

PA11-GF 3450

Polyamide 11 reinforced with glass beads



The PA11-GF 3450 is a polyamide powder reinforced with glass beads allowing to open the scope of additive manufacturing possibility in terms of application and properties.

Characterized by its low shrinkage, the PA11-GF 3450 is suitable for the preparation of massive parts to be used at high temperatures. This material is ideal for mechanical parts in the engine compartment or complex end-use parts for a wide range of applications in industrial sectors such as Automotive, Aerospace or Defense.

The PA11-GF 3450 can be processed with any ProMaker P series printers.



KEY FEATURES & BENEFITS

- Good resistance in extreme temperatures
- Low shrinkage
- Adapted to print high stiffness parts



TYPICAL APPLICATIONS

- Large and massive parts
- Mechanical parts in the engine compartment
- Complex end-use parts
- Military applications parts

MATERIAL PROPERTIES

	TEST METHOD	VALUE
Base material		Polyamide 11, reinforced with glass beads
Appearance		Light grey
Bulk density [g/cm ³]	ISO 1068-1975	0.95
Sintered part density [g/cm ³]	Prodways Method	1.40
Average particle size (µm)	Laser diffraction	55
Melting point [°C]	ISO 11357-3	198 - 205

MECHANICAL PROPERTIES*

	TEST METHOD	VALUE
Tensile strength [MPa]	ISO 527	30 - 45
Young modulus [MPa]	ISO 527	2900 - 3450
Tensile elongation at break [%]	ISO 527	5 - 9
Flexural modulus (MPa)	ISO 178	2200 - 2300
HDT/A (1.8 MPa) [°C]	ISO 75	133

* Performance characteristics may change according to product application, operating conditions or level of refresh.