

Laser Sintering MATERIAL SPECIFICATIONS

HT - 23

HIGHLIGHTS

- Isotropic Properties
- Melt compounded Carbon Fiber filled PEKK
- High melt point
- Chemical Resistant
- Inherently flame retardant

APPLICATIONS

- Aerospace
- Mobility Industry
- Well suited to applications which require superior thermal properties, with maximum performance and consistent properties in XY&Z dimensions

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	English	Metric
Color/Appearance	Visual	Dark Grey	Dark Grey
Bulk Density	ASTM D1895	0.018 lb./in ³	0.5 g/cm ³
Elongation at Break	ASTM D638	1.16 % / 1.06 %	1.16% / 1.06%
Flexural Strength	ASTM D790	14,649 psi / 11,748 psi	101 MPa / 81 MPa
Flexural Modulus	ASTM D790	865.88 kpsi / 744.04 kpsi	5.97 GPa / 5.13 GPa
Tensile Modulus X	ASTM D638	942.75 kpsi	6.50 GPa
Tensile Modulus Y	ASTM D638	928.24 kpsi	6.40 GPa
Tensile Modulus Z	ASTM D638	841.22 kpsi	5.80 GPa
Tensile Strength X	ASTM D638	11,603 psi	80 MPa
Tensile Strength Y	ASTM D638	11,167 psi	77 MPa
Tensile Strength Z	ASTM D638	8,847 psi	61 MPa
Strain at break X	ASTM D638	189 psi	1.3 MPa
Strain at break Y	ASTM D638	189 psi	1.3 MPa
Strain at break Z	ASTM D638	160 psi	1.1 MPa
Average Particle Size (D50)	Laser Diffraction	.003 inches	80 microns
Particle Size Range (D10-D90)	Laser Diffraction	.002 to .005 inches	45 to 115 microns
Sintered Part Density	ASTM D792	0.050 lb./in	1.39 g/cm ³

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change without notice.

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