GLASS SPHERE FILLED

PA 640-GSL

HIGHLIGHTS

- Sharp, dark grey appearance
- Excellent strength to weight ratio properties
- Cost effective, requiring 10% less material per build
- Excellent surface finish and detail

APPLICATIONS

- Athletic equipment
- UAV and aerospace components
- Motor sports and racing
- Ideal for applications requiring a balance of strength and lighter weight without sacrificing dimensional stability and surface finish

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	Dark Grey	Dark Grey
Bulk Density	ASTM D1895	0.214 oz/in^3	0.37 g/cm^3
Average Particle Size (D50)	Laser Diffraction	0.002 inches	55 microns
Particle Size Range (D10-D90)	Laser Diffraction	0.001 - 0.004 inches	35 - 100 microns
Sintered Part Density	ASTM D792	0.474 oz/in^3	0.82 g/cm^3
Heat Deflection Temperature	ASTM D648	338° F @ 264 psi	170° C @ 1.82 MPa
Heat Deflection Temperature	ASTM D648	356° F @ 66 psi	180° C @ 0.45 MPa
Ultimate Tensile Strength (XY)	ASTM D638	7,170 psi	49 MPa
Ultimate Tensile Strength (Z)	ASTM D638	4,835 psi	33 MPa
Tensile Modulus (XY)	ASTM D638	554,000 psi	3,816 MPa
Tensile Modulus (Z)	ASTM D638	282,000 psi	1,945 MPa
Elongation at Break (XY)	ASTM D638	3%	3%
Elongation at Break (Z)	ASTM D638	3%	3%
Flexural Modulus (XY)	ASTM D790	731,000 psi	5,040 MPa
Flexural Modulus (Z)	ASTM D790	626,000 psi	4,313 MPa

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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