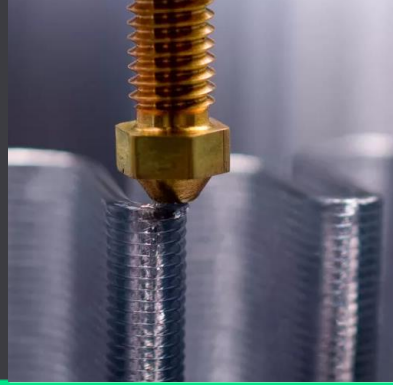


3D printing

by  Signify



Polycarbonate
FDM filament

Clear
& Colored

Technical specification

High performance Polycarbonate filament developed for excellent performance in demanding applications. Excellent strength, stiffness and toughness. UV stabilized for protection against UV light. Vicat softening point of over 140 °C. UL V2 flammability rating supports application in electrical applications. High temperature resistance but still printable on standard desktop printers. With the Signify PC filament it is possible to print clear filament at least two times faster than for instance PETG.

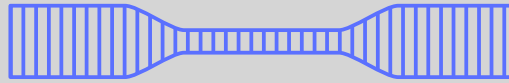
Property	Standard	Method/Unit	value
Base resin properties			
Temperature of deflection under load	ISO 75-1,-2	0.45 MPa	143 °C
Density kg/m ³	ISO 1183-1	kg/m ³	1200
Melt volume flow rate	ISO 1133	300°C /1.2 kg	19 cm ³ /10 min
UV resistance			UV stabilized
Flammability	UL 94	0.75 mm Class UL	V2
Typical printing properties			
Nozzle temperature range		°C	280-320
Recommended minimum printing bed temperature		°C	110
Build room temperature			Closed chamber
Drying before printing		Minutes at 120 ° C	240
Other			
Wire diameter 1		mm	1.75 +/- 0.075
Wire diameter 2		mm	2.85 +/- 0.075
Packaging			750 gr. , Ø 20 cm PC spool, vacuum sealed in cardboard box

October, 2022

Disclaimer: All data subject to any change without notice. Signify makes no warranty, expressed or implied, concerning the accuracy of any results to be obtained from the use of this information and no warranty is expressed or implied concerning the use of this product other than that the product will comply with the properties described in the technical specifications table as set forth above. The buyer assumes all risks of use and/or handling of the product. No statement is intended or should be construed as a recommendation to infringe any patent.

Data based on measurements on clear material, colored material properties can deviate.

Tensile bars



“Z 90” printed vertically



“XY 45” printed on bed, 45° angle

Characteristics printed samples			
Property	Standard	Method/Unit	value
Printer settings			
Infill			100 %
Layer thickness		mm	0.4
Properties			
Tensile strength	ASTM D638	XY 45 direction, MPa Z 90 direction, MPa	60.4 59.6
Youngs modulus	ASTM D638	XY 45 direction, MPa Z 90 direction, MPa	1462 NA
Elongation at break	ASTM D638	XY 45 direction Z 90 direction	6.5 % 6.2 %
Bending strength	ISO 178	XY 45 direction, MPa	86.8
Bending modulus	ISO 178	XY 45 direction, MPa	1790
Charpy impact strength unnotched	ISO 179-1, 5 J	XY 45 direction, KJ/m2	No breakage
Resistance to heat	Signify method ISO 75	XY 45 direction °C	144

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