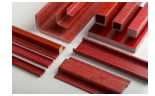


### Technical Data Sheet



# Glastic<sup>®</sup> UTR Angles and Channels

GFK-UP

#### Typical characteristics

- Polyester (UP) resin matrix reinforced by fiberglass
- 1,000 Minutes Track Resistance, Electrically Insulating, Highly Flame Resistant, Low Smoke & Smoke Toxicity, UL<sup>®</sup> 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>			

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	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+

All of the information, suggestions, and recommendations pertaining to the properties and uses of the Röchling Glastic Composites products described herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the use contemplated, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. THERE IS NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Under no circumstances shall we be liable for incidental or consequential loss or damage. Glastic® is a registered trademark of Röchling Glastic Composites. UL® is a registered trademark of Underwriters Laboratories, Inc. See correlating profile page for sizing and related information.

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Print: 29/04/2026 • Release: 15/12/2023 • Version: 5.0  
 PIM-ID: 715323 • PIM-Code: 74-23-9.7-11.4.6.7.8-8  
 Company-IDs: 23050

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