## **PEEK Carbon Fiber**

PEEK CF, Carbon PEEK

PEEK CF has the highest mechanical properties among the materials achievable with Additive Manufacturing, allowing it to be applied in Metal Replacement practices in more extreme contexts and environments.



## **Material properties**

Density	ISO 1183	1,34	g/cm³	Printing layer height
Water absorption at saturation	ISO 62	0,4	%	0,15 mm (0,006 in) Maximum dimensions 300x300x300 mm (11.8x11.8x11.8 in)
Tensile strength	ISO 527	87,4	MPa	Infill
Elongation at break	ISO 527	3,9	%	30%
Elastic modulus	ISO 527	7900	MPa	Shell thickness 1,8 mm (0,07 in)
Flexural strength	ISO 178	168,6	MPa	Tolerances
Resilience	ISO 179	66	kJ/m²	± 0,60mm < 100mm / ± 0,6% > 100mm
Hardness	ISO 868	86 D	Shore	<b>Applications</b> The material has the highest
HDT 0.45 MPa	ISO 75	162	°C	mechanical properties among those achievable with Additive
HDT 1.8 MPa	ISO 75	315	°C	Manufacturing using plastics, allowin it to be applied in Metal Replacemen practices in the most extreme contex and environments.
Melting temperature	ISO 11357	343	°C	
Flammability	UL94	V-0		
Thermal conductivity (20°C)	ISO 22007	0,95	W/mK	

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