



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## BMC/DMC PD20 For Standoff Insulators

|                     |   |
|---------------------|---|
| <b>Item:</b>        | <b>BMC/DMC for Standoff Insulators</b>  |
| <b>Description:</b> | Bulk Molding Compound (BMC) / Dough Molding Compound (DMC) are polymeric composite materials made of a mixture of unsaturated polymer resin, processing additives, cross linked catalyst, shrink control polyester, mold release agent, fire retardant agent, color pigments, inorganic fillers, and glass chops. It strong mechanical and electrical insulating properties make it an ideal material for supporting bus bars or other live electrical components.<br>The material is compression molded into a variety of shapes which commonly include metallic inserts such as threaded inserts for mechanical connections and improved mechanical strength. |
| <b>UL File #:</b>   | Raw Materials: E249670 / Finished Parts: UL E354884   |

| Key Characteristics                        | Test Method    | Values           | PLC | Units                     |
|--|----------------|------------------|-----|---------------------------|
| Specific Gravity                           | ASTM D-792     | 1.9              |     | --                        |
| Glass Contents                             | --             | 20               |     | %                         |
| Water Absorption (24 hours)                | ASTM D-570     | 0.15             |     | %                         |
| Tensile Strength                           | ASTM D-638     | 400              |     | kgf/cm <sup>2</sup>       |
| Flexural Strength                          | ASTM D-790     | 900              |     | kgf/cm <sup>2</sup>       |
| Izod Impact Strength                       | ASTM D-256     | 250              |     | J/m                       |
| Compressive Strength                       | ASTM D-695     | 1,500            |     | kgf/cm <sup>2</sup>       |
| Compressive Modulus                        | ASTM D-695     | 10,000 (140,000) |     | kgf/cm <sup>2</sup> (psi) |
| Dielectric Strength                        | ASTM D-149     | 10               |     | kV/mm                     |
| Comparative Tracking Index                 | IEC-60112      | > 600            | 0   | V                         |
| Track Resistance                           | ASTM D-2303    | > 600            |     | Minutes                   |
| Dry Arc Resistance                         | ASTM D-495     | > 180            |     | Seconds                   |
| Flammability Index                         | UL 94          | V-0              |     | --                        |
| Glow Wire Ignition Temp ( Thickness > 3mm) | IEC-60695-2-13 | 960              |     | °C                        |
| Hot Wire Ignition Test                     | ASTM D-3874    | > 120            | 0   | Seconds                   |
| Relative Temperature Index,                | UL - 746B      | 130              |     | °C                        |
| Mechanical Strength (Thickness - 3mm)      | UL - 746B      | 105              |     | °C                        |
| Hight Voltage Arc Tracking Rate            | UL - 746A      | < 10             | 0   | mm/min                    |
| High Current Arc Ignition                  | UL - 746A      | > 120            | 0   | mean # of arcs            |
| Material Group                             | IEC - 60601    | 1                |     | --                        |
| Pollution Degree                           | IEC - 60950    | 3                |     | --                        |
| Insulation Class                           | as per NEMA    | B                |     | --                        |
| Working Temp                               | --             | -40 - 135        |     | °C                        |

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.