



Edgetek™ AM-60GF/000 HS Natural Polyphthalamide

Key Characteristics

Product Description

The Edgetek® Engineering Thermoplastic Compounds portfolio covers a broad range of standard and custom-formulated high performance materials. This portfolio includes high-temperature materials for elevated service temperature environments, high-modulus / structural materials for load-bearing and high-strength applications and flame-retardant products. These compounds are based on select engineering thermoplastic resins that are compounded with reinforcing additives such as carbon fiber, glass fiber and glass beads.

General

| | |
|------------------------|---|
| Material Status | • Commercial: Active |
| Regional Availability | • Africa & Middle East • Europe |
| Filler / Reinforcement | • Glass Fiber, 60% Filler by Weight |
| Features | • Heat Stabilized |
| Uses | • Automotive Applications • General Purpose • Electrical/Electronic Applications • Industrial Applications |
| Appearance | • Natural Color |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---------------------------|------------------------|-------------|
| Density ² | 1.75 g/cm ³ | 1.75 g/cm ³ | ISO 1183 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus | 2.76E+6 psi | 19000 MPa | ISO 527-2 |
| Tensile Stress | 34800 psi | 240 MPa | ISO 527-2 |
| Tensile Strain (Break) | 0.50 to 1.0 % | 0.50 to 1.0 % | ISO 527-2 |
| Flexural Modulus | 2.32E+6 psi | 16000 MPa | ISO 178 |
| Flexural Stress | 49300 psi | 340 MPa | ISO 178 |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Charpy Notched Impact Strength (73°F (23°C)) | 4.8 ft·lb/in ² | 10 kJ/m ² | ISO 179/1eA |
| Charpy Unnotched Impact Strength 73°F (23°C) | 38 ft·lb/in ² | 80 kJ/m ² | ISO 179 |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed | 536 °F | 280 °C | ISO 75-2/A |
| Melting Temperature (DSC) | 572 to 617 °F | 300 to 325 °C | ISO 3146 |
| Electrical | Typical Value (English) | Typical Value (SI) | Test Method |
| Comparative Tracking Index | 600 V | 600 V | IEC 60112 |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating (0.13 in (3.2 mm)) | HB | HB | UL 94 |
| FMVSS Flammability | < 3.9 in/min | < 100 mm/min | DIN 75200 |

Processing Information

| Injection | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature | 248 °F | 120 °C |
| Drying Time | 4.0 hr | 4.0 hr |
| Suggested Max Moisture | < 0.10 % | < 0.10 % |
| Processing (Melt) Temp | 599 to 635 °F | 315 to 335 °C |
| Mold Temperature | 212 to 284 °F | 100 to 140 °C |

Notes

¹ Typical values are not to be construed as specifications.

² +/-0.02



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