

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") |

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| | 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.

