# Edgetek™ CY-1000 UV FR V0

## Polycarbonate + ABS

### 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<br>• Asia Pacific | • Europe<br>• Latin America | • North America |
| Features | • Flame Retardant | | |
| RoHS Compliance | • RoHS Compliant | | |
| Forms | • Pellets | | |

### Technical Properties [1]

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| Specific Gravity | 1.21 | 1.21 | ASTM D792 |
| Molding Shrinkage - Flow | 4.0E-3 to 6.0E-3 in/in | 0.40 to 0.60 % | ASTM D955 |
| Water Absorption (24 hr) | 0.10 % | 0.10 % | ASTM D570 |
| Outdoor Suitability | f2 | f2 | UL 746C |
| **Mechanical** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Tensile Modulus [2] | 310000 psi | 2140 MPa | ASTM D638 |
| Tensile Strength (Yield) | 8500 psi | 58.6 MPa | ASTM D638 |
| Tensile Elongation [2] (Break) | 10 % | 10 % | ASTM D638 |
| Flexural Modulus | 380000 psi | 2620 MPa | ASTM D790 |
| Flexural Strength | 14000 psi | 96.5 MPa | ASTM D790 |
| **Impact** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Notched Izod Impact | | | ASTM D256A |
| 73°F (23°C), 0.250 in (6.35 mm), Injection Molded | 2.0 ft·lb/in | 110 J/m | |
| **Thermal** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi (0.45 MPa), Unannealed | 150 °F | 65.6 °C | |
| **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+17 ohms·cm | 1.0E+17 ohms·cm | ASTM D257 |
| **Flammability** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Flame Rating (0.0625 in (1.59 mm), ALL) | V-0 | V-0 | Internal Method |

**Notes**

[1] Typical values are not to be construed as specifications.

[2] Type I, 0.20 in/min (5.1 mm/min)

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