

Polycarbonate

Fused Deposition Modelling
(FDM)



An accurate, rigid and stable material

Polycarbonates (PC) are the most widely used industrial thermoplastics across automotive, aerospace, medical and many other applications.

PC offers accuracy, durability and stability, creating strong parts that withstand functional testing. It also has superior mechanical properties to ABS and a number of other thermoplastics. PC is perfect for concept modelling, functional prototyping, manufacturing tools, and end-use parts.

Why choose Polycarbonate?

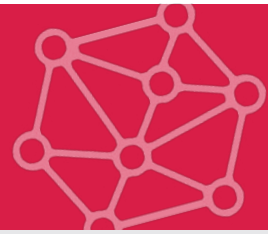
- High tensile and flexural strength
- Good impact resistance
- High heat resistance
- Transparent to radio frequencies

Applications

- Conceptual models
- Jigs and fixtures
- Rapid tooling

Polycarbonate

Fused Deposition Modelling (FDM)



General properties	Value (XY Axis)	Test method
Colour	White	Visual
Part density	1.20 g/cm ³	ASTM D792

Thermal properties	Value (XY Axis)	Test method
Heat deflection temperature – annealed (0.45Mpa)	138° C	ASTM D648
Heat deflection temperature – annealed (1.8Mpa)	127° C	ASTM D648

Mechanical properties	Value (XY Axis)	Test method
Tensile strength (ultimate)	57 MPa	ASTM D638
Tensile modulus	1944 MPa	ASTM D638
Elongation at break	4.8%	ASTM D638
Flexural strength	89 MPa	ASTM D790
Flexural strain at break	No break	ASTM D790
Flexural modulus	2006 MPa	ASTM D790
Impact strength – Izod (notched)	73 J/m	ASTM D256
Impact strength – Izod (un-notched)	877 J/m	ASTM D256

Other	Value (XY Axis)	Test method
Flammability classification	HB	UL94

Get a quote for your parts at rapidfab.ricoh-europe.com

Have a question? Call our friendly team on

+44 (0) 800 304 7196

Specifications are subject to change without notice.

The technical data indicated above is an average value of the test result of a part created under proper management and appropriate conditions.
The value is for reference and is not guaranteed.