

MATERIAL CARD 04

PA12 CF15

PA12 CF15, or Polyamide 12 reinforced with 15% carbon fibre, is a high-performance thermoplastic offering superior strength and rigidity. The incorporation of carbon fibre lends it enhanced stiffness, heat resistance, and dimensional stability, ideal for mechanically demanding applications.



Benefits

PA12 CF15 excels in its high strength to weight ratio, making it ideal for parts where weight is a critical factor as well as being an excellent material for lightweight tooling, jigs, and fixtures. It also has good chemical resistance, excellent heat deflection, and high durability, lending itself to applications ranging from aerospace to automotive and industrial uses.



Physical & Mechanical Properties

Property	Typical Value
Tg (°C)	50 - 60
Melt Temp (°C)	178 - 180
Density (kg/m ³)	1010 - 1050
Yield strength (MPa)	76
Bio-Compatibility	No

	Good	Average	Poor
Chemical Resistance	■		
UV Stability		■	
Reusability			■
Impact Resistance	■		
Fire Performance		■	

Typical Applications

- Aerospace/Defence components
- Automotive parts
- Medical equipment
- Industrial machinery
- Sports equipment
- Drone components
- Prototyping
- Robotics

Industries

- Aerospace
- Defence
- Space
- Rail
- Marine
- Nuclear
- Automotive

Colour Options

- Black
- White
- Blue
- Red
- Yellow
- Nectarine
- Ivory
- Green
- Grey
- Natural

To discuss your next additive manufacturing challenge, call our experts on **03330 150 563**

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