

### 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

- Electrical Industry
- Generator and Motor
- Dry transformers
- Electrical Insulating Components
- Switchgear
- Electronics

	Test method	Unit	Guideline value
<b>General properties</b>			
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
<b>Mechanical properties</b>			
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 <sup>6</sup>	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
<b>Thermal properties</b>			
Coefficient of Thermal Expansion	ASTM D 696	(in./in.°C) x 10 <sup>-5</sup>	2
Thermal Conductivity	ASTM C 177		1.9
<b>Flame resistance properties</b>			



	Test method	Unit	Guideline value
UL Subject 94	UL 94		V0
Specific Optical Density of Smoke - Ds @ 4.0 min. Non-Flaming (Avg.)	ASTM E 662		0.3
Specific Optical Density of Smoke - Ds @ 4.0 min. Flaming (Avg.)	ASTM E 662		10.7
Specific Optical Density of Smoke - Dm(corr) Non-Flaming (Avg.)	ASTM E 662		3.1
Specific Optical Density of Smoke - Dm(corr) Flaming (Avg.)	ASTM E 662		128.4
<b>Physical properties</b>			
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"
<b>Dielectrical properties</b>			
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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