



ABS

Unionfab

■ Overview

ABS is a technical material for 3D printing, known for its superior comprehensive properties such as high temperature resistance, UV resistance and water resistance. However, the disadvantage is that it warps easily and stinks when printing. Bambu ABS is designed to reduce warping and cracking but maintain outstanding impact resistance. In addition, it's very suitable for high speed printing because of its good flow behavior.

■ Features

High temperature resistance	UV resistance
Water resistance	Impact resistance

■ Physical Properties

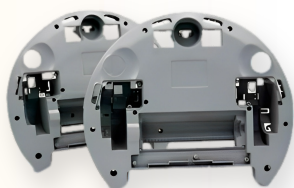
Subjects	Test Method	Data
Density	ISO1183	1.05g/cm ³
Melt Index	260°C, 2.16kg	34.2±3.8g/10min
Melting Temperature	DSC, 10°C/min	200°C
Glass Transition Temperature	DSC, 10°C/min	N/A
Crystallization Temperature	DSC, 10°C/min	N/A
Vicar Softening Temperature	ISO 306, GB/T 1633	94°C
Heat Deflection Temperature	ISO 75 1.8Mpa	84°C
Heat Deflection Temperature	ISO 75 0.45Mpa	87°C
Saturated Water Absorption Rate	25°C, 55%RH	0.65%

■ Mechanical Properties

Subjects	Test Method	Data
Young's Modulus (X-Y)	ISO 527, GB/T 1040	2200±190MPa
Young's Modulus (Z)	ISO 527, GB/T 1040	1960±110MPa
Tensile Strength (X-Y)	ISO 527, GB/T 1040	33±3MPa
Tensile Strength (Z)	ISO 527, GB/T 1040	28±2MPa
Breaking Elongation Rate (X-Y)	ISO 527, GB/T 1040	10.5±1.0%
Breaking Elongation Rate (Z)	ISO 527, GB/T 1040	4.7±0.8%
Bending Modulus (X-Y)	ISO 178, GB/T 9341	1880±110MPa
Bending Modulus (Z)	ISO 178, GB/T 9341	1590±1MPa
Bending Strength (X-Y)	ISO 178, GB/T 9341	62±4MPa
Bending Strength (Z)	ISO 178, GB/T 9341	39±4MPa
Impact Strength (X-Y)	ISO 179, GB/T 1043	39.3±3.6KJ/m ² ; 21.5±2.2KJ/m ² (notched)
Impact Strength (Z)	ISO 179, GB/T 1043	7.4±1.2KJ/m ²

■ Applications

- Sweeping robot shell



- Wind turbine blades

