

Nylon PA12 Glass Filled

Nylon PA 12 GB, Nylon PA 12 40% Glass Filled

Nylon PA 12 40% GF is suitable for demanding conditions and is recommended for all applications where thermal stability and structural rigidity are required.



Material properties

Density	ASTM D792	1.30	g/cm ³
Water absorption at saturation	ISO 62	1.70	%
Hygroscopicity	ISO 62	0.80	%
Suitability for food contact	CE 1935/2004 – 10/2011	NO	
Tensile strength	ASTM D638	30	MPa
Elongation at break	ASTM D638	10	%
Yield strength	ISO 527	47.5	MPa
Elastic modulus	ASTM D638	2500	MPa
Flexural strength	ASTM D790	57.5	MPa
Resilience	ISO 179	80	kJ/m ²
Hardness	ASTM D2240	82 D	Shore
HDT 0.45 MPa	ASTM D648	174	°C
HDT 1.8 MPa	ASTM D648	114	°C

Printing layer height

0.003 in (0.08 mm)

Maximum dimensions

15x11.2x15 in (380x284x380 mm)

Tolerances

± 0.02 in < 3.94 in / ± 0.3% > 3.94 in

Applications

For functional prototypes and automotive and consumer electronics end parts. Excellent impact and fatigue resistance for parts requiring hundreds of opening and closing cycles. Can replace injection moulded parts. Resistant to hydrocarbons and oils.

All data is provisional from beta testing of the material and process. Additional tests and properties will integrate this datasheet as soon as available. Information contained in this data sheet is up-to-date and correct as at the date of issue. As MJF 3D Hub cannot control or anticipate the conditions under which this product may be used, each user should review the information in the specific context of the planned use. To the maximum extent permitted by law, we will not be responsible for damages of any nature resulting from the use or reliance upon the information contained in this data sheet. No express or implied warranties are given other than those implied mandatory by law.