Material Datasheet

Carbon Fiber Nylon

CF- Nylon is a combination of nylon with 20% (by weight) of micro-carbon fibers.

CF-Nylon is an advanced semi-aromatic polyamide copolymer reinforced with high-modulus carbon fiber. This filament is ideal for anyone that desires a structural component with high modulus, improved chemical and thermal resistance, excellent surface quality.

Common Applications

- Plastic gears
- Screws, nuts, bolts
- Flexible industrial parts
- Prosthetics, medical equipment
- Gears, fixtures and door hinges
- Automobile parts

Physical Properties	Standard	Unit	Typical Value
Density	ASTM D792	g/cm^3	1.24
Melt Flow Index	ASTM D1238	g/10 min	10(250°C/5Kg)

Mechanical Properties	Standard	Unit	Typical Value
Tensile Strength	ASTM D882	MPa	75
Elongation at Break	ASTM D882	%	26
Flexural Strength	ASTM D790	MPa	122
Flexural Modulus	ASTM D790	MPa	5160
Izod Impact Strength	ASTM D256	KJ/m^2	12

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	ASTM D3418	°C	120