

## EOS PA 3200 GF

### MATERIAL NAME

PA3200 GF

### Color

White

### MATERIAL GROUP

Nylon

### MATERIAL TYPE

Thermoplastic

### BRAND

EOS

### TECHNOLOGY

SLS,SLM

### FEATURES

Nylon glass fiber powder PA3200 GF is a white, glass-filled polyamide powder containing up to 30% glass fiber, which has better rigidity and elongation at break than nylon. Nylon glass fiber material has better impact resistance, high hardness, good strength and better toughness. The maximum temperature of heat resistance is 150 ° C-170 ° C, and the surface is fine powder. It is an ideal material with high hardness requirements.

Mechanical properties	Value	Unit	Test Standard
Izod Impact notched (23°C)	4.2	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact unnotched (23°C)	21	kJ/m <sup>2</sup>	ISO 180/1U
Shore D hardness (15s)	80	-	ISO 868
Ball indentation hardness	98	MPa	ISO 2039-1
Tensile Modulus (X Direction)	3200	MPa	ISO 527-1/-2
Tensile Modulus (Y Direction)	3200	MPa	ISO 527-1/-2
Tensile Modulus (Z Direction)	2500	MPa	ISO 527-1/-2
Tensile Strength (X Direction)	51	MPa	ISO 527-1/-2
Tensile Strength (Y Direction)	51	MPa	ISO 527-1/-2
Tensile Strength (Z Direction)	47	MPa	ISO 527-1/-2
Strain at break (X Direction)	9	%	ISO 527-1/-2
Strain at break (Y Direction)	9	%	ISO 527-1/-2
Strain at break (Z Direction)	5.5	%	ISO 527-1/-2
Charpy impact strength (+23°C, X Direction)	35	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C, X Direction)	5.4	kJ/m <sup>2</sup>	ISO 179/1eA
Flexural Modulus (23°C, X Direction)	2900	MPa	ISO 178
Flexural Strength (X Direction)	73	MPa	ISO 178
Temp. of deflection under load (1.80 MPa, X Direction)	96	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa, X Direction)	157	°C	ISO 75-1/-2
<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Melting temperature (20°C/min)	176	°C	ISO 11357-1/-3
Vicat softening temperature (50°C/h 10N)	179	°C	ISO 306
Vicat softening temperature (50°C/h 50N)	166	°C	ISO 306