

## Technical data sheet ABS

Filament: **ABS**.

Brand name: Filalab [www.filalab.lt](http://www.filalab.lt)

Usage: **3D filament for FDM 3D printers.**

Manufacturer: **UAB Filalab, Vilnius, Lithuania.**

Printing recommendations:

Bed temperature: **95°C ± 10°C**

Extruder temperature: **230°C ± 10°C**

Diameter tolerance: **1.75 mm ± 0.03 mm**



## Material Properties

### Physical properties:

Physical properties	Value	Method
Specific Gravity g/cm <sup>2</sup>	1.04	ASTM D792
Molding Shrinkage (Flow), 3.2mm	0.4~0.7 %	ASTM D955
Melt Flow Rate 220°C/10kg	43 g/10min	ASTM D1238

### Mechanical properties:

Physical properties	Value	Method
Tensile Strength, 3.2mm @ Yield 50mm/min	430 kg/cm <sup>2</sup>	ASTM D638
Tensile Elongation, 3.2mm @ Break 50mm/min	30 %	ASTM D638
Tensile Modulus, 3.2mm 1mm/min	21.900 kg/cm <sup>2</sup>	ASTM D638
Flexural Strength, 3.2mm 15mm/min	700 kgf/cm <sup>2</sup>	ASTM D790
Flexural Modulus 1.27mm/min (0.05 inch/min)	2,100 (21,500) MPa (kgf/cm <sup>2</sup> )	ASTM D790

### Thermal properties:

Properties	Value	Method
Heat Deflection Temperature, 6.4mm (Unannealed) 18.6kg 4.6kg	84 Celsius 89 Celsius	ASTM D648
Vicat Softening Temperature 5kg, 50°C/h	94 Celsius	ASTM D1525
Flammability	UL94	HB

### Note:

These results should be regarded as guide values only.

Values depend on print settings, print atmosphere conditions.