POLYMER SOLUTIONS

PA 3200 GF

Material Data Sheet

PA 3200 GF

Product Description

PA 3200 GF is a white polyamide 12 powder filled with glass beads. Parts made from PA 3200 GF show high rigidity while maintaining a good elongation at break. In addition, they are characterized in particular by their special wear resistance, which makes them a perfect fit for increased abrasion resistance requirements.

MAIN CHARACTERISTICS

- High stiffness
- Wear resistance
- Improved temperature performance

TYPICAL APPLICATIONS

- Machine components that require enhanced siffness under load, e.g., housings
- Heavily used parts that require enhanced wear and abrasion resistance
- Forming tools

MECHANICAL PROPERTIES	DRY / CONDITIONED	UNIT	TEST STANDARD
Tensile Modulus			ISO 527-1/-2
X Orientation	3200 / -	MPa	
Y Orientation	3200 / -	MPa	
Z Orientation	2500 / -	MPa	
Tensile Strength			ISO 527-1/-2
X Orientation	51 / -	MPa	
Y Orientation	51 / -	MPa	
Z Orientation	47 / -	MPa	
Strain at Break			ISO 527-1/-2
X Orientation	9 / -	%	
Y Orientation	9 / -	%	
Z Orientation	5.5 / -	%	
Flexural Modulus			ISO 178
X Orientation	2900 / -	MPa	
Flexural Strength			ISO 178
X Orientation	73 / -	-	
Charpy Impact Strength (+23°C)			ISO 179
X Orientation	35 / -	kJ/m²	
Charpy Notched Impact Strength (+23°C)			ISO 179
X Orientation	5.4 / -	kJ/m²	
Izod Impact Strength (+23°C)			ISO 179
X Orientation	21 / -	kJ/m²	
Izod Notched Impact Strength (+23°C)			ISO 179
X Orientation	4.2 / -	kJ/m²	
Ball Indentation Hardness			ISO 2039-1
X Orientation	98 / -	MPa	
Shore D Hardness			ISO 7619-1
X Orientation	80 / -	-	

THERMAL PROPERTIES	DRY / CONDITIONED	UNIT	TEST STANDARD
Melting Temperature	-	°C	ISO 11357-1/-3
Temperature of Deflection under Load 1.80 MPa			ISO 75-1/-2
X Orientation	96	°C	
Temperature of Deflection under Load 0.45 MPa			ISO 75-1/-2
X Orientation	157	°C	

OTHER PROPERTIES	VALUE	UNIT	TEST STANDARD
Density	1.22	g/cm³	EOS Method
Powder Color	whitish	-	-
Components Color	whitish	-	-

HEADQUARTERS

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