



## Features:

- Excellent color stability
- Great durability and mechanical properties
- High temperature resistance
- Create accurate and repeatable parts as demanded by manufacturers
- Good chemical resistance and anti-oxidative properties
- Low water absorption

## Benefits:

- Low cost of ownership
- Use existing machine config files
- Good powder material recycling
- Wide process window
- Can easily be glued or bonded
- Parts can be easily machined, sealed and painted
- Fast applications and technical support
- Available custom blends

## Applications:

- Produce complex prototype pieces and end-use parts without tooling
- Spare parts and low volume manufacturing
- Customized production and prototype plastic parts
- Aerospace fixtures and check assemblies
- Automotive dashboard assemblies and light housings
- Complex thin-wall duct work
- Pump and fan assemblies
- Lighting fixtures and assemblies
- Electrical connectors
- Cell phone covers
- Functional toy prototypes
- Repeated snap fit assemblies
- Undersea optical cable protection
- Sporting goods
- Hobbyist and Makers





## Datasheet

FS-3200PA Unfilled Nylon			
Properties	Test Method	Metric	U.S.
Density, Bulk	ASTM D1895	0.45 g/cm <sup>3</sup>	
Density, Sintered	ASTM D792	0.95 g/cm <sup>3</sup>	
Particle Size (D50)	Laser Diff.	45 microns	
Tensile Strength	ASTM D638	48 MPa	6976 psi
Tensile Modulus	ASTM D638	1609 MPa	239 ksi
Flexural Strength	ASTM D790	44 MPa	6309 psi
Flexural Modulus	ASTM D790	1431 MPa	208 ksi
Elongation at Break	ASTM D638	38%	38%
Impact Strength, Notched Izod	ASTM D256	29 J/m	0.54 ft-lb/in
Impact Strength, Un-notched Izod	ASTM D256	484 J/m	9.07 ft-lb/in
Moisture Absorption - 24 Hrs	ASTM D570	0.8 - 0.95%	
Melting Point	ASTM D3418	183 °C	361 °F
Heat Deflection @0.45 MPa	GB/T 1634-2-2000	146 °C	294 °F
Heat Deflection @1.80 MPa	GB/T 1634-2-2000	58 °C	137 °F

\* Data is averaged and may vary depending on operating parameters

FS-3400GF Glass Filled Nylon			
Properties	Test Method	Metric	U.S.
Density, Bulk	ASTM D1895	0.67 g/cm <sup>3</sup>	
Density, Sintered	ASTM D792	1.26 g/cm <sup>3</sup>	
Particle Size (D50)	Laser Diff.	39 microns	
Tensile Strength	ASTM D638	44 MPa	6382 psi
Tensile Modulus	ASTM D638	5043 MPa	731 ksi
Flexural Strength	ASTM D790	41 MPa	5947 psi
Flexural Modulus	ASTM D790	2627 MPa	381 ksi
Elongation at Break	ASTM D638	5%	5%
Impact Strength, Notched Izod	ASTM D256	33 J/m	0.62 ft-lb/in
Impact Strength, Un-notched Izod	ASTM D256	193 J/m	3.62 ft-lb/in
Moisture Absorption - 24 Hrs	ASTM D570	0.5 - 0.71%	
Melting Point	ASTM D3418	184 °C	363 °F
Heat Deflection @0.45 MPa	GB/T 1634-2-2000	172 °C	341 °F
Heat Deflection @1.80 MPa	GB/T 1634-2-2000	82 °C	180 °F

\* Data is averaged and may vary depending on operating parameters