

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 stiffness 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/m ² | |
| Charpy Notched Impact Strength (+23°C) | | | ISO 179 |
| X Orientation | 5.4 / - | kJ/m ² | |
| Izod Impact Strength (+23°C) | | | ISO 179 |
| X Orientation | 21 / - | kJ/m ² | |
| Izod Notched Impact Strength (+23°C) | | | ISO 179 |
| X Orientation | 4.2 / - | kJ/m ² | |
| 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/cm ³ | EOS Method |
| Powder Color | whitish | - | - |
| Components Color | whitish | - | - |

HEADQUARTERS

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