



PolyMax™ PC-FR

SKU: PM70252

PolyMax<sup>™</sup> is a family of advanced 3D printing filaments produced with Polymaker's Nano-reinforcement technology, to deliver exceptional mechanical properties and printing quality.

PolyMax™ PC-FR, creation from Covestro's Makrolon® family, could achieve V0 performance in the UL94 flame retardancy test and displays excellent toughness, strength and heat resistance. This filament opens new applications in the automotive, railway and aerospace industries.

Colour-Black, White

Diameter size-1.75mm, 2.85mm

Net weight-1Kg

### RECOMMENDED SETTINGS

Nozzle Temperature:

250°C - 270°C

Printing Speed:

30 - 50 mm/s

Bed Temperature:

90°C - 105°C

Chamber Temperature:

90°C - 100°C

Bed Surface:

almost any surface with a thin coat of MAGIGOO PC

Cooling Fan:

OFF

### MECHANICAL PROPERTIES

Young's Modulus:

2634 ± 182 (MPa)

Tensile Strength:

67 ± 4.5 (MPa)

Bending Strength:

96.6 ± 1.3 (MPa)

Charpy Impact Strength:

11.7 ± 1.3 (kJ/m2)

### THERMAL PROPERTIES

Glass Transition Temperature:

N/A

Vicat Softening Temperature:

116°C

Melting Temperature:

N/A

## **NOTES**

**Drying Settings:** 

75°C for 6h

**Recommended Support Materials:** 

PolyDissolve™ S2 (coming soon)

# Other:

When printing with PolyMax™ PC-FR it is recommended to use a heated chamber. It is recommended to anneal the printed part right after the printing process to release the residual internal stress when not using a heated chamber. Annealing settings: 90°C for 6h