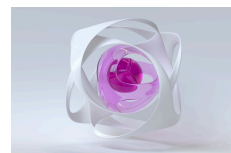


## Product Information

# INFINAM® PEEK 9359 F

## HIGH VISCOSITY, UNREINFORCED PEEK FILAMENT FOR 3D PRINTING



**INFINAM® PEEK 9359F** is a filament extruded from natural colored VESTAKEEP® polyether ether ketone (PEEK) resin. The semi-crystalline polymer features superior thermal and chemical resistance. Parts made from INFINAM® PEEK 9359F are of low flammability.

Appropriate application fields include aerospace, automotive and other industries. Using INFINAM® PEEK 9359F with FDM technology will benefit our customers, for example less material consumption, superior mechanical properties of printed parts, and more freedom of design.

### Delivery of INFINAM® PEEK 9359F

INFINAM® PEEK 9359F has the nominal diameter of 1.75 mm (+/- 0.04 mm\*) and fit for FDM/FFF printing. It is supplied on spools with different volumes. The weight of 250 g, 500 g, 1 kg and 2 kg are available. Customer can choose the appropriate volume according to their parts or printing capacity. The spools are packaged in vacuumed plastic bags to avoid moisture taken.

\*Diameters are tested by a multi-axis laser gauge. The diameter is the average of these axis.

### Drying recommendations

We recommend drying the filament prior to usage to avoid stringing, bubbles, or other defects.

1. Filament on spool: minimum 12 hours at 100 °C to 120 °C.
2. Filament removed from spool: minimum 4 hours at 130 °C to 140 °C.

The maximum drying temperature of the filament is 140 °C. Please also pay attention to the instruction of your drying device.

### Statement on data listed

The properties listed apply to the VESTAKEEP® resin used in the manufacture of INFINAM® PEEK 9359F. The performance of any parts manufactured from INFINAM® PEEK 9359F are dominated by the printing or any other processing of the filament. Only Density and Filament Diameter apply to INFINAM® PEEK 9359F directly.

The values presented are typical or average values, they do not constitute a specification.

FOR FURTHER INFORMATION PLEASE CONTACT US AT [EVONIK-HP@EVONIK.COM](mailto:EVONIK-HP@EVONIK.COM)  
OR VISIT OUR PRODUCT AT [WWW.INFINAM.COM](http://WWW.INFINAM.COM)

## Key Features

### Industrial Sector

Automotive and Mobility, Aircraft and Aerospace, Energy, Oil and Gas, 3D Printing

### Resistance to

Heat (thermal stability), Fire / burn

**Processing**  
3D Printing

**Electrical**  
Insulating

**Delivery form**  
(Mono)filament

## Mechanical properties ISO

	dry	Unit	Test Standard
Tensile modulus	3600	MPa	ISO 527
Tensile strength	90	MPa	ISO 527
Yield stress	90	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	70	MPa	ISO 527
Nominal strain at break, tB	5	%	ISO 527
Charpy impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	7	kJ/m <sup>2</sup>	ISO 179/1eA
Type of failure	C	-	-
Charpy notched impact strength, -30°C	6	kJ/m <sup>2</sup>	ISO 179/1eA
Type of failure	C	-	-

## Thermal properties

	dry	Unit	Test Standard
Melting temperature	340	°C	ISO 11357-1/-3
Glass transition temperature, DSC	152	°C	ISO 11357-1/-2
Temp. of deflection under load A, 1.80 MPa	155	°C	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	205	°C	ISO 75-1/-2
Melting Temperature	340	°C	ASTM D 3418

## Physical properties

	dry	Unit	Test Standard
Density	1300	kg/m <sup>3</sup>	ISO 1183
Filament Diameter	1.75	mm	-

Density	<b>1300</b>	kg/m <sup>3</sup>	ASTM D 792
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<b>Burning Behav.</b>	<b>dry</b>	<b>Unit</b>	<b>Test Standard</b>
Burning behav. at 1.5 mm nom. thickn.	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested	<b>1.6</b>	mm	-

<b>Rheological properties</b>	<b>dry</b>	<b>Unit</b>	<b>Test Standard</b>
Melt volume-flow rate, MVR	<b>12</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>380</b>	°C	-
Load	<b>5</b>	kg	-

<b>Properties of 3D printed parts acc. ISO</b>	<b>dry</b>	<b>Unit</b>	<b>Test Standard</b>
Charpy impact strength on-edge Y, 23°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength upright Z, 23°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eU

## Characteristics

### Applications

Monofilament

### Processing

Fused deposition molding, Additive manufacturing

### Special Characteristics

Semi-crystalline, High heat resistant

### Color

Natural color

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**Evonik Operations GmbH**  
**Smart Materials**  
**High Performance Polymers**  
45772 Marl / Germany  
Tel: +49 2365 49-9878  
[evonik-hp@evonik.com](mailto:evonik-hp@evonik.com)  
[www.plastics-database.com](http://www.plastics-database.com)