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Ballistic Grade Polycarbonate Properties

| Physical Properties | ASTM Test Method | Units | Values |
|-------------------------------------------|------------------|---------------------------------|------------|
| Specific Gravity | D-792 | g/cm ³ | 1.20 |
| Optical Refractive Index | D-542 | | 1.586 |
| Light Transmission | D-1003 | % | 86 |
| Water Absorption | D-570 | % | 0.15 |
| Mechanical Properties | ASTM Test Method | Units | Values |
| Tensile Strength-Ultimate | D-638 | psi | 9,500 |
| Tensile Strength-Yield | D-638 | psi | 9,000 |
| Tensile Modulus | D-638 | psi | 340,000 |
| Elongation | D-638 | % | 110.0 |
| Flexural Strength | D-790 | psi | 13,500 |
| Flexural Modulus | D-790 | psi | 345,000 |
| Shear Strength, Ultimate | D-732 | psi | 10,000.00 |
| Shear Strength, Yield | D-732 | psi | 6,000.00 |
| Shear Modulus | D-732 | psi | 114,000.00 |
| Rockwell Hardness | D-785 | | M-70 |
| Thermal Properties | ASTM Test Method | Units | Values |
| Coefficient of Thermal Expansion | D-696 | in/(in-°F) x 10 ⁻⁵ | 3.75 |
| Coefficient of Thermal Conductivity | C-177 | BTU-ft/(hr-ft ² -°F) | 1.35 |
| Heat Deflection Temperature, @ 264 psi | D-648 | °F | 270 |
| Heat Deflection Temperature, @ 66 psi | D-648 | °F | 280 |

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.