

LUVOCOM® 3F PAHT CF 9891 BK

A 15% carbon fibre reinforced polyamide (PA6) material designed for industrial applications. The carbon fibre reinforcement improves material stiffness. Easy to print due to low warping and increased layer adhesion. PAHT CF 9891 has a low influence from moisture and temperature on dimensional stability and electrical properties.

Material features:

- Carbon Fiber Reinforced Material (15%)
- Extremely stiff
- Designed for industrial applications
- PA6 based material
- · Low warping and increased layer adhesion



Filament specs.			
Size	Ø tolerance	Roundness	
1,75mm	± 0,05mm	≥ 95%	
2.85mm	+ 0.10mm	> 95%	

Material properties		
Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,24 g/cm³
MFI 250°C/2,16kg	ISO 1133	4 g/10 min
Tensile strength at yield	ISO 527	120 MPa
Elongation strain at yield	ISO 527	2%
Tensile (E) modulus	ISO 527	10500 MPa
Impact Strength - Charpy method 23°C Unnotched	ISO 179 1eA U	35 kJ/m2
Mold shrinkage	DIN 16742	0,3-0,5%
Water absorption 23°C	ISO 62	<0,3%
Printing temp.	Internal method	260±5°C

Additional info:

Recommended temperature for heated bed is 65-75°C. Adhesion is possible on different surfaces. LUVOCOM® 3F PAHT CF 9891 BK can be used on all common desktop FDM technology or FFF 3D printers. Dry the spool before printing: 12 hours at 70°C or 4 hours at 100°C.

*Please consider the use of a hardened steel nozzle when printing with LUVOCOM® 3F PAHT CF 9891 BK. The carbon fibers are abrasive and will result in fast wear of regular brass nozzles.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.