

Technical Data Sheet

Ultrafuse ABS BASIC

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Version No.: 1.0

General information

Components

Acrylonitrile Butadiene Styrene based filament for Fused Filament Fabrication

Product Description

ABS is one of the most used material in FFF printing. Ultrafuse ABS BASIC is a filament featuring cost effective, high heat resistance and good mechanical properties. It is a good choice for engineer application. Heated bed is necessary for good printing performance. The filament is available in various colors.

Delivery form and warehousing

Ultrafuse ABS BASIC filament should be stored at 15 - 25°C in its originally sealed package in a clean and dry environment. If the recommended storage conditions are observed the products will have a minimum shelf life of 12 months.

Product safety

Recommended: Process materials in a well ventilated room, or use professional extraction systems. For further and more detailed information please consult the corresponding material safety data sheets.

Notice

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

Recommended 3D-Print processing parameters

Nozzle Temperature	240 – 260 °C / 464– 500 °F
Build Chamber Temperature	-
Bed Temperature	95 – 110 °C / 203 – 230 °F
Bed Material	Tape, Spray, Glue
Nozzle Diameter	≥ 0.4 mm
Print Speed	40 - 80 mm/s

Drying Recommendations

Drying recommendations to ensure printability	60°C in a hot air dryer or vacuum oven for 4-16 hours
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Please note: To ensure constant material properties the material should always be kept dry.

General Properties

Standard

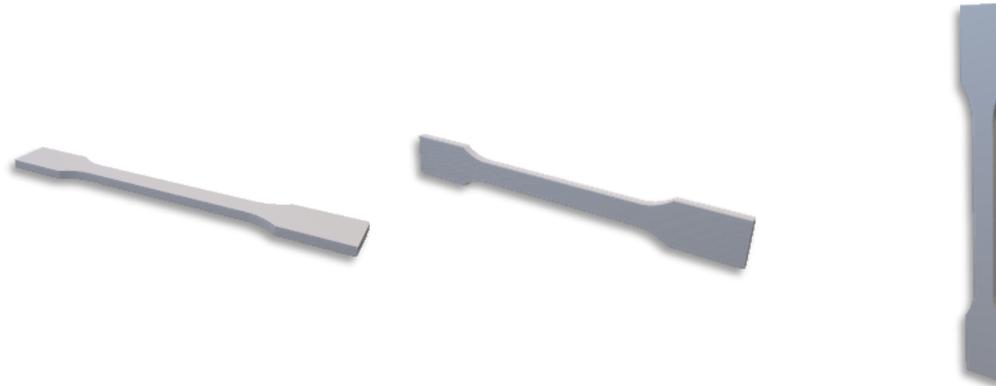
Printed Part Density	1046 kg/m ³ / 65.3 lb/ft ³	ISO 1183-1
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Thermal Properties

Standard

Melt Volume Rate	25.3 cm ³ / 10 min	ISO 1133
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Mechanical Properties



Print direction	Standard	XY Flat	XZ On its edge	ZX Upright
Tensile strength	ISO 527	35.5 MPa / 5.1 ksi	-	22.1 MPa / 3.2 ksi
Elongation at Break	ISO 527	9.4 %	-	1.2 %
Young's Modulus	ISO 527	2460 MPa / 357 ksi	-	2200 MPa / 319 ksi
Impact Strength Izod (unnotched)	ISO 180	40.0 kJ/m ²	-	6.3 kJ/m ²