

# LUVOCOM® 3F PEEK 9581 NT

LUVOCOM® 3F PEEK 9581 NT is based on polyetheretherketone (PEEK), one of the highest performing engineering thermoplastics in the world and can replace metals and composites. LUVOCOM® 3F PEEK 9581 NT is a material from LEHVOSS. LUVOCOM® 3F PEEK 9581 NT is an unreinforced grade and can be used for multiple applications in different industries; aerospace-, gas-, oil-, automotive- and the medical industry. This semi crystalline thermoplastic provides high temperatures, excellent mechanical and chemical resistance properties. The excellent layer adhesion of LUVOCOM® 3F PEEK 9581 NT improves the impact resistance, strength, durability and the printing process.

### Material features:

- Outstanding temperature and chemical resistance
- High strength, including z-layers
- Flame retardant
- Cytotoxicity proliferation according EN ISO 10993-1

### Colours:

LUVOCOM® 3F PEEK 9581 NT is available in the colour natural.

NA1



### Packaging:

LUVOCOM® 3F PEEK 9581 NT is available on polycarbonate and carton spools. Ask our team to help you customizing your product.

### 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	1,31 g/cc
MFI 380°C/10kg	ISO 1133	29 g/10 min
Tensile strength at yield	ISO 527	97 MPa
Elongation strain at yield	ISO 527	5%
Tensile (E) modulus	ISO 527	3800 MPa
Flexural strength	ISO 178	145 MPa
Flexural modulus	ISO 178	3400 MPa
Impact strength charpy method 23°C - notched	ISO 179 1eA	7 kJ/m <sup>2</sup>
Flammability behaviour	UL94	V-0
Heat deflection temp. A (1,8MPa)	ISO 75	145°C
Printing temp.	Internal method	395±25°C

### Additional info:

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

LUVOCOM® 3F PEEK 9581 NT can be used on desktop FDM or FFF technology 3D printers able to reach the required temperatures. Dry the spool before printing: 6-8 hours at max. 120°C or 4 hours at 130°C. *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.

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