



Ultrafuse® PET CF15

Combines Easy Processability and very Low Moisture Uptake with Excellent Strength and Rigidity – at an Affordable Cost

Ultrafuse® PET CF15 is a polyethylene terephthalate reinforced with 15 % carbon fiber. This engineering filament is easier to process than other carbon fiber reinforced filaments. Users will be able to 3D-print new components that remain fully functional under higher mechanical and thermal loads.

Ultrafuse® PET CF15 is an engineering filament optimized to enable users to develop new 3D printing applications with higher requirements. With its superior heat resistance, high strength and rigidity, this is a filament for a wide range of demanding industrial applications. Its high dimensional stability and very low moisture uptake makes it a perfect solution for applications in humid operating environments.

Benefits at a Glance

- Strong, rigid components
- Easy to process
- Very low moisture absorption
- Heat resistant up to 74 °C
- High dimensional stability
- Compatible with HIPS for breakaway support
- Excellent surface finish

Example Applications

- Automotive
- Jigs and fixtures
- Applications for humid operating environments

Material Properties

Tensile strength (MPa)	12.5 (ZX), 63.2 (XY)
Flexural modulus (MPa)	2253(ZX), 6293 (XZ), 5452 (XY)
Elongation (Break)	0.5 % (ZX), 3.7 % (XY)
Impact strength Izod notched (kJ/m²)	2.0 (z-x), 5.0 (XZ), 5.7 (XY)
Impact strength Izod unnotched (kJ/m²)	2.4 (ZX), 22.6 (XZ), 25.1 (XY)
HDT @ 0.45 MPa	108 °C

Printing Guidelines

Print Speed	30–80 mm / sec
Nozzle Temperature	250–270 °C
Nozzle	Hardened/ruby nozzle 0.6 mm diameter
Bed Temperature	100–120 °C
Bed Modification	PEI or clean glass
Fan Speed	0 %
Layer Height	0.2–0.4 mm

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