

## VIVAK PETG (North American Sales Only) Sheet

### Typical Properties

| Physical                          | TEST METHOD | UNITS | VIVAK PETG |
|-----------------------------------|-------------|-------|------------|
| Specific Gravity/Relative Density | ASTM D792   |       | 1.27       |
| Optical Refractive Index          | ASTM D542   |       | 1.57       |
| Light Transmission - Total        | ASTM D1003  | %     | 86         |
| Light Transmission - Haze         | ASTM D1003  | %     | 1.0        |
| Water Absorption                  | ASTM D570   | %     | 0.2        |

| Mechanical                          | TEST METHOD | UNITS          | VIVAK PETG |
|-------------------------------------|-------------|----------------|------------|
| Tensile Strength                    | ASTM D638   | psi            | 7,700      |
| Tensile Modulus of Elasticity       | ASTM D638   | psi            | 320,300    |
| Flexural Strength                   | ASTM D790   | psi            | 11,200     |
| Flexural Modulus of Elasticity      | ASTM D790   | psi            | 310,000    |
| Dielectric Constant @1kHz           | ASTM D150   |                | 2.6        |
| Dielectric Constant @1mHz           | ASTM D150   |                | 2.4        |
| Dielectric Strength                 | ASTM D149   | volts/mil      | 410        |
| Compressive Strength                | ASTM D695   | psi            | 8,000      |
| Shear Strength                      | ASTM D732   | psi            | 9,000      |
| Izod Impact Strength – Molded Notch | ASTM D256   | ft-lb/in Notch | 1.7        |
| Izod Impact Strength – Milled Notch | ASTM D256   | ft-lb/in Notch | 1.2        |
| Drop Dart Impact                    | ASTM D3763  | ft-lbs         | 22         |
| Rockwell Hardness                   | ASTM D785   |                | R-115      |

| Thermal                                    | TEST METHOD | UNITS                         | VIVAK PETG           |
|--|-------------|-------------------------------|----------------------|
| Deflection Temperature @ 264 psi (1.8 MPa) | ASTM D648   | °F                            | 157                  |
| Deflection Temperature @ 66 psi (0.45 MPa) | ASTM D648   | °F                            | 164                  |
| Coefficient of Thermal Expansion           | ASTM D696   | in/in/°F                      | 3.8x10 <sup>-5</sup> |
| Thermal Conductivity                       | ASTM E1225  | BTU-ft/ft <sup>2</sup> /hr/°F | 0.13                 |
| Flammability (Burning Rate)                | ASTM D635   | in/minute                     | 0.06                 |
| Flammability                               | UL 94       |                               | HB                   |
| Smoke Density Rating                       | ASTM D2843  | %                             | 53.8                 |
| Self-Ignition Temperature                  | ASTM D1929  | °F                            | 880                  |
| Flame Spread Index                         | ASTM E84    |                               | 85                   |
| Smoke Developed Index                      | ASTM E84    |                               | 450                  |
| Glass Transition Temperature               | ASTM D3418  | °F                            | 178                  |

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