

eABS-HT

Technical Data Sheet

Based on the modification of ABS material, compared with various ABS materials, it has enhanced temperature resistance, with a heat deformation temperature as high as 100°C, and can meet high temperature application scenarios. eABS-HT inherits the good toughness and impact resistance of ABS and can print strong and durable parts.

Material Status	Mass Production	
Characteristics	 High temperature Wear resistance High strength	
Applications	Hand-board applications Automotive	• Electronic and electrical appliances
Form	• Filament	
Processing method	• 3D Print, FDM Print	

	testing method	Typical value
Physical Properties		
Density	GB/T 1033	1.04 g/cm ³
Melt Flow Index	GB/T 3682	7.0 (220°C/10KG)
Mechanical Properties		
Tensile Strength	GB/T 1040	23.06 MPa
Elongation at Break	GB/T 1040	3.78 %
Flexural Strength	GB/T 9341	71.56 MPa
Flexural Modulus	GB/T 9341	2372.8 MPa
IZOD Impact Strength	GB/T 1843	16.094 kJ/m ²
Thermal Properties		
Heat distortion Temperature	GB/T 1634	104.35°C (0.45Mpa)
Continuous Service Temperature	IEC 60216	N/A
Maximum (short term) Use Temperature		N/A
Electrical Properties		
Insulation Resistance	DIN IEC 60167	N/A
Surface Resistance	DIN IEC 60093	N/A

Wuhan University Building A403-I,A901,No.6 Yuexing 2 Road,Nanshan District,Shenzhen,Guangdong

China Tel +86 755 86581960 fax +86 755 26031982 Email: bright@brightcn.net www.esun3d.com



Recommended printing parameters

Extruder Temperature Build Platform Temperature Fan Speed Printing Speed

230 - 270°C 55°C 100% 40-300mm/s

Based on Bambu P1S 0.4 mm nozzle and Orcaslicer1.7.0 Beta. Printing conditions may vary with different

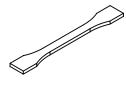
nozzle diameters Drying Recommendations

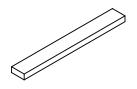
N/A

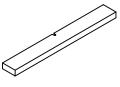
Precautions:

When slicing, it is best to turn on the Z seam alignment and starting point alignment functions, turn off the Z-axis lift and exit, avoid passing through the shell when idling, optimize the slicing printing path, and appropriately reduce the printing speed to achieve the best printing effect.

Mechanical Properties







Tensile testing specimen GB/T 1040

Flexural testing specimen GB/T 9341

Impact testing specimen GB/T 1043

The physical properties, mechanical properties, thermal properties, and electrical properties of the filament are obtained based on the injection molding spline test.

Print test condition:

Extruder Temperature	270°C
Build Platform Temperature	90°C
Outline/Perimeter Shells	2
Top/Bottom Layers	3
Infill Percentage	100%
Fan speed	10%
Maximum volumetric flow rate	4mm³/s

Based on Bambu P1S 0.4 mm nozzle and Orcaslicer 2.1.0 Beta.

Notice

All information supplied by or on behalf of eSUN in relation to this product, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but the product is sold "as is". eSUN assumes no liability and makes no representations or warranties, express or implied, of merchantability, fitness for a particular purpose, or of any other nature with respect to information or the product to which information refers and nothing herein waives any of the seller's conditions of sale.

Wuhan University Building A403-I,A901,No.6 Yuexing 2 Road,Nanshan District,Shenzhen,Guangdong

China Tel +86 755 86581960 fax +86 755 26031982 Email: bright@brightcn.net www.esun3d.com