





The ideal material for applications that require a combination of mechanical and thermal properties

Glass-filled SLS nylon is reinforced with glass beads, which creates parts with greater stiffness and resistance to higher temperatures than standard nylon.

Why choose PA6 GB?

- High modulus and mechanical strength
- Toughness
- Excellent thermal stability
- Resistance to oil and fluids even at high temperature
- Parts can be smoothed and joined
- Parts can be dyed

Applications

- Automotive and motorsport components (oil pans, cooling pipes, air ducts, cylinder head covers, charge air coolers, air intake manifolds)
- Appliances (pumps, pipes, connectors)
- Construction (miniature circuit breakers, electrical connectors)
- Ideal for parts requiring resistance to high stress and loads at high temperature
- Appropriate for low-mid volume rapid manufacturing

PA6 GB Selective Laser Sintering (SLS)

General properties	Value (XY Axis)	Test method
Colour	Natural	Visual
Part density	1.45 g/cm ³	ISO 1183

Thermal properties	Value (XY Axis)	Test method
Melting temperature	210° C	ISO 11357-3 (10°C/min)
Heat deflection temperature (0.45Mpa)	197° C	ISO 75B
Heat deflection temperature (1.8Mpa)	117° C	ISO 75A

Mechanical properties	Value (XY Axis)	Test method
Tensile strength (ultimate)	77 MPa	ISO 527
Tensile modulus	6500 MPa	ISO 527
Elongation at break	2%	ISO 527
Flexural stress (ultimate)	110 MPa	ISO 178
Flexural strain	3.4%	ISO 178
Flexural modulus	4800 MPa	ISO 178
Impact strength – Izod (notched)	3.9 kJ/m ²	ISO 180

Electrical properties	Value (XY Axis)	Test method
Dielectric strength	17.3 kV/mm	IEC 60243-1
Dielectric dissipation factor (1Hz)	0,044	IEC 60250
Dielectric constant	2,7	IEC 60250
Volume resistivity	$2.1 \cdot 10^{12}$ Ohm \cdot cm	IEC 250
Surface resistivity	3,8 ·10 ¹² Ohm	IEC 250

Get a quote for your parts at rapidfab.ricoh-europe.com Have a question? Call our friendly team on +44 (0) 800 304 7196

Specifications are subject to change without notice.

The technical data indicated above is an average value of the test result of a part created under proper management and appropriate conditions. The value is for reference and is not guaranteed.

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