PA CF15 HT filament

FDM Technology, 210706

Introduction

High Temperature Polyamide with Carbon Fiber

Weight: 750 gr
Diameter: 1,75 mm - 2,85 mm
Color: black

Main Features

- Higher chemical resistance than most PA grades
- High temperature resistance up to 150°C
- Strong and stiff parts
- High dimensional stability
- Easy to process
- Low moisture absorption
- Compatible with water support materials and HIPS





Technical Data Sheet

Recommended 3D-Print processing parameters	
Nozzle Temperature	260 – 280 °C / 500 – 536 °F
Build Chamber Temperature	-
Bed Temperature	100 – 120 °C / 212 – 248 °F
Bed Material	PEI or Glass
Nozzle Diameter	⩾ 0.6 mm, Ruby or Hardened
Print Speed	30 - 80 mm/s

Mechanical Properties (Dry)		
Tensile strength	103.2 MPa / 15.0 ksi	ISO 527
Elongation at Break	1.8%	ISO 527
Young's Modulus	8386 MPa / 1216 ksi	ISO 527
Flexural Strength	160.7 MPa / 23.3 ksi	ISO 178
Flexural Modulus	8258 MPa / 1198 ksi	ISO 178
Flexural Strain at Break	2.4 %	ISO 178
Impact Strength Charpy (notched)	4.8 kJ/m^2	ISO 179-2
Impact Strength Charpy (unnotched)	20.6 kJ/m^2	ISO 179-2

General Properties		
Printed Part Density (dry)	1232 kg/m^3	ISO 1183-1
Printed Part Density (conditioned)	1234 kg/m^3	ISO 1183-1

Thermal Properties		
HDT @ 1.8 MPa	92 °C / 198 °F	ISO 75-2
HDT @ 0.45 MPa	145 °C / 293 °F	ISO 75-2
Glass Transition Temperature	70 °C / 158 °F	ISO 11357-2
Melting Temperature	234 °C / 453 °F	ISO 11357-3

Notes

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.