

Xencor[™] PARA LGF-1050 polyarylamide

Xencor[™] PARA LGF-1050 is a 50% Long Glass Fiber reinforced, heat stabilized polyarylamide PARA with excellent surface gloss, low moisture absorption and high heat deflection temperature. It exhibits unique stiffness/toughness combination, an excellent retention of properties in a wide temperature range, as well as outstanding creep resistance. Xencor[™] PARA LGF-1050 has a pellet length of 9mm and can be processed on most injection-molding machines. It is available in black and natural.

Black: Xencor™ PARA LGF-1050 BK 000-9 Natural: Xencor™ PARA LGF-1050 NT-9

General

| Material Status | Commercial: Active | |
|------------------------|---|--|
| Availability | Africa & Middle East Asia Pacific Europe | Latin AmericaNorth America |
| Filler / Reinforcement | Long Glass Fiber, 50% Filler by Weight | |
| Features | Creep Resistant Electrically Insulating Fatigue Resistant High Gloss High Impact Resistance | High Temperature Stiffness Low CLTE Low Shrinkage Low Warpage |
| Uses | Aircraft ApplicationsAutomotive Applications | Consumer ApplicationsIndustrial Applications |
| RoHS Compliance | RoHS Compliant | |
| Appearance | • Black | |
| Forms | Pellets | |
| Processing Method | Compression Molding Injection Molding | Overmolding |

| Physical | Typical Value Unit | Test method |
|--|--------------------|-----------------|
| Density | 1.64 g/cm³ | ISO 1183 |
| Water Absorption (Equilibrium, 23°C, 50% RH) | 1.2 % | ISO 62 |
| Mold Shrinkage - Flow ¹ | 0.10 to 0.30 % | Internal Method |

| Mechanical | Typical Value Unit | Test method |
|---|--------------------|-------------|
| Tensile Modulus | | ISO 527-1 |
| 23°C | 22000 MPa | |
| 70°C | 20000 MPa | |
| Tensile Stress | | ISO 527-2 |
| 23°C | 265 MPa | |
| 70°C | 205 MPa | |
| Tensile Strain (Break) | 1.6 % | ISO 527-2 |
| Flexural Modulus (23°C) | 21000 MPa | ISO 178 |
| Flexural Stress (23°C) | 405 MPa | ISO 178 |
| Impact | Typical Value Unit | Test method |
| Charpy Notched Impact Strength (23°C) | 34 kJ/m² | ISO 179 |
| Charpy Unnotched Impact Strength (23°C) | 60 kJ/m² | ISO 179 |
| Thermal | Typical Value Unit | Test method |
| Deflection Temperature Under Load | | |
| 0.45 MPa, Unannealed | 260 °C | ISO 75-2/B |
| 1.8 MPa, Unannealed | 255 °C | ISO 75-2/A |
| Injection | Typical Value Unit | |
| Drying Temperature | 120 °C | |
| Drying Time | 4.0 hr | |
| Suggested Max Moisture | 0.080 % | |
| Rear Temperature | 280 to 300 °C | |
| Middle Temperature | 280 to 310 °C | |
| Front Temperature | 280 to 310 °C | |
| Nozzle Temperature | 270 to 310 °C | |
| Processing (Melt) Temp | < 310 °C | |
| Mold Temperature | 120 to 140 °C | |
| | | |

Injection Notes

Pre-Drying

• Since polyamides are hygroscopic materials as well as sensitive to moisture during processing, this product should always be pre-dried.

Regrind

• Regrind of highly filled thermoplastic materials, such as this material, should only be recycled with special care. The regrind content must never exceed 20% and only regrind of optimum quality should be used. In any case, part properties should be checked.

Notes

Typical properties: these are not to be construed as specifications. ¹ Tested in accordance with Specialty Polymers methods.

www.syensqo.com

Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

Neither Syensqo nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Syensqo's products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Syensqo's recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva® family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infinged. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right.

All trademarks and registered trademarks are property of the companies that comprise the Syensqo or their respective owners.

© 2024 2023 Syensqo. All rights reserved.

