

GLASS SPHERE FILLED

PA 635-GSL

HIGHLIGHTS

- Black, light weight glass filled nylon 12
- Parts exhibit superior weight reduction characteristics compared to other commercially available glass filled products
- Requires 30%-40% less material by weight to fill a standard LS machine compared to other glass filled materials

APPLICATIONS

- Wind tunnel model testing
- UAV and aerospace components
- Complex light weight geometries requiring accuracy and small feature resolution
- Ideal for applications with lighter weight and stiffness requirements

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ENGLISH	METRIC
Color/Appearance	Visual	Black	Black
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	0.445 oz/in ³	0.77 g/cm ³
Heat Deflection Temperature	ASTM D648	Testing in Progress	Testing in Progress
Heat Deflection Temperature	ASTM D648	Testing in Progress	Testing in Progress
Ultimate Tensile Strength (XY)	ASTM D638	5,939 psi	41 MPa
Tensile Modulus (XY)	ASTM D638	282,000 psi	2,199 MPa
Flexural Modulus (XY)	ASTM D790	316,000 psi	2,179 MPa
Elongation at Break (XY)	ASTM D638	3%	3%
Flexural Strength (XY)	ASTM D790	8,210 psi	57 MPa
Izod Impact Strength - Notched (XY)	ASTM D256	Testing in Progress	Testing in Progress
Dielectric Constant	ASTM D150	Testing in Progress	Testing in Progress
Chemical Resistance	-	Testing in Progress	Testing in Progress

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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About RPS

RPS has been in operation over ten years and our engineers collectively have decades of experience working with stereolithography and laser sintering equipment. With proven experience in 3D printing, engineering, electronics, computer-aided engineering and more, we understand the technology and can offer advice on how it can suit your specific application.

We manufacture the **NEO800** stereolithography system, designed, developed and built by RPS engineers. We are also an HP Channel Partner of HP's Multi-Jet Fusion technology and offer a range of materials and software through our partnership with market-leading suppliers ALM, DSM Somos® and Materialise.

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