JABIL ENGINEERED MATERIALS

ABS 1400 LW

Overview

Jabil's ABS 1400 LW is easy to print with balanced properties that consistently lay flat. It has minimal warping when printed with 100% infill in a non-heated chamber system. It also maintains good layer-to- layer adhesion from the bottom of the build to the top, with excellent surface appearance. The ABS 1400 LW is great for applications where the properties of ABS are wanted, but low warp is required.





Applications:

- Brackets
- Housings
- Jig, Fixtures and Tooling to aid in manufacturing

Scan for more information:



Advantages:

- Excellent bed adhesion
- Stiffer than most ABS filament
- Reduce CLTE
- Improved dimensional stability

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- Consistent lot-to-lot print properties
- Good chemical resistance to most fluids



ABS 1400 LW



Print Temperature The optimal printing range is 275°C to 295°C.



Bed Temperature The hotter the better, up to 110°C.



Printing Speed

Base printing speed of 60 mm/s Infill speed of 45 mm/s Wall speed of 40 mm/s Initial layer speed of 20 mm/s



Cooling

For best results, use a cooling fan speed of 5%. Some printers will run bestwith no cooling fan. Make sure to have the fan off for the first layer.



Bed Ahesion

Suitable adhesion can be obtained with PVA-based glue stick on a glass bed. A brim should be used. If the printer being used is unable to maintain the recommended bed temperature, an ABS/acetone slurry or a PEI sheet may be used to help adhesion.



Colors Available Natural & Black



Diameters Available 1.75mm & 2.85mm

Scan to get print profiles:



Mechanical Properties ¹					
	Test Condition	Typical Value	Method		
Tensile Modulus (MPa)		2730			
Tensile Elongation at Break (%)	XY coupons, Ambient	3.3	ASTM D638, Type I		
Ultimate Tensile Strength (MPa)		35.3			
Flexural Modulus (MPa)	XY coupons, Ambient	2450	- ASTM D790		
Flexural Strength (MPa)		59.8			
Izod Impact, Notched (J/m)	XY coupons, Ambient	39	- ASTM D256		
Izod impact, Unnotched (J/m)	XY coupons, Ambient	235			
1. Testing conducted on bars printed at 2	295°C.				

Thermal Properties

	Test Condition	Typical Value	Method
Heat Deflection Temperature (°C)	0.455 MPa	101	- DMA
Heat Deflection Temperature (°C)	1.82 MPa	92	
Glass Transition Temperature (°C)	20°C/min ramp	111	DSC

Other Physical Properties

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	Test Condition	Typical Value	Method
Density (g/cm3)	Ambient	1.10 - 1.12	ASTM D792
Moisture Absorption (weight %)	24 hours	0.3 %	ASTM D570

