

FR-PC DATA SHEET

PC-FR is a flame retardant PC filament (UL94V-0/1.5 mm) displaying excellent toughness, strength and heat resistance. This filament opens new applications in the automotive, railway and aerospace industries

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Density	ISO 1183	g/cm³	1.18-1.2 (at 21.5°C)
Glass transition temperature	ISO 11357	°C	113
Melting Point	ISO 11357	°C	N/A
Heat Deflection Temperature	ISO 75-f, 0.45 MPa	°C	108
Melt index	ISO 1133, 260°C, 1.2 kg	g/10min	6-8
Odor	-	-	Little odorless

MECHANICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	ISO 527	MPa	67
Young's modulus	ISO 527	MPa	2634
Elongation at break	ISO 527	%	3.9
Bending strength	ISO 178	MPa	96

Tested with 3D Printed specimen of 100% infill

FIRE TESTING	TEST MEHOD	UNITS	TYPICAL VALUE
Flamability Rating(*Base Resin)	UL94	-	V-0 @1.5mm

Disclaimer

The typical values presented in this document are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts properties can be impact by, but not limited to, part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of FR-PC materials for the intended application. We make no warranty of any kind, unless announced separately, to the fitness for any particular use or application. We shall not be made liable for any damage, injury or loss induced from the use of materials in any particular application.