



MANUFACTURERS OF  
**ELECTRICAL INSULATION MATERIALS**  
 INSULATING COMPONENTS FOR  
**POWER SYSTEMS EQUIPMENT**

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## MATERIAL DATA SHEET

**Item:** DelbondBM100GlassEpoxyInsulation

**Description:** Delbond is a thin insulating and bonding product made of woven glass and epoxy resin with high mechanical properties at high temperature. Delbond BM100 consists of a base layer of woven glass resin which is then laminated with a semi-cured dry glass impregnated with a cured epoxy resin on one side. Delbond BM100 is especially suitable for the insulation of the coil end windings that may rub together.

**Availability:**

|                   |  |                            |          |
|-------------------|--|----------------------------|----------|
|                   |  | English units              | SI Units |
| Laminate Sheets:  | Rolls: 42.126" x 109.36 yards  | Rolls: 107 cm x 100 meters |          |
|                   | Coils: ≥.394" x 109.36 yards   | Coils: ≥1 cm x 100 meters  |          |
| Fabricated Parts: | The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers. |                            |          |

| Material        | Base Thickness | Resin Thickness | Total Thickness | Tolerance          |
|-----------------|----------------|-----------------|-----------------|--------------------|
| Delbond Class F | 1 Side Coated  |                 |                 |                    |
|                 | .007" (.18mm)  | .007" (.18mm)   | .0078" (.2mm)   | +/- .0004" (.01mm) |
|                 | .010" (.25mm)  | .010" (.25mm)   | .0108" (.27mm)  | +/- .0004" (.01mm) |
|                 | .014" (.36mm)  | .014" (.36mm)   | .0148" (.38mm)  | +/- .0004" (.01mm) |

| Key Characteristics:                        | Units - English (SI) | Typical Values |                |                |
|---|----------------------|----------------|----------------|----------------|
| Average Thickness as Received               | in (cm)              | .007" (.018)   | .010" (.025)   | .014" (.036)   |
| Average Mass per Unit Area                  | g/m <sup>2</sup>     | 260            | 360            | 490            |
| Thickness After Pressure Cycle              | in (cm)              | .006" (.015)   | .008" (.02)    | .012" (.03)    |
| Tensile Strength (1 hour-160 °C-10,342psi)  |                      |                |                |                |
| 20 °C                                       | psi (MPa)            | 34,774 (239.6) | 34,774 (239.6) | 34,774 (239.6) |
| 155 °C                                      | psi (MPa)            | 8,274 (57)     | 8,274 (57)     | 8,274 (57)     |
| Breakdown Voltage (1 hour-160 °C-10,342psi) | kV                   | 620.523        | 689.48         | 758.49         |

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