

Data Sheet

Nylon 12 full-colour / CB PA 12

Alternative	Designations
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Key Features

Excellent thermal and electrostatic properties • Conductive • Ideal for functional prototypes

Description

This fibre composite material is a semi-crystalline thermoplastic with approximately 35% carbon fibre about 0.15 mm fibre length. It has the highest strength to weight ratio among all MJF materials. In addition, it can be dyed in a wide range of colours and has very good UV resistance. CB PA 12 is an ideal material for a wide range of applications, including 3D printing filament, consumer goods, automotive parts, and industrial components.

Mechanical Properties

Thermal Properties

Tensile modulus	1600 – 1700 MPa	Melting temperature (20°C/min)	189°C
Tensile strength	46 MPa		
Elongation at break	14 – 20%		
Flexural strength	142 MPa		

Physical Properties

Density 1.03 g/cm³

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.