SILK TDS

Polylactide

Product Description

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

Properties

Property of 3D printed specimens	Test condition	PLA Silk
Tensile modulus [MPa]	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^2]	23 °C	10,4

Test specimens print settings

3D printer: Creality Ender 3
Slicer: Cura
Nozzle: 0,4 mm

Infill: 20 %
Shells: 2
Layer height: 0,2 mm

Nozzle temperature: 230 °C
Bed temperature: 55 °C
Print speed: 50 mm/s

Printing Recommendations

Nozzle temperature: 210 – 240°C
Heated bed: Not required (recommended 70-80 °C)
Print speed: 50 – 100 mm/s
Build platform: Blue tape, Kapton tape, Glass bed

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