

Lexan® 103 Resin

| PROPERTY | NOMINAL VALUES | TEST METHOD |
|---|---------------------------|-------------|
| Physical | | |
| Specific Gravity | 1.20 | ASTM D792 |
| Water Absorption at 24 hours | 0.15 % | ASTM D570 |
| Water Absorption at equilibrium | | ASTM D570 |
| 73 °F | 0.35 % | |
| 212 °F | 0.58 % | |
| Electrical | | |
| Volume Resistivity | 1.0E+17 Ohm-cm | ASTM D257 |
| Dielectric Strength, in air (0.126 in) | 380 V/mil | ASTM D149 |
| Dielectric Constant | | ASTM D150 |
| 50 Hz | 3.170 | |
| 60 Hz | 3.170 | |
| 1E + 6 Hz | 2.960 | |
| Dissipation Factor | | ASTM D150 |
| 50 Hz | 0.00090 | |
| 60 Hz | 0.00090 | |
| 1E + 6 Hz | 0.0100 | |
| Mechanical | | |
| Tensile Strength at Yield (Type I, 2.0 in/min) | 9000 psi | ASTM D638 |
| Tensile Strength at Break (Type I, 2.0 in/min) | 9500 psi | ASTM D638 |
| Tensile Elongation at Yield (Type I, 2.0 in/min) | 7.0 % | ASTM D638 |
| Tensile Elongation at Break (Type I, 2.0 in/min) | 110 % | ASTM D638 |
| Flexural Strength at Yield (0.051 in/min, 1.97 in Span) | 13,500 psi | ASTM D790 |
| Flexural Modulus (0.051 in/min, 1.97 in Span) | 340,000 psi | ASTM D790 |
| Thermal | | |
| Vicat Softening Point (Rate B, Loading 2 (50N)) | 310 °F | ASTM D1525 |
| DTUL, Unannealed (66 psi, 0.252 in) | 280 °F | ASTM D648 |
| DTUL, Unannealed (264 psi, 0.252 in) | 270 °F | ASTM D648 |
| Impact | | |
| Notched Izod Impact (73 °F) | 17.0 ft-lb/in | ASTM D256 |
| Unnotched Izod Impact (73 °F) | 60.0 ft-lb/in | ASTM D256 |
| Tensile Impact Strength (Type S) | 260 ft-lb/in ² | ASTM D1822 |
| Hardness | | |
| Rockwell Hardness | | ASTM D785 |
| M-Scale | 70 | |
| R-Scale | 118 | |
| Flame Characteristics | | |
| Flame Rating – UL (0.0290 in) | HB | UL 94 |
| Optical | | |
| Refractive Index | 1.586 | ASTM D542 |
| Transmittance | 88.0 % | ASTM D1003 |
| Haze | 1.0 % | ASTM D1003 |

*Lexan is a registered trademark of General Electric Company

**Flame characteristics not intended to reflect hazards under actual fire conditions.

***Typical values only. Actual properties of individual batches will vary within specification limits.