

#### 2016-03-23

# ABS

ABS is an extra strong impact-resistant filament ideal for 3D printing of solid printed products. Due to the process stability and physical features of Acrylonitrile Butadiene Styrene it is a widely used thermoplastic polymer in industry. The material is also very light and durable. This makes ABS particularly suitable for tools, toys and all kinds of utensils. Printed at a slightly over-average temperature for ABS, this filament gives extra strong 3D print results.

#### Features:

- · Very high impact-resistance
- Extra strong
- Stable printing
- Light and durable
- Limited warping



#### Dimensions

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

## **Physical properties**

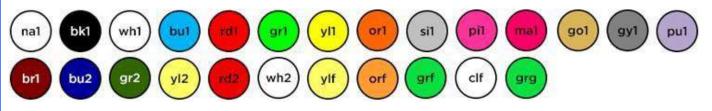
Description	Testmethod	Typical value
Specific gravity	ASTM D792	1,03 g/cc
MFR 220°C/10kg	ASTM D1238	8,0 g/10 min
Tensile strength	ISO 527	44 Mpa
Strain at break	ISO 527	9%
Tensile modulus	ASTM D638	2000 Мра
Impact strength Izod method 23°C	ISO 180/A	36 KJ/m²

## Colours:

ABS is available from stock in 25 bright colours. For non stock colours a minimum of 40kg  $\pm 10\%$  is required.

## **Thermal properties**

Description	Testmethod	Typical value
printing temp.	-	220-270°C
melting temp.	ISO 294	245°C ± 10°C
vicat softening temp.	ISO 306	± 103°C



## Packaging:

ABS is available in nearly any type of packaging and labelling. Ask our team to help you customizing your product.

## Additional info:

Recommended temperature for heated bed is  $\pm$  90-110°C.

ABS is printed at a slightly higher temperature to make the final product extra strong.

ABS can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.