

## OPTIX-L Designer Series Sheet

### Typical Properties

| Physical                          | TEST METHOD | UNITS | OPTIX-L      |
|-----------------------------------|-------------|-------|--------------|
| Specific Gravity/Relative Density | ASTM D792   |       | 1.19         |
| Optical Refractive Index          | ASTM D542   |       | 1.49         |
| Light Transmission - Total        | ASTM D1003  | %     | 92%          |
| Light Transmission - Haze         | ASTM D1003  | %     | Less Than 1% |
| Water Absorption                  | ASTM D570   | %     | 0.2          |

| Mechanical                     | TEST METHOD | UNITS     | OPTIX-L         |
|--------------------------------|-------------|-----------|-----------------|
| Tensile Strength               | ASTM D638   | psi       | 11,000          |
| Tensile Modulus of Elasticity  | ASTM D638   | psi       | 465,000         |
| Flexural Strength              | ASTM D790   | psi       | 14,700          |
| Flexural Modulus of Elasticity | ASTM D790   | psi       | 461,000         |
| Dielectric Constant @1kHz      | ASTM D150   |           | 3               |
| Dielectric Constant @1mHz      | ASTM D150   |           | 2.7             |
| Dielectric Strength            | ASTM D149   | volts/mil | 354             |
| Volume Resistivity             | ASTM D257   | ohms/cm   | >3.912E+15 Ω/cm |
| Compressive Strength           | ASTM D695   | psi       | 83,300          |
| Shear Strength                 | ASTM D732   | psi       | 11,200          |
| Rockwell Hardness              | ASTM D785   |           | M-100           |

| Thermal  | TEST METHOD | UNITS                         | OPTIX-L                            |
|--|-------------|-------------------------------|------------------------------------|
| Maximum Recommended Continuous Service Temperature |             | °F                            | 175                                |
| Forming Temperature                                |             | °F                            | 280° - 340°F (138° - 170°C)        |
| Deflection Temperature @ 264 psi (1.8 MPa)         | ASTM D648   | °F                            | 200                                |
| Coefficient of Thermal Expansion                   | ASTM D696   | in/in/°F                      | 3.5x10 <sup>-5</sup>               |
| Thermal Conductivity                               | ASTM C177   | BTU-ft/ft <sup>2</sup> /hr/°F | 1.45 Btu in/ft <sup>2</sup> hr. °F |
| Smoke Density Rating                               | ASTM D2843  | %                             | 13.5                               |
| Self-Ignition Temperature                          | ASTM D1929  | °F                            | 750°F                              |
| Flame Spread Index                                 | ASTM E84    |                               | 140                                |

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Questions? Please contact Plaskolite Customer Support 800-848-9124