

	PA12 noir	PA12 blanc	PA12 GF	PA12 GF (grande taille)
Material introduction	PA12 Black-Pro is a PA12 Nylon-like material, which is one of the best SLS materials for long-term use, and the cost is much lower than nylon 12 materials on the market, which is a more cost-effective choice.	The material is a White polyamide 12 with high-temperature resistance, good toughness, and high strength, which is suitable for functional verification of product prototypes.	Glass bead-filled polyamide 12 powder with a combination of excellent rigidity and good elongation at break	PA Glass-filled (Gray Black) is a nylon material with an excellent combination of rigidity and good elongation at break, suitable for applications requiring stiffness, high-temperature conditions and wear resistance.
Density				
Heat deflection temperature	(ISO78-1:2020, HDT@0.45MPa): 145°C, (ISO78-1:2020, HDT@1.8MPa): 52°C	(0.45 MPa) (GB/T 1040.2-2006): 145 °C, (1.8 MPa) (GB/T 1040.2-2006): 82 °C	(0.45 MPa) (GB/T 1040.2-2006): 160 °C, (1.8 MPa) (GB/T 1040.2-2006): 85 °C	(ASTM D648, 0.45MPa): 184.4°C, (ASTM D648, 1.8MPa): 126°C
Elongation at break	(ISO527-1:2018): 40%(X/Y), 35%(Z)	0.36	(GB/T 1040.2): 5%	(ASTM D638): 5%-8%
Tensile Modulus	(ISO527-1:2019): 1450MPa(X/Y), 1400MPa(Z)	1600 MPa	(GB/T 1040.2): 3500 MPa	(ASTM D256): 2398MPa
Tensile strength	(ISO527-1:2019): 42MPa(X/Y), 40MPa(Z)	(GB/T 1040.2): 46 MPa	(GB/T 1040.2): 44 MPa	(ASTM D638): 32MPa
Flexural Modulus	(GB/T 9341-2008): 1400MPa(X/Y), 1300MPa(Z)	1300 MPa	(GB/T 1040.2): 2400 MPa	(ASTM D790): 2241MPa
Flexural Strength			(GB/T 1040.2): 65 MPa	(ASTM D790):
Bending strength	(GB/T 9341-2008): 48MPa(X/Y), 45MPa(Z)	46.3 MPa		
Notch impact strength	(GB/T 1843-2008): 10KJ/m ² (X/Y), 7KJ/m ² (Z)	4.9 KJ/m ²	4.13 KJ/m ²	
Unnotched impact strength	(GB/T 1843-2008): 32KJ/(X/Y), 24KJ/(Z)	13.2KJ/m ²	19.28 KJ/m ²	
Izod Impact Test with Notch				(ASTM D256): 29J/M
Izod Impact Test without Notch				(ASTM D256): 264J/M
Tensile elongation at break				
Melting point	(ISO11357-1:2020, 10°C/min): 185.5°C	183 °C	184 °C	
Dielectric constant		60 Hz: 3.5	60 Hz: 3.7	
Tolerance	±300 µm or ±0.3%	±200 µm or ±0.2%	±200 µm or ±0.2%	±300 µm or ±0.3%
Other properties				
		PRECIPRINT 3D l'impression de précision		