

Nylon 66 Reinforcement Materials

Product Name		Product Model						
PA66-CF		F15C	F20C	F30C	F40C	Data generated directly after machining (standard climate China)		
Density	1.18g/cm ³	1.22g/cm ³	1.16g/cm ³	1.23g/cm ³				
Colour	Black	Material Properties		Main features		Target Industries		
		<ul style="list-style-type: none"> ➤ Carbon Fiber Reinforcement ➤ Hydrolysis Resistance ➤ Injection Molding Grade ➤ Thermal Stability 		<ul style="list-style-type: none"> ➤ high strength ➤ high toughness ➤ good dimensional stability ➤ good surface 		<ul style="list-style-type: none"> ➤ mechanical engineering ➤ automotive industry ➤ sports equipment 		
Mechanical strength	parameter	value				unit	norm	comment
		F15C	F20C	F30C	F40C			
Tensile strength	50mm/m	170	200	230	250	Mpa	ISO 527-2	1)
Elongation at Break	50mm/m	4.0	2.5	1.7	1.3	%	ISO 527-2	:specimen 1b
Flexural Strength	2mm/mi	220	280	310	340	Mpa	ISO 178	2)Specimen
Flexural Modulus	2mm/mi	900	1200	1600	1800	Mpa	ISO 178	80mm×10mm×4mm
Izod Notched Impact	23°C	9	14	18	22	kJ/m ²	ISO 180	
Thermal performance	parameter	value				unit	norm	comment
Temperature of Deflection	1.8MPa	225	235	240	242	°C	ISO 75	3)
Temperature of Deflection	0.45MPa	/	242	245	246	°C	ISO 75	80mm×10mm×4mm
Melting temperature	/	250	250	250	250	°C	ISO 11375	
Electrical properties	parameter	value				unit	norm	comment
Surface resistivity	/	10 ⁸	10 ⁵	10 ⁴	10 ³	Ω	/	
Volume resistivity	/	10 ⁸	10 ⁵	10 ⁴	10 ³	Ω·cm	/	
Other properties	parameter	value				unit	norm	comment
Water absorption	24h,23°C	1.0	0.8	0.6	0.5	%	ISO 62	
Flammability	/	HB	HB	HB	HB	class	UL94	
Solid Filler Content	1h,600°C	15	20	30	40	%	ISO 3451	
Suggested Temperature		260-290				°C		

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