

Technical Data Sheet

Glastic® SG-200

GFK-UP

Typical characteristics

- Strong, excellent retention of properties at elevated temperature, easily fabricated

Typical industries

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

	Test method	Unit	Guideline value
General properties			
Part Number			1906
NEMA Grade LI 1-1989	NEMA LI-1		GPO-1
Standard Color			Natural/Tan
UL Temperature Index - Electrical	UL 746B	°C	210
UL Temperature Index - Mechanical	UL 746B	°C	210
UL Recognition File Number			E81928
Mechanical properties			
Flexural Strength	ASTM D 790	psi	29,000
Compressive Strength	ASTM D 695	psi	36,000
Tensile Strength	ASTM D 638	psi	12,500
Tensile Modulus	ASTM D 638	psi X 10 ⁶	1.7
IZOD Impact Strength (notched)	ASTM D 256	ft. lb./in.	12
Shear Strength	ASTM D 732	psi	11,100
Thermal properties			
Coefficient of Thermal Expansion	ASTM D 696	(in./in.°C) x 10 ⁻⁵	2
Thermal Conductivity	ASTM C 177		1.7
Flame resistance properties			
UL Subject 94	UL 94		HB
UL Hot Wire Ignition	UL 746A	sec.	35 (0.028"), 39 (0.058")

ri-inquiry@roechling.com • www.roechling.com/industrial/materials



	Test method	Unit	Guideline value
UL High Amp Ignition	UL 746A		200+
Oxygen Index	ASTM D 2863	%O ₂	21.8
Physical properties			
Specific Gravity	ASTM D 792		1.7
Water Absorption	ASTM D 570	%	0.3
Dielectrical properties			
Electrical Strength - Perpendicular S/T in Air	ASTM D 149	Vpm	500
Electrical Strength - Perpendicular S/T in Oil	ASTM D 149	Vpm	625
Electrical Strength - Parallel S/S in Oil	ASTM D 149	kV	50
Arc Resistance	ASTM D 495	sec.	120/180 ¹
IEC Track Resistance (CTI)	UL 746A	V	500+
Permittivity, 60 Hz	ASTM D 150		4.6
Dissipation Factor, 60 Hz	ASTM D 150		0.37
Dissipation Factor, MHz	ASTM D 150		0.013
Permittivity, MHz	ASTM D 150		3.7
Insulation Resistance	ASTM D 257	Ω x 10 ¹²	145

Typical average values are for 0.063" thick laminate. Properties vary with material thickness and form. Additional information and samples can be obtained through Röchling Glastic Composites customer service or your local authorized distributor. 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.

* Note 1: Tested after post baking at 150C for an hour.