



Edgetek™ ET3500-5002 BK

Polycarbonate + ASA

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 | • Europe |
| Filler / Reinforcement | • Glass Fiber, 12% Filler by Weight |
| Features | • Low Warpage |
| RoHS Compliance | • RoHS Compliant |
| Forms | • Pellets |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---------------------------------|---------------------------------|--------------|
| Density ² (73°F (23°C)) | 1.23 g/cm ³ | 1.23 g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (300°C/2.16 kg) | 17 to 22 g/10 min | 17 to 22 g/10 min | ISO 1133 |
| Melt Volume-Flow Rate (MVR) (300°C/21.6 kg) | 13 to 16 cm ³ /10min | 13 to 16 cm ³ /10min | ISO 1133 |
| Molding Shrinkage - Flow | 1.0E-3 to 2.0E-3 in/in | 0.10 to 0.20 % | ASTM D955 |
| Water Absorption (24 hr) | 0.15 % | 0.15 % | ASTM D570 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus 73°F (23°C), 0.157 in (4.00 mm), Injection Molded | 856000 psi | 5900 MPa | ISO 527-2/1 |
| Tensile Stress Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded | 14500 psi | 100 MPa | ISO 527-2/50 |
| Tensile Strain Break, 73°F (23°C), 0.157 in (4.00 mm), Injection Molded | 2.2 % | 2.2 % | ISO 527-2/50 |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Charpy Notched Impact Strength 73°F (23°C), Injection Molded | 3.8 ft·lb/in ² | 8.0 kJ/m ² | ISO 179 |
| Charpy Unnotched Impact Strength 73°F (23°C), Injection Molded | 18 ft·lb/in ² | 37 kJ/m ² | ISO 179 |
| Electrical | Typical Value (English) | Typical Value (SI) | Test Method |
| Surface Resistivity | > 1.0E+14 ohms | > 1.0E+14 ohms | ASTM D257 |
| Volume Resistivity | > 1.0E+15 ohms·cm | > 1.0E+15 ohms·cm | ASTM D257 |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating | HB | HB | UL 94 |

Processing Information

| Injection | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature | 248 °F | 120 °C |
| Drying Time | 3.0 to 4.0 hr | 3.0 to 4.0 hr |
| Processing (Melt) Temp | 536 to 608 °F | 280 to 320 °C |
| Mold Temperature | 180 to 230 °F | 82 to 110 °C |

Notes

¹ Typical values are not to be construed as specifications.

² ±0.02



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