



## LAMINATE COMPOSITE TYPE SG-200

Type SG-200 is a high-strength, high-temperature laminate composite that offers temperature ratings of up to 210° C (410° F). Type SG-200 is ideal for a wide variety of product applications requiring high-temperature NEMA GPO-1 products. Type SG-200 is also a superior replacement material for epoxy-bonded mica in layer insulation applications. Type SG-200 has a UL® Temperature Index of 210° C (410° F) Electrical and 210° C (410° F) Mechanical. Type SG-200 is available in thicknesses of 1/8" to 1" and in a tan color. Special sheet sizes up to 64" x 64" are available up to 1 1/2".

- **Excellent Electrical Properties**
- **Extremely Strong**
- **Retention of Properties at High Temps**
- **Easily Machined with Standard Tooling**
- **Asbestos Free**
- **Dust Free**
- **Non-Porous, Zero Water Absorption**

### CHARACTERISTICS & PROPERTIES

Standard Color	Tan	Arc Resistance, Sec.	120/180 <sup>2</sup>
Tensile Strength, Psi	12,500	IEC Track Resistance (CTI), V.	500+
Tensile Modulus, Psi x 10 <sup>6</sup>	1.7	UL High Voltage Track Rate, In./Min.	0
Flexural Strength, Psi	29,000	Permittivity, 60 Hz	5
Compressive Strength, Psi	36,000	Dissipation Factor, 60 Hz	0
Sheer Strength, Psi	11,100	Permittivity, MHz	4
IZOD Impact Strength, ft.lb./in.	12	Dissipation Factor, MHz	0
Water Absorption, % by wt.	0	Insulation Resistance, Ohm x 10 <sup>12</sup>	145
Specific Gravity	2	UL Subject 94	HB
Electrical Strength		UL High Amp Ignition, # Exposure	200+
Perpendicular S/T in Air, Vpm	500	Oxygen Index, %O <sub>2</sub>	21.8
Perpendicular S/T in Oil, Vpm	625	Coeff. of Thermal Expansion, ln/ln <sup>0</sup> C x 10 <sup>5</sup>	2
Parallel S/S in Oil, kV	50	Thermal Conductivity, BTU/HR/Ft <sup>2</sup> /ln <sup>0</sup> F	1.7

### AVAILABILITY

US20	SG-200, 48" X 96" X 1/8"	US26	SG-200, 48" X 48" X 1/8"	US32	SG-200, 24" X 48" X 1/8"
US21	SG-200, 48" X 96" X 1/4"	US27	SG-200, 48" X 48" X 1/4"	US33	SG-200, 24" X 48" X 1/4"
US22	SG-200, 48" X 96" X 3/8"	US28	SG-200, 48" X 48" X 3/8"	US34	SG-200, 24" X 48" X 3/8"
US23	SG-200, 48" X 96" X 1/2"	US29	SG-200, 48" X 48" X 1/2"	US35	SG-200, 24" X 48" X 1/2"
US24	SG-200, 48" X 96" X 3/4"	US30	SG-200, 48" X 48" X 3/4"	US36	SG-200, 24" X 48" X 3/4"
US25	SG-200, 48" X 96" X 1"	US31	SG-200, 48" X 48" X 1"	US37	SG-200, 24" X 48" X 1"

### ZIRCAR Refractory Composites, Inc.

P.O. BOX 489, FLORIDA, NY 10921-0489  
 Tele: (845) 651-2200, Fax: (845) 651-1515  
 e-mail: sales@zrci.com  
 Home page: <http://www.zrci.com>

### Technical Data

Bulletin No. ZRCI-1002  
 March 2018