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Innovating Tomorrow's Materials

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Technical Data Sheet: Performance ASA GF10

Description: Matter3D Performance ASA-GF10 is a premium, engineering-grade glass fiber-reinforced ASA filament designed for exceptional outdoor durability, dimensional stability, and reliable 3D-printing performance. Reinforced with 10% glass fiber, this material offers enhanced rigidity, improved resistance to deformation, and reduced warping compared to conventional ASA.

Combining the excellent weather resistance and UV stability of ASA with the mechanical benefits of glass fiber reinforcement, Performance ASA-GF10 delivers strong layer adhesion, high stiffness, and excellent dimensional accuracy. Its low-shrinkage characteristics make it ideal for automotive components, outdoor fixtures, structural housings, functional prototypes, and demanding end-use applications requiring strength, rigidity, and long-term environmental resistance.

Physical Properties	Standard	Units	Recorded Value
Density	ASTM D792	g/mL	1.23

Mechanical Properties	Standard	Unit	Recorded Value
Tensile Strength (Yield)	ASTM D638	MPa	59
Elongation at break	ASTM D638	%	5
Flexural Strength	ASTM D790	MPa	104
Flexural Modulus	ASTM D790	MPa	4450
IZOD Impact, charpy	ASTM D256	J/m	130

Thermal Properties	Standard	Unit	Recorded Value
Glass Transition Temp. Tg	DSC	°C	112
Heat Deflection Temperature at 1.8 MPa	ASTM D648	°C	110

Printer Settings:
Nozzle: 265–295 °C
Bed: 110 °C
Chamber: 60–70 °C (enclosed printer strongly recommended)
Cooling fan: 0% (≤5% only for bridges)

Notice:
Typical values, not specifications. Performance varies with printer, part geometry, and settings. Users must verify fitness for purpose and comply with regulations. Matter Industries Inc. provides no warranties and assumes no liability.