

# LUVOCOM® 3F PEEK CF 9676 BK

LUVOCOM® 3F PEEK CF 9676 BK has outstanding **mechanical properties** in combination with its **excellent thermal and chemical resistance**. LUVOCOM® 3F PEEK CF 9676 BK is a **flame retardant** polyetheretherketone, reinforced with carbon fibers. The carbon fiber improve the **stiffness** and **compressive strength** enormously. This material is suitable for dynamically-stressed parts, aerospace applications and applications which require inherent flame resistance.

## Material features:

- Outstanding temperature and chemical resistance
  - Very high strength and stiffness
  - Suitable for dynamically-stressed parts
  - Flame retardant\*
  - Low smoke and toxic gas emissions
- \*Yellow card not available*

## Colours:

LUVOCOM® 3F PEEK CF 9676 BK is available in the colour black.

NA1

## Packaging:

LUVOCOM® 3F PEEK CF 9676 BK is available on our standard transparent reel.\*

Ask our team to help you customizing your product.

\*Dry +4 hours at max.110°C



## 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	1.36 g/cm <sup>3</sup>
MFI 380°C/10kg	ISO 1133	16 g/10min
Tensile strength at yield	ISO 527	126 MPa
Elongation-strain at yield	ISO 527	3.9%
Tensile (E) modulus	ISO 527	7800 MPa
Impact strength charpy method 23°C – notched	ISO 179	7 kJ/m <sup>2</sup>
Heat deflection temp.	ISO 75	280°C
Mold shrinkage	DIN 16742	0.2-0.4%
Printing temp.	Internal Method	425±25°C

## Additional info:

Recommended temperature for heated bed is >110°C. Adhesion is possible on different surfaces.

LUVOCOM® 3F PEEK CF 9676 BK can be used on desktop FDM or FFF technology 3D printers able to reach the required temperatures. For maximum performance of printed parts annealing is recommended.

*\*Please consider the use of a hardened steel nozzle when printing with LUVOCOM® 3F PEEK CF 9676 BK. The carbon fibers are abrasive and will result in fast wear of regular brass nozzles. Note: brass nozzles are not allowed - this contains copper which is reactive with PEEK.*

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