

# Data Sheet: Carbon Fiber Reinforced Polyamide 12 (PA12)

## Details

This fibre composite material is made from the PA12 thermoplastic with approximately 35% carbon fibre about 0.15mm fibre length. It has the highest strength to weight ratio among all FDM materials. It is suitable for the production of lightweight functional prototypes and end products.

## Key Features

Excellent thermal and electrostatic properties · Conductive

## Thermal Properties

Property	Value
Heat Resistance [°C]	143

## Mechanical Properties

Property	Value
Tensile strength [MPa]	75.6
Flexural strength [MPa]	142
Impact strength [J/m]	85
Elongation at break [%]	1.9

## Physical Properties

Property	Value
Electrical Resistivity [ohm-cm]	$3.3 \times 10^{-6}$



*Manufacturing On Demand*

## 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.