

3D Printing Filament

ASA-CF Datasheet

ASA Carbon Fiber



ASA Carbon Fiber is an engineering plastic, composed of a graft of acrylic rubber, acrylonitrile, and styrene copolymer, with added carbon fiber reinforcement. In addition to ASA's excellent mechanical and physical properties, it also has superior anti-ultraviolet (UV) capabilities, making it ideal for outdoor plastic products exposed to direct sunlight. In certain applications, ASA's anti-UV properties prevent fading and yellowing. It resists degradation caused by UV radiation, high temperatures, and oxidation in the atmosphere. This greatly enhances the material's anti-aging and weather resistance. According to test results, ASA's anti-aging performance is over 10 times better than that of ABS.

Features:

1. Excellent mechanical and physical properties
2. Superior weather resistance
3. High rigidity
4. Strong heat resistance
5. Good chemical resistance



Property:

Property	Unit	Test Standard	Typical Value
Density	g/m ³	ISO 1183	1.10
Melt Flow Index (220°C,10Kg)	g/10min	ISO 1133	18
Melting Point	°C	DSC	215
Tensile Strength at Yield	MPa	ISO527-2/50	60
Tensile Elongation at Break	%	ISO527-2/50	15%
Bending Strength	MPa	ISO178	78
Flexural Modulus	MPa	ISO178	2580
Notched Izod Impact	KJ/m ²	ISO180-A	13
Shrinkage Rate	%	ISO294-4	0.2~0.4
Carbon Fiber Content Rate	%	/	15%

Filament Specs:

Diameter	1.75±0.03mm
Suggested Printing Temperature	260°C
Suggested Heatbed Temperature	80-110°C
Suggested Printing Speed	30-100mm/s
Printing Condition	Warmed/Closed chamber is necessary.