purefil of Switzerland

Polylactide Soft (PLA Soft)

General

Polyactid Soft is a polymer that consists, among other things, of lactic acid molecules. PLA Soft is a special type of PLA, which is extremely flexible and has high impact strength. PLA Soft has an elongation at break 30 times higher than normal PLA and is an easy-to-print alternative to TPE. A heating bed is advantageous for PLA Soft filament, but not absolutely necessary.

We recommend using an air cooler when processing PLA Soft filament. Furthermore, PLA has a much more pleasant smell than other plastics in processing.

As a basic material, PLA Soft is generally biodegradable under special conditions. However, the end product contains pigments and additives. Because of this, the PLA Soft parts must still be disposed of in the waste and not in the garden. This filament meets the requirements for the composition of European Regulation No. 10/2011 on plastic materials for food contact.

advantageous

- Extremely flexible

- 35 times higher elongation at break than PLA
- Ideal material for beginners
- Easier to print than TPE
- Less flammable than ABS
- Print directly on glass plate
- Industrially biodegradable
- Does not fade

disadvantageous

- Can soften again from 60 degrees
- Direct drive extruder recommended
- More difficult to print than normal PLA

Processing data

Printing temperature 190-230 °C Heated bed temperature Nicht benötigt, 50 °C empfohlen Drying temperature 80°C Drying time 2h

Technical specifications

Shrinkage (ISO 294-4, 2577)	-	%
MFR (ISO 1133)	8	g/10min
Yield stress (ISO 527)	20	MPa
Elongation at yield (ISO 527)	-	%
Elongation at break (ISO 527)	180	%
Tensile modulus (ISO 527)	-	MPa
Heat deflection	-	
temperature 0.45 MPa		
Vicat softening temperature A	-	
(ISO 306)		
Thermal conductivity 23°C	-	
Flammability	HB	
Density	1.20	g/cm ³



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