

Data Sheet: Nylon 12 - Carbon filled

Details

The blend of Nylon 12 resin with chopped carbon fibre gives this material excellent structural properties. The carbon fibre occupies 35% of its weight. This allows for distinct freedom of design. It has wide applications in automobile, industrial and recreational industries.

Key Features

Excellent structural properties • Lightweight

Thermal Properties

Property	Value
Heat deflection [°C]	143
Glass transition temperature [°C]	41
Vicat softening temperature [°C]	166
Coefficient of thermal expansion [K-1 · 10-6]	25

Mechanical Properties

Property	Value
Tensile strength [MPa]	76
Modulus of elasticity [GPa]	7.6
Flexural strength [MPa]	142
Flexural modulus [GPa]	10.3
IZOD Impact [J/m]	85
Elongation at break [%]	1.9

Physical Properties

Property	Value
Density [g/cm ³]	1.15
Water Absorption [%]	0.5
Electrical Resistivity [ohm-cm]	1.4×10^5

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit [Materialdatacenter.com](https://www.materialdatacenter.com) for further information on this material.