## **PRODUCT DESCRIPTION**

YOUSU HIPS 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	Test Method	Unites	Test Condition	Typical Value
Physical Properties				
Density	ASTM D792	g/cm <sup>3</sup>	23 °C	1.04
	ISO 1183			
Melt Flow Rate	ASTM D1238	g/10min	200 °C, 5.0Kg	5.5
	ISO 1133			
Mechanical Properties				
Tensile Strength	ASTM D638	MPa	23°C	22.6
	ISO 527-2			23.0
Tensile Elongation	ASTM D638	%	23°C, break	40
	ISO 527-2			
Flexural Strength	ASTM D790	MPa	23 °C	43.0
	ISO 178			
Flexural Modulus	ASTM D790	MPa		2260
	ISO 178			
Impact Strength,	ASTM D256	J/m	23℃ 6.35mm	110
IZOD Unnotched	ISO 180			110
Thermal Properties				
Vicat Softening	ASTM D1525	°C		97.0
Temperature	ISO 306/B			97.0
Heat Deflection	ASTM D648	- °C	1.8 MPa Annealed	90.0
Temperature	ISO 75-2/A			
Flammability				
Flammability	UL-94		1.5 mm	HB

## Applications

YOUSU HIPS 3D FILAMENT is specially designed for 3D printing. **Processing Information** 

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.

Yousu HIPS 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.

Basic Parameters			
Product Code	YS-HIPS <sup>141</sup>		
Material	HIPS		
Diameter	1.75/3.0 mm		
Printing Temp	220-270°C		
Print Bed Temp	100-110°C		

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