



Edgetek™ MLS-1000

Polycarbonate + PSU

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 • Asia Pacific | • Europe • North America | • South America |
| Features | • General Purpose | • Heat Resistance, High | |
| Uses | • Automotive Applications • Consumer Applications | • General Purpose • Industrial Applications | |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

Technical Properties ¹

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------------------------|-------------------------|--------------------|-------------|
| Specific Gravity | 1.23 | 1.23 | ASTM D792 |
| Molding Shrink (Flow) | 0.60 to 0.70 % | 0.60 to 0.70 % | ASTM D955 |
| Water Absorption (24 hr, 0.125 in (3.18 mm)) | 0.020 % | 0.020 % | ASTM D570 |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Modulus ² | 350000 psi | 2410 MPa | ASTM D638 |
| Tensile Strength ² (Yield) | 9500 psi | 65.5 MPa | ASTM D638 |
| Tensile Elongation ² (Break) | 20 to 22 % | 20 to 22 % | ASTM D638 |
| Flexural Modulus | 350000 psi | 2410 MPa | ASTM D790 |
| Flexural Strength | 14000 psi | 96.5 MPa | ASTM D790 |
| Impact | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Notched Izod Impact | | | ASTM D256A |
| 73 °F (23 °C), 0.125 in (3.18 mm), Injection Molded | 1.60 ft-lb/in | 85.4 J/m | |

Processing Information

| Injection | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Processing (Melt) Temp | 630 to 660 °F | 332 to 349 °C |

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

CONTACT INFORMATION

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