



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## C-209 Semi-Conductive

|                      |   |  |   |
|----------------------|---|--|---|
| <b>Item:</b>         | <b>Grade C-209: Semi-Conductive Glass Reinforced Laminate</b>   |  |   |
| <b>Description:</b>  | C-209 is a semi-conductive glass reinforced laminate that is utilized as side-pack, side insulation in the stator slots of large rotating apparatus. As a semi-conductive material, C-209 provides a pathway to dissipate partial discharge, static charges and flashovers to prevent the damaging effects of corona discharge. |  |   |
| <b>Availability:</b> | <b>Laminate Sheets:</b>   | Thickness:   | English Units (in)<br>0.008 to 0.787  |
|                      |   | Sheet Size:  | SI Units (mm)<br>0.2 to 20<br>42 x 84 / 48 x 84 / 48 x 110<br>1070 x 2140 / 1240 x 2140 / 1240 x 2800 |
|                      | <b>Fabricated Parts:</b>  | The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers. |   |

| Key Characteristics                     | Test Method | Units - English (SI)       | Typical Values             |
|---|-------------|----------------------------|----------------------------|
| Standard Color                          | --          | --                         | Black                      |
| Density                                 | --          | lbs/in <sup>3</sup> (g/cc) | 0.065 (1.8)                |
| Water Absorption (0.125")               | ASTM D-570  | %                          | 0.58                       |
| Tensile Strength                        | ASTM D-638  | psi (MPa)                  | 35,000 (214)               |
| Compressive Strength                    | ASTM D-695  | psi (MPa)                  | 58,000 (400)               |
| Flexural Strength                       | ASTM D-790  | psi (MPa)                  | Lengthwise<br>57,000 (393) |
|   |             |                            | Crosswise<br>80,000 (550)  |
| Shear Strength                          | ASTM D-732  | psi (MPa)                  | 21,000 (144)               |
| Relative Temperature Index <sup>1</sup> | UL 746B     | °C                         | 180                        |
| IZOD Impact Strength, Notched           | ASTM D-256  | ft-lbs/in                  | Lengthwise<br>13           |
|   |             |                            | Crosswise<br>8.5           |
| Bond Strength                           | ASTM D-229  | lb (kg)                    | 920 (417)                  |
| Surface Resistivity                     | ASTM D-257  | Ohms/Square                | 500-50,000                 |

<sup>1</sup> Flexural Strength tested for determining mechanical RTI

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed 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.