

Nylon 12 (PA 12) glass-filled

Alternative Designations

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Key Features

Enhanced compressive strength • Stiff • Cost-effective

Description

Nylon 12 (PA 12) glass-filled is a type of nylon/polyamide powder that has been reinforced with glass fibers. Compared to the Nylon PA 12, this has enhanced compressive strength with improved heat distortion temperature. Parts produced are consistent and durable. Its stiffness allows for the production of components for automotive, aerospace and consumer products.

Mechanical Properties

Tensile modulus	3200 MPa
Tensile strength	51 MPa
Elongation at break	9%
Flexural strength	65 MPa
Flexural modulus	2.4 – 2.7 GPa
Hardness (Shore D)	82

Thermal Properties

Melting temperature (20°C/min)	185°C
Heat deflection temperature (1.80 MPa)	110°C
Heat deflection temperature (0.45 MPa)	179°C
Softening temperature	165 – 175°C

Physical Properties

Density	1.22 g/cm ³
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Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.