



FILATECH
Making It Better

HIPS Filament

HIPS – HIGH IMPACT POLYSTYRENE

High Impact Polystyrene (HIPS) is very similar to ABS. The main difference is that HIPS plastic can be dissolved using Limonene as a solvent, therefore making it a great option as support material when printing ABS with dual extrusion printer.

HIPS filament is as easy to 3D print with as ABS but is much less likely to warp.

Our HIPS filaments are available in different colors and 1.75mm and 2.85mm diameter.

OPTIONS:

Size:	1.75	mm +/- 0.03 mm
	2.85	mm +/- 0.03 mm
Color:	Full Color Range (Special Colors By Order)	
Packaging:	0.5	Kg Spools
	1.0	Kg Spools
	6.0	Kg Spools

FEATURES:

Higher melting temperature for better mechanical strength at higher temperature.

Free from harmful or hazardous materials.

Low shrinkage rate.

High rigidity combined with good flex.

Produces objects with higher toughness.

Proper for objects with good toughness, higher working and with minimum warping during printing.

Shall be printed on heat bed.

Parts can withstand temperatures of up to 80 °C without losing strength.

Parts can be vapor smoothed for greater strength and better surface finish

Limonene Soluble

SPECIFICATIONS:

Filament Material:	HIPS	
Specific Gravity:	1.07	gr/cm ³
Size:	1.75	mm +/- 0.03 mm
	2.85	mm +/- 0.03 mm
Printing Information:	Extruder: 220 – 230 °C	
	Bed:	60 – 100 °C
Working Temperature:	Withstands up to 80 °C	

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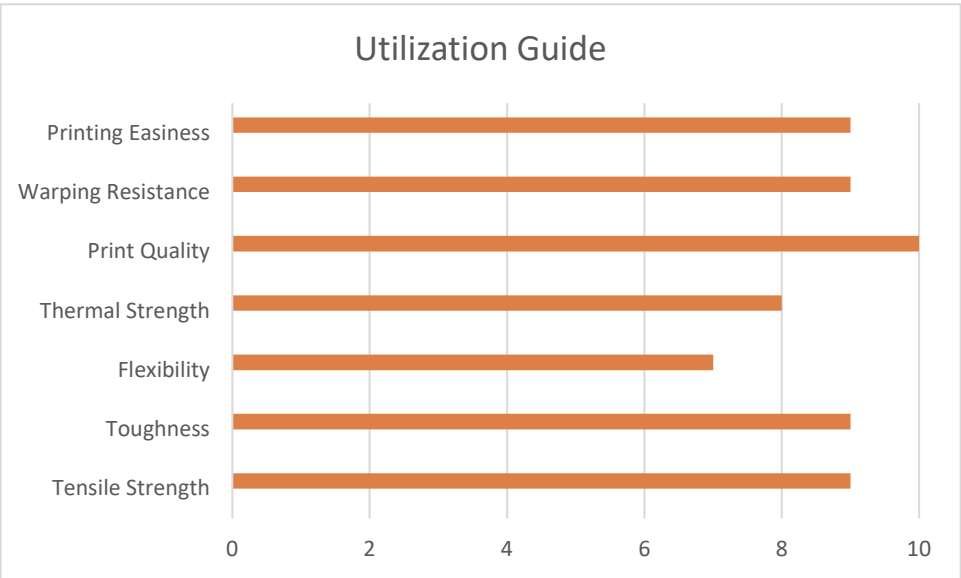
ENGINEERING PROPERTIES:

Property	ASTM Methods	Units	Value
Density	D-792	g/cm ³	1.07
Tensile Strength	D-638	Kg/cm ²	226
Tensile Modulus	D-638	Kg/cm ² (X10 ⁴)	1.9
Elongation	D-638	%	51
Flexural Strength	D-790	Kg/cm ²	438
Flexural Modulus	D-790	Kg/cm ² (X10 ⁴)	2.3
IZOD Impact Strength	D-256	Kg-cm/cm	15.7
Heat Deflection Temp.	D-648	°C	89
Vicat Softening Temp.	D-1525	°C	99
Melt Flow Index	D-1238	g/10 Min.	5.5
Residual Monomer	GC	PPM	368

UTILIZATION GUIDE:

(Comparative, Out of 10)

Tensile Strength	9
Toughness	9
Flexibility	7
Thermal Strength	8
Print Quality	10
Warping Resistance	9
Printing Easiness	9



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CERTIFICATES:

Management:	BS EN ISO 9001:2015
Quality:	CE (CE-2924)
Environment:	RoHS (UQ-5724)