## **PRODUCT DESCRIPTION**

YOUSU ABS 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.

Basic Parameters				
Product Code		YS-ABS <sup>111</sup>		
Material		ABS		
Diameter		1.75/3.0 mm		
Printing Temp		220-250℃		
Print Bed Temp		80-120℃		
Properties	Test Method	Unites	Test Condition	Typical Value
Physical Properties				
Density	ISO 1183	g/cm <sup>3</sup>	23°C	1.05
Melt Flow Rate	ISO 1133	g/10min	220°C, 10Kg	18.9
Mold Shrinkage	ISO 294-4	%		0.4-0.7
Linear Expansion Coefficient	ISO 11359			8.6×10 <sup>-5</sup>
Mechanical Properties				
Tensile Strength	ISO 527	MPa	50mm/min, yield 50mm/min, break	47
Tensile Elongation		%	50mm/min, break	30
Flexural Strength	ISO 178	MPa	2mm/min	76
Flexural Modulus		GPa		2.2
Impact Strength, IZOD	ISO 180/1A	KJ/m <sup>2</sup>	23℃ Notched	19
notched			-30°C Notched	9
Thermal Properties				
Vicat Softening	ISO 306	°C	1Kg,50°C/hr	104
Temperature			5Kg,50°C/hr	100
Heat Deflection Temperature	ISO 75/A	°C	1.8 MPa Unannealed	83
			1.8 MPa Annealed	98
Flammability				
Flammability	UL-94			1.5mm HB

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.



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## Applications

YOUSU ABS 3D FILAMENT is specially designed for 3D printing.

## **Processing Information**

Yousu ABS 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.

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