



**FILATECH**  
Making It Better

# ABS Filament

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## ABS - ACRYLONITRILE BUTADIENE STYRENE

Our ABS (Acrylonitrile Butadiene Styrene) is a commonly used 3D printer material. Best used for making durable parts that need to withstand higher temperatures. In comparison to PLA filament, ABS plastic is less "brittle" and more "ductile." It can also be post-processed with acetone to provide a glossy finish. When 3D printing with ABS filament, a heated printing surface is recommended, as ABS plastic will contract when cooled leading to warped parts. ABS filament is available in both 1.75mm and 2.85mm diameter sizes.

The latest range of ABS filaments have been developed by our expert engineers utilizing the latest technology and high quality prime virgin raw material.

### 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
	30	Gr Loops (Sample/3D Pen)

### 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
- Easy to glue with acetone.

### SPECIFICATIONS:

Filament Material:	ABS	
Specific Gravity:	1.03	gr/cm <sup>3</sup>
Size:	1.75	mm +/- 0.03 mm
	2.85	mm +/- 0.03 mm
Printing Information:	Extruder: 220 – 260 °C	
	Bed:	80 – 100 °C
Working Temperature:	Withstands up to 80 °C	

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## ENGINEERING PROPERTIES:

PROPERTIES	ASTM TEST METHOD	TEST CONDITION	UNIT	VALUE
Melt Flow Index	D1238	200 °C, 5 Kg	g/10 min	0.4
Mass Density	D792	23 °C	-	1.03
Hardness	D785	-	R Scale	100
Tensile Strength (Yield)	D638	6 mm/min	Kg/cm <sup>2</sup>	370
			lb/in <sup>2</sup>	5250
Tensile Elongation	D638	6 mm/min	%	40
Flexural Strength	D790	2.8 mm/min	Kg/cm <sup>2</sup>	560
			lb/in <sup>2</sup>	8000
Flexural Modulus	D790	2.8 mm/min	10 <sup>4</sup> Kg/cm <sup>2</sup>	2.0
			10 <sup>5</sup> lb/in <sup>2</sup>	2.8
Izod Impact Strength	D256 (Notched)	6.4 mm, 23°C	Kg-cm/cm	37
			ft-lb/in	6.9
		3.2 mm, 23°C	Kg-cm/cm	44
			ft-lb/in	8.1
Vicat Softening Temp.	D1525	1 Kg, 50 °C/hr	°C	106
			°F	223
Heat Distortion Temp.	D648	1.8 MPa Annealed	°C	95
			°F	203
		1.8 MPa Unannealed	°C	85
			°F	186
UL Flammability	UL 94	-	-	1.5 mm HB

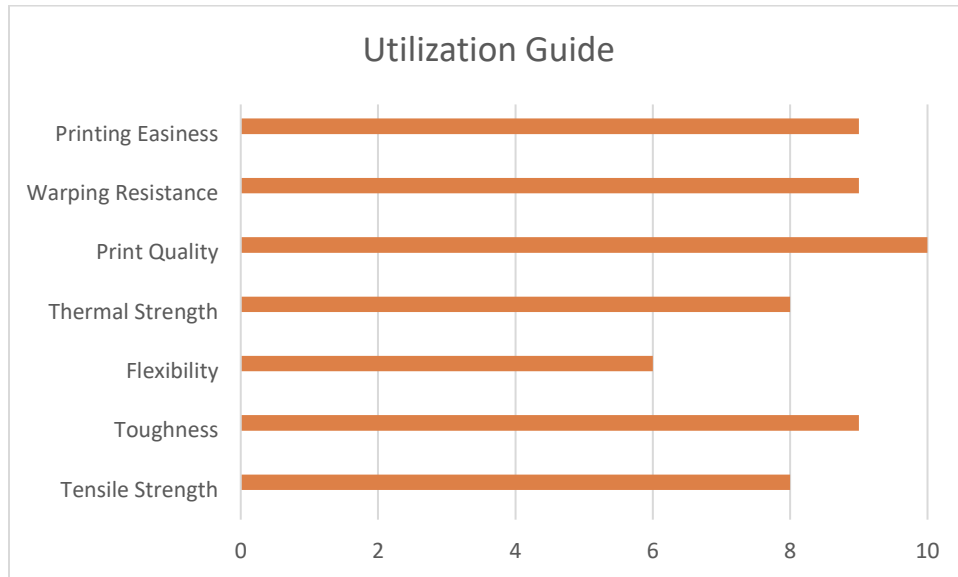
## UTILIZATION GUIDE:

(Comparative, Out of 10)

Tensile Strength	8
Toughness	9
Flexibility	6
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)