# Edgetek™ ET3200-5010 NHFR

## Polycarbonate

### Key Characteristics

| General | | | |
|---|---|---|---|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Europe | | |
| Features | • Flame Retardant | • Good Dimensional Stability | • Halogen Free |
| Uses | • Electrical/Electronic Applications | • General Purpose | • Housings |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

### Technical Properties [1]

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| Density | 1.20 g/cm³ | 1.20 g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 10 to 15 g/10 min | 10 to 15 g/10 min | ISO 1133 |
| Molding Shrinkage [2] | 0.30 to 0.70 % | 0.30 to 0.70 % | Internal Method |
| **Mechanical** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Tensile Modulus | | | ISO 527-2/1 |
| 73°F (23°C), 0.157 in (4.00 mm), Injection Molded | 435000 psi | 3000 MPa | |
| Tensile Stress | | | ISO 527-2 |
| Yield, 73°F (23°C), 0.157 in (4.00 mm) | 9720 psi | 67.0 MPa | |
| Tensile Strain (Yield, 73°F (23°C)) | 5.5 % | 5.5 % | ISO 527-2 |
| Tensile Strain (Break, 73°F (23°C)) | > 50 % | > 50 % | ISO 527-2 |
| Flexural Modulus (73°F (23°C)) | 341000 psi | 2350 MPa | ISO 178 |
| Flexural Stress (73°F (23°C)) | 10900 psi | 75.0 MPa | ISO 178 |
| **Impact** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Charpy Notched Impact Strength | | | ISO 179 |
| -22°F (-30°C) | 4.3 ft·lb/in² | 9.0 kJ/m² | |
| 73°F (23°C) | 4.8 ft·lb/in² | 10 kJ/m² | |
| Charpy Unnotched Impact Strength | | | ISO 179 |
| -22°F (-30°C) | 47 ft·lb/in² | 99 kJ/m² | |
| 73°F (23°C) | No Break | No Break | |
| **Electrical** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Comparative Tracking Index | 250 V | 250 V | IEC 60112 |
| **Flammability** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Flame Rating | | | UL 94 |
| 0.06 in (1.6 mm) | V-0 | V-0 | |
| 0.12 in (3.0 mm) | V-0 | V-0 | |
| Glow Wire Flammability Index | | | IEC 60695-2-12 |
| 0.03 to 0.12 in (0.8 to 3.0 mm) | 1760 °F | 960 °C | |

### Processing Information

| Injection | Typical Value (English) | Typical Value (SI) |
|---|---|---|
| Drying Temperature | 212 to 248 °F | 100 to 120 °C |