

PA 616-GS

A high elongation polyamide material in black. Excellent for production Rapid Manufacturing applications.

POWDER PROPERTIES	TEST METHOD	PA 616-GS
Specific Gravity	ASTM D792	1.49 grams/CC
Bulk Density	ASTM D1895	0.75 grams/CC
Average Particle Size (D50)	Laser Diffraction	50 microns
Particle Size Range (D10-D90)	Laser Diffraction	35 to 100 microns

THERMAL PROPERTIES	TEST METHOD	PA 616-GS
Melting Point	ASTM D3418	186 Deg C
Melt Flow Rate (3min, 5.0kg, 235C)	ASTM D1238	40 (+/-) 5 grams/10min

MECHANICAL PROPERTIES	TEST METHOD	PA 616-GS
Heat Deflection Temp @ 0.45 MPa	ASTM D648	175 Deg C
Heat Deflection Temp @ 1.82 MPa	ASTM D648	110 Deg C
Ultimate Tensile Strength (XY)	ASTM D638	31 MPa / 4,500 psi
Tensile Modulus (XY)	ASTM D638	4,100 MPa / 595 kpsi
Flexural Modulus (XY)	ASTM D790	3,100 MPa / 450 kpsi
Elongation at Break (XY)	ASTM D638	1.45%
IZOD Impact Strength (Un-notched)	ASTM D256	101 joules/meter
IZOD Impact Strength (Notched)	ASTM D256	96 joules/meter
Volume Resistivity (22C, 50% RH, 500V)	ASTM D257-93	2.0 * 10 ¹⁴ ohm/cm
Surface Resistivity (22C, 50% RH, 500V)	ASTM D257-93	2.3 * 10 ¹⁴ ohm/cm
Dielectric Constant (22C, 50% RH, 500V)	ASTM D150-95	3.7

Actual part properties may vary slightly from those listed above based on processing parameters, operating conditions, and material usage. Forecast3D makes no warranties of materials for any particular application, nor does it make a warranty of any type, expressed or implied, including, but not limited to, the warranties of merchantability for a particular purpose.

Forecast3D is a world class Rapid Manufacturing facility located in Carlsbad CA specializing in high-quality rapid prototyping, 3D printing (SLA, SLS, FDM, Objet, and DMLS), short-run manufacturing and CNC machining, and is well known for its unique ProCAST RTV & Hybrid Tooling capabilities.