



## Material Series: MB2000-10

### SERIES DESCRIPTION & APPLICATION

MB2000-10 is an excellent flame and track resistant material possessing outstanding electrical and mechanical properties. The 2000 Series' good dielectric strength and low shrink allow close dimensional control. Key features include: Rated UL 94 V0 @1.5mm. UL file number **E80533**

| General Material Properties  |              |                   |
|------------------------------|--------------|-------------------|
| Property (Test Method)       | Value        | Units             |
| Density (ASTM D792)          | 1.8-1.9      | g/cm <sup>3</sup> |
| Mold Shrinkage (ASTM D955)   | 0.0005-0.004 | in/in             |
| Water Absorption (ASTM D570) | 0.14         | %                 |
| Barcol Hardness (ASTM D2583) | 35-45        | Barcol Units      |

| Mechanical Material Properties (Net Shape Molded Coupons) |                           |                |                |
|---|---------------------------|----------------|----------------|
| Property (Test Method)                                    | Value (US)                | Value (Metric) | Units          |
| Tensile Strength (ASTM D638)                              | 4,500-5,500               | 30-35          | psi (MPa)      |
| Flexural Strength (ASTM D790)                             | 13,000-16,000             | 90-110         | psi (MPa)      |
| Flexural Modulus (ASTM D790)                              | 1.3-1.6 x 10 <sup>6</sup> | 9.0-11         | psi (GPa)      |
| Compressive Strength (ASTM D695)                          | 17,000-19,000             | 120-130        | psi (MPa)      |
| Shear Strength (ASTM D732)                                | 6,000-7,000               | 40-50          | Psi (MPa)      |
| Notched Izod Impact (ASTM D256)                           | 4-6                       | 215-320        | ft-lb/in (J/m) |

| Thermal and Electrical Material Properties |            |                |                   |
|--|------------|----------------|-------------------|
| Property (Test Method)                     | Value (US) | Value (Metric) | Units             |
| Flammability (UL 94 V0)                    | Pass 0.06  | Pass 1.5       | in (mm)           |
| Heat Deflection Temperature (ASTM D648)    | >500       | >260           | °F (°C)           |
| UL RTI Elec, Imp, Str (UL 746B)            | -          | 130, 130, 130  | °C                |
| Dielectric Strength (ASTM D149)            | 320+       | 12.6           | Volts/mil (kV/mm) |
| Arc Track Resistance (ASTM D495)           | 185+       | 185+           | Seconds           |
| Incline Plane Tracking (ASTM D2303-85)     | 1000+      | 1000+          | Minutes           |

All property values are based on test performed on standard ASTM test samples and according to standard ASTM test methods unless otherwise indicated. This information is offered solely for your consideration and is to be used as a guide only. No other warranty is implied.

### Contact Us:

#### CORPORATE HEADQUARTERS

10095 Queens Way Chagrin Falls, Ohio 44023-5495  
(440) 543-7526 Fax: (440) 543-4691  
[www.Altraset.com](http://www.Altraset.com)