

PEEK

Innovatefil® PEEK is a thermoplastic that offers a unique combination of high mechanical properties, temperature resistance and excellent chemical resistance. It is indicated for applications that need strength and rigidity, as well as ductility.

It is chemically resistant to harsh environments and suitable for sterilization for medical and food contact applications. It has very good resistance to UV rays and weathering, so its use outdoors is recommended.



	VALUES	UNIT OF MEASUREMENT	STANDARD		
PHYSICAL PROPERTIES					
Chemical composition	PEEK				
Density	1,3	g/cm ³	ASTM D792		
Glass transition temperature	150	°C	ASTM D3418		
MECHANICAL PROPERTIES					
Tensile strength	96	MPa	ISO 527		
Traction module	3830	MPa	ISO 527		
Flexible strength	121	MPa	ISO 178		
Flexible module	3700	MPa	ISO 178		
Tensile elongation (maximum stress)	4,9	%	ISO 178		
Izod Impact Force (notch, 23°C)	9,2	kJ/m ²	ISO 180		
Hardness	88	Shore D	ISO 7619 - 1		
THERMAL PROPERTIES					
Thermal deflection temperature (1,8 MPa)	157	°C	ASTM D648		
Melting point	340	°C	ASTM D3418		
Thermal conductivity	0,24	W/m · K	ASTM E1530		
Flamability ratio					
0,800 mm	V - 1		UL 94		
1,60 mm	V - 0		UL 94		
PRINTING PROPERTIES					
Printing temperature	380 - 420	°C			
Bed temperature	130 - 160	°C			
Heated chamber	Recommended				
Adhesion to the base	Nano polymer adhesive				
SIZE					
SIZE	NET WEIGHT	GROSS WEIGHT	DIAMETER	COLOR	PACKAGING
M	400 g	605 g	1,75 mm	Natural (cream)	Innovatefil box

NOTICE: The information provided in the data sheets is intended for reference only. It should not be used as design or quality control values. Actual values may differ significantly depending on printing conditions. The final performance of printed components not only depends on materials, design and printing conditions are also important.