Plastics App™

High Performance Filaments

December 8th, 2020

Perform ✓ ACF

Technical Data Sheet

- ✓ Perform ✓ ACF is a high performance Polyamide (Nylon) Carbon Fiber filament designed to work on FFF printers for the realization of functional parts.
- ✓ Perform ✓ ACF is easy to process and has extremely high durability, great temperature resistance and excellent dimensional stability.

Typical Properties

Property	Test Method	Unit	Typ. Value
Nominal Diameter	-	mm	1.75 / 2.85
Density	ISO 1183	gr/cm³	1.19
Tensile Modulus	ISO 527	MPa	7,021
Tensile Strength	ISO 527	MPa	102
Flexural Strength	ISO 178	MPa	134
Elongation	ISO 527	%	2.7%
Izod Impact (Notched)	ASTM D256	J/m	112
HDT @ 0.45 MPa	ISO 75	°C	180

Recommended Settings

Parameter	Unit	Set Value
Nozzle Temp.	°C	250 ±10
Plate Temp.	°C	90 ±10
Cooling	-	Off
Print Speed	mm/sec	30-80
Retraction	mm	>4
Drying	°C, hr	80, 4

Perform ✓ ACF adheres well when using PEI surface, PA adhesive or Kapton Tape on a heated glass plate.

Perform ✓ ACF is an abrasive material which requires a hardened steel or ruby nozzle.

Disclaimer

Typical properties and recommendations should be regarded as guideline values and not specifications. It is on the user responsibility to carefully evaluate the suitability of the material and its properties to the application