

Technical Data Sheet



Glastic® UTR Angles and Channels

Typical characteristics

- Polyester (UP) resin matrix reinforced by fiberglass
- 1,000 Minutes Track Resistance, Electrically Insulating, Highly Flame Resistant, Low Smoke & Smoke Toxicity, UL® Recognized, and Halogen-Free

Typical industries

- Industrie de l'équipement électrique
- Générateurs et moteurs
- Transformateurs à air sec
- Composants d'isolation électrique
- Installations de distribution électrique
- Industrie électronique

| | Test method | Unit | Guideline value |
|-----------------------------------|-------------|--------------------------------|-----------------|
| General properties | | | |
| NEMA Grade LI 1-1989 | NEMA LI-1 | | GPO-3 |
| Standard Color | | | Red |
| UL Temperature Index - Electrical | UL 746B | °C | 130 |
| UL Temperature Index - Mechanical | UL 746B | °C | 160 |
| UL Recognition File Number | | | E23525 |
| Mechanical properties | | | |
| Flexural Strength | ASTM D 790 | psi | 25,000 |
| Flexural Strength @130°C | ASTM D 790 | psi | 13,000 |
| Tensile Strength | ASTM D 638 | psi | 15,000 |
| Tensile Modulus | ASTM D 638 | psi X 10 ⁶ | 1.7 |
| IZOD Impact Strength (notched) | ASTM D 256 | ft. lb./in. | 9.6 |
| Shear Strength | ASTM D 732 | psi | 14,500 |
| Compressive Strength - Flatwise | ASTM D 695 | psi | 42,000 |
| Compressive Strength - Edgewise | ASTM D 695 | psi | 20,000 |
| Thermal properties | | | |
| Coefficient of Thermal Expansion | ASTM D 696 | (in./in.°C) x 10 ⁻⁵ | 2 |
| Thermal Conductivity | ASTM C 177 | | 1.9 |



| | Test method | Unit | Guideline value |
|--|-------------|----------|-----------------|
| Flame resistance properties | | | |
| UL Subject 94 | UL 94 | | V0 |
| Specific Optical Density of Smoke - D _s @ 4.0 min. Non-Flaming (Avg.) | ASTM E 662 | | 0.3 |
| Specific Optical Density of Smoke - D _s @ 4.0 min. Flaming (Avg.) | ASTM E 662 | | 10.7 |
| Specific Optical Density of Smoke - D _m (corr) Non-Flaming (Avg.) | ASTM E 662 | | 3.1 |
| Specific Optical Density of Smoke - D _m (corr) Flaming (Avg.) | ASTM E 662 | | 128.4 |
| Physical properties | | | |
| Water Absorption | ASTM D 570 | % by wt. | 0.3 |
| Specific Gravity | ASTM D 792 | | 1.8 |
| Barcol Hardness | ASTM D 2583 | | 50 |
| Thickness Tolerance - Up to 0.125" | | in. | +/- 0.015 |
| Thickness Tolerance - 0.125" to 0.250" | | in. | +/- 0.020 |
| Thickness Tolerance - Over 0.250" | | in. | +/- 0.025 |
| Angularity of Legs | | degrees | +/- 3 |
| Cut Length | | in. | +2", -0" |
| Dielectrical properties | | | |
| Electrical Strength - Perpendicular S/T in Air | ASTM D 149 | Vpm | 200 |
| Electrical Strength - Parallel S/S in Oil | ASTM D 149 | kV | 45 |
| Arc Resistance | ASTM D 495 | sec. | 185 |
| Inclined Plane Track Resistance | ASTM D 2303 | min. | 500+ |

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