

PC 1500 FR

Overview

Jabil's PC 1500 FR is a flame-retardant, easy printing polycarbonate manufactured with FR UL V-0 material for durable parts. The material is perfect for parts that require strength, stiffness and impact resistance with flame retardancy. The PC 1500 FR testing performed in a qualified lab demonstrates V-0 burn properties on a printed part down to 1mm thickness when printed with the correct design and print parameters.*

**Jabil is not responsible for UL certification of parts printed by any third-party. Finished part testing and certification is the responsibility of the user/fabricator.*



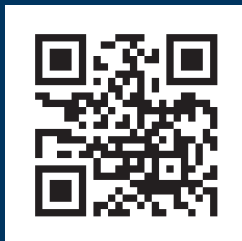
Applications:

- Housings (including battery housings)
- Welding fixtures
- Brackets
- Motor mounts
- Parts for aerospace or automotive applications

Advantages:

- Stiff with excellent impact strength and ductility
- Maintains impact resistance while having very good flame retardancy and self-extinguishing properties.

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PC 1500 FR



Print Temperature

The optimal printing range is 285°C to 305°C.



Bed Temperature

Up to 105°C with ABS slurry, or up to 140°C using a PVP-based glue stick.



Printing Speed

Base printing speed of 40 mm/s
 Infill speed of 40 mm/s
 Wall speed of 32 mm/s
 Initial layer speed of 20 mm/s



Cooling

For best results, do not use a cooling fan. Enabling bridging settings will help improve overhang quality.



Bed Adhesion

Suitable adhesion can be obtained by using a slurry of ABS in acetone, or with a PEI sheet with a PVP-based glue stick. A brim should be used to help with bed adhesion.



Colors Available

Natural & Black



Diameters Available

2.85mm

Scan to get
print profiles:



Mechanical Properties ¹			
	Test Condition	Typical Value	Method
Tensile Modulus (MPa)	XY coupons, Ambient	2210	ASTM D638, Type I
Tensile Elongation at Break (%)		6.0	
Ultimate Tensile Strength (MPa)		61	
Flexural Modulus (MPa)	XY coupons, Ambient	2310	ASTM D790
Flexural Strength (MPa)		93.9	
Izod Impact, Notched (J/m)	XY coupons, Ambient	50.7	ASTM D256
Izod impact, Unnotched (J/m)	XY coupons, Ambient	850	

1. Testing conducted on bars printed at 305°C.

Thermal Properties			
	Test Condition	Typical Value	Method
Heat Deflection Temperature (°C)	0.455 MPa	131	DMA
Heat Deflection Temperature (°C)	1.82 MPa	118	
Glass Transition Temperature (°C)	20°C/min ramp	143	DSC

Other Physical Properties			
	Test Condition	Typical Value	Method
Density (g/cm ³)	Ambient	1.18	ASTM D792
Moisture Absorption (weight %)	24 hours	0.15	ASTM D570