ASTM D882)	3500	MPa
Heat deflection temperature 0.45 MPa (ASTM E2092)	55	°C
Vicat softening temperature A	-	°C
Thermal conductivity 23°C	-	W/(K*m)
Brennbarkeit	HB	
Dichte (ASTM D792)	1.24	g/cm ³