Technical Data Sheet

Chemical Name:
Acrylonitrile Butadiene Styrene

Main Applications:
Concept modeling, Educational projects, Design projects, Ideal for functional prototypes stronger than PLA.

Description:
ABS is a commonly used filament suitable for making more durable and stronger parts than with PLA, as it can stand higher temperatures, it is slightly more flexible and can be easily painted.

Key Aspects:
It can be treated with acetone or acetone vapor to give it a glossy finish (be careful) and to make the object stronger, or to solidly glue parts together. Use HIPS as support material for printing ABS. ABS shrinks when it cools so you should use an enclosed printer with warm and steady air temperature (> 25°C) in order to prevent delamination or warping.

Diameter:
1.75 mm, 2.85 mm

Weight
750 g

Density:
1.04

Meters per 750 g:
113.044 / 299.82

Weight per meter:
2.5 / 6.63 g

Meters per kg:
399.76 / 150.725

Color Information:	Color:	PANTONE:
	Black	6C
	Blue	2935 C
	Green	17-6153 TCX
	Gray	8402 C
	Natural	--
	Orange	1505 C
	Red	485 C
	White	11-4001
	Yellow	1235 C

Printing Settings	
Printing Temperature	230-250°C
Density (g/cc)	1.05
Build Plate Temperature	Required 80-100°C
Cooling Fans	OFF

Mechanical Properties	Typical value	ASTM Method
Elongation	15%	D638
Tensile Strength	485 kgf/cm2	D638
Flexural Strentgh	720 kgf/cm2	D790
Flexural Modulus	24.500 kgf/cm2	D790
Izod Impact Strenght (3.2mm)	24kgf . cm /cm2	D256
Izod Impact Strenght (6.4mm)	20kgf . cm/cm2	D256
Rockwell Hardness (R scale)	109	D785

Physical Properties	Typical value	ASTM Method
Density	1.04 g/cm3	D792
Melt Flow Index (220C, 10kg)	38g/10 min	D1238
Mold Shirinkage	0.5% - 0.8%	D955
Water Absorption	- %	D570

Warning:

This product can expose you to chemicals, which are known to the State of California to cause cancer.
For more information, go to www.P65Warnings.ca.gov

Disclaimer:

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