



| TYPICAL PROPERTIES of SPECTAR <sup>®</sup> PETG |                                                                            |                           |
|-------------------------------------------------|----------------------------------------------------------------------------|---------------------------|
| ASTM or UL test                                 | Property                                                                   | Spectar <sup>®</sup> PETG |
| <b>PHYSICAL</b>                                 |                                                                            |                           |
| D792                                            | Density (lb/in <sup>3</sup> )                                              | 0.046                     |
|                                                 | (g/cm <sup>3</sup> )                                                       | 1.27                      |
| D570                                            | Water Absorption, 24 hrs (%)                                               | 0.1 - 0.3                 |
| <b>MECHANICAL</b>                               |                                                                            |                           |
| D638                                            | Tensile Strength (psi)                                                     | 3,800 - 4,500             |
| D638                                            | Tensile Modulus (psi)                                                      | 320,000                   |
| D638                                            | Tensile Elongation at Break (%)                                            | 50                        |
| D790                                            | Flexural Strength (psi)                                                    | 10,300 - 12,000           |
| D790                                            | Flexural Modulus (psi)                                                     | 290,000 - 320,000         |
| D695                                            | Compressive Strength (psi)                                                 | -                         |
| D695                                            | Compressive Modulus (psi)                                                  | -                         |
| D785                                            | Hardness, Rockwell                                                         | R104 - M112               |
| D256                                            | IZOD Notched Impact (ft-lb/in)                                             | 1.7                       |
| <b>THERMAL</b>                                  |                                                                            |                           |
| D696                                            | Coefficient of Linear Thermal Expansion<br>(x 10 <sup>-5</sup> in./in./°F) | 3.3 - 3.8                 |
| D648                                            | Heat Deflection Temp (°F / °C)<br>at 264 psi                               | 157 / 70                  |
| D3418                                           | Sheet Forming Temp Range (°F / °C)                                         | 250 - 320 / 120 - 160     |
| -                                               | Max Operating Temp (°F / °C)                                               | 150 / 65                  |
| C177                                            | Thermal Conductivity<br>(BTU-in/ft <sup>2</sup> -hr-°F)                    | -                         |
|                                                 | (x 10 <sup>-4</sup> cal/cm-sec-°C)                                         | -                         |
| UL94                                            | Flammability Rating (2 mm thickness)                                       | HB                        |
| <b>ELECTRICAL</b>                               |                                                                            |                           |
| D149                                            | Dielectric Strength (V/mil) short time                                     | 410                       |
| D150                                            | Dielectric Constant at 1 KHz                                               | 4.0                       |
| D150                                            | Dissipation Factor at 1 KHz                                                | 0.005                     |
| <b>OPTICAL</b>                                  |                                                                            |                           |
| -                                               | Light Transmission, minimum (%)                                            | 86                        |
| -                                               | Refractive Index                                                           | 1.57                      |

Data provided is for reference purposes only. Additional testing may be required for design specifications or quality control. All values at 73°F unless otherwise stated.

