

PRODUCT DESCRIPTION

YOUSU Silk PLA 3D FILAMENT, a thermoplastic derived from reproducible resources, which is specially designed by Yousu 3D Technology Co., Ltd, limited for 3D FDM printer. As a popular product used in 3D printing, our product shows excellent mechanical and physical properties after printed as a part.

Properties	ASTM	Unites	Test Condition	Typical Value
Physical Properties				
Density	D792	g/cm ³	23℃	1.18~1.23
Melt Flow Rate	D1238	g/10min	190℃, 2.16Kg	7.5~8.5
Mechanical Properties				
Tensile Strength (X-Y)	D638	MPa	50mm/min	46~48
Tensile Strength (Z)	D638	MPa	50mm/min	17.3~18.5
Tensile Modulus (X-Y)	D638	MPa	50mm/min	1074~1105
Elongation (X-Y)	D638	%	50mm/min	8.9~11.2
Flexural Strength (X-Y)	D790	MPa	2mm/min	63~65
Flexural Modulus (X-Y)	D790	MPa	2mm/min	1403~1452
Impact Strength, IZOD notched (X-Y)	D256	KJ/m ²	4mm, 23℃	4.46~5.21
Thermal Properties				
Heat Distortion Temp.	D648	℃	0.45MPa	50~53

Applications

YOUSU Silk PLA 3D FILAMENT is specially designed for 3D printing.

Processing Information

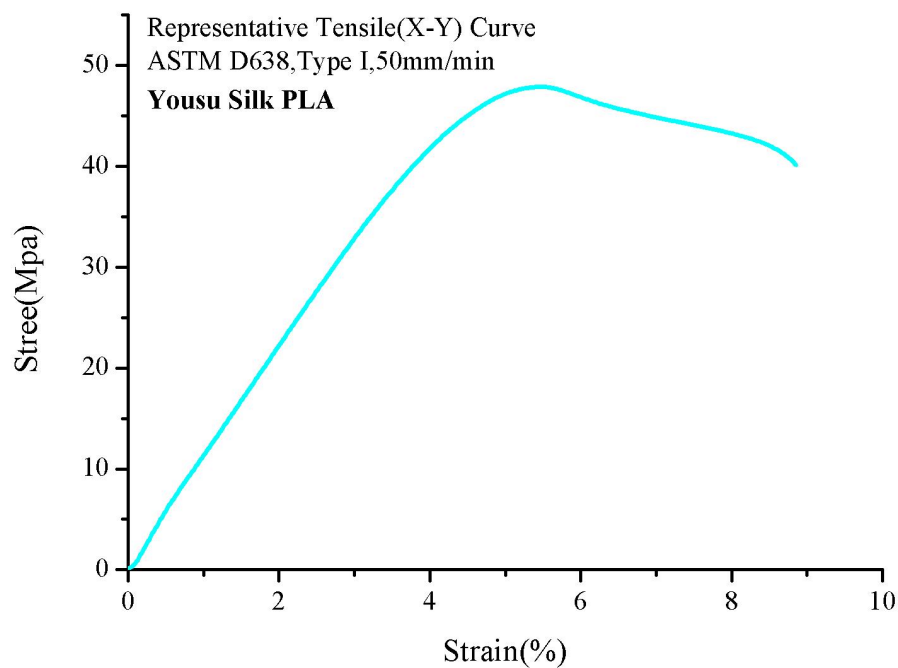
YOUSU Silk PLA 3D FILAMENT, is applied to most of the FDM 3D printer on the market. Our product has two kinds of diameters: 1.75mm and 3.0mm and show excellent stability and mobility in the molten state. Parts printed with our products have well thermal and mechanical properties. Before printing some parameters should be noticed.

All information provided and recommendations made herein are intended to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use in order to make their own final decision regarding suitability. We do not guarantee results, freedom from patent infringement, or suitability of resultant products for any suggested application with respect to the use of any formula or material described herein.

Basic Parameters	
Product Code	
Material	Silk PLA
Diameter	1.75 mm
Printing Temp	200℃-240℃
Print Bed Temp	40℃~60℃
Cooling fan	100%
Printing speed	40mm/s~250mm/s (or higher speed)

MECHANICAL PROPERTIES

Representative Tensile(X-Y) Curve



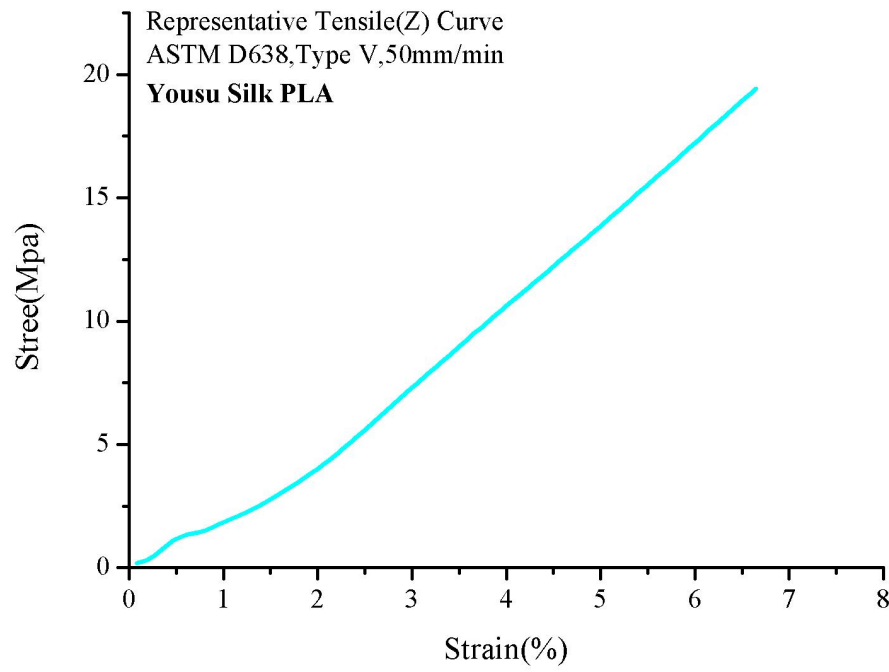
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YOUSU Silk PLA 3D FILAMENT
Guangzhou Yousu 3D Technology Co., Ltd

Revision Date: 10/04/2023
Version: 1.0

Representative Tensile(Z) Curve



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