

DATA SHEET

GLASS MELAMINE NEMA GRADE G-9

|   |                      |
|---|----------------------|
| <b>BASE MATERIAL</b>  | Glass Fibric         |
| <b>RESIN</b>  | Melamine             |
| <b>MILITARY SPECIFICATION</b>   | MIL-P-15037          |
| <b>MIL-SPEC TYPE</b>  | GME                  |
| <b>TENSIL STRENGTH</b>  |                      |
| Lengthwise  | 50,000               |
| Crosswise   | 40,000               |
| <b>COMPREHENSIVE STRENGTH (psi)</b>   |                      |
| Flatwise  | 75,000               |
| Edgewise  | 35,000               |
| <b>FLEXURAL STRENGTH, MIN FOR 1/8 -ILN SPECIMEN (psi)</b>                       |                      |
| Lengthwise  | 55,000               |
| Crosswise   | 35,000               |
| <b>MODULUS OF ELASTICITY, FLEXURAL</b>  |                      |
| Lengthwise  | 1,700 m              |
| Crosswise   | 1,500 m              |
| <b>SHEAR STRENGTH (psi)</b>   | 25,000               |
| <b>IZOD IMPACT, MIN (ft-lb per in.of notch)</b>                                 |                      |
| Flatwise  | 13                   |
| Edgewise  | 8                    |
| <b>HARDNESS, ROCKWELL (M - scale)</b>   | 120                  |
| <b>SPECIFIC GRAVITY</b>   | 1.9                  |
| <b>COEFFICIENT OF THERMAL EXPANSION (per deg C)</b>                             | 1 X 10 <sup>-5</sup> |
| <b>WATER ABSORPTION, MAX IN 25HR (%)</b>  |                      |
| 1/16 in.  | .8                   |
| 1/2 in.   | .4                   |
| <b>DIELECTRIC STRENGTH, PERPENDICULAR TO lamination, shor-time test (v-mil)</b> |                      |
| 1/16 in.  | 400                  |
| 1/8 in.   | 350                  |
| <b>DISSIPATION FACTOR, MAX 1 MC, ASTM D-150, Condition A</b>                    | .02                  |
| <b>DIELECTRIC CONSTANT, MAX 1 MC, ASTM D-150, Condition A</b>                   | 7.5                  |
| <b>INSULATION RESISTANCE, 96 HR, 90 PERCENT RH, 95 (megohms)</b>                | 100                  |
| <b>BONDING STRENGTH, MIN (lb)</b>   | 1,700                |
| <b>THERMAL CONDUCTIVITY (cal-cm/sec-sq cm-deg C)</b>                            | 7 X 10 <sup>-4</sup> |
| <b>MAX. OPERATING TEMP. °F.</b>   | 285                  |
| Machine Design, June 16, 1966   |                      |



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