

# PEEK Annealed

Polyether ether ketone

PEEK is a polymer used in the industrial and aerospace field thanks to its exceptional mechanical properties, very similar to those of some metal alloys: in its filament-worked version, it allows to obtain complex geometries, freeing the Designer of most of the design constraints and limitations of traditional manufacturing technologies.



## Material properties

Density	ISO 1183	1,30	g/cm <sup>3</sup>
Water absorption at saturation	ISO 62	0,4	%
Tensile strength	ISO 527	99,9	MPa
Elongation at break	ISO 527	9,1	%
Elastic modulus	ISO 527	3740	MPa
Flexural strength	ISO 178	147	MPa
Resilience	ISO 179	185	kJ/m <sup>2</sup>
Hardness	ISO 868	85 D	Shore
HDT 1.8 MPa	ISO 75	152	°C
Melting temperature	ISO 11357	343	°C
Flammability	UL94	V-0	
Thermal conductivity (20°C)	ISO 22007	0,29	W/mK

### Printing layer height

0,15 mm (0,006 in)

### Maximum dimensions

300x300x400 mm (11.8x11.8x15.7 in)

### Infill

30%

### Shell thickness

1,8 mm (0,07 in)

### Tolerances

± 0,60mm < 100mm / ± 0,75% > 100mm

### Applications

Excellent for both prototypes and final components. Fantastic specific strength, superior to some non-ferrous alloys. Chemical and thermal resistance allowing use in harsh environments. Suitable for mechanical components, brackets, casings and covers.

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