

PSS Property Comparison

Based on 0.25" sheet thickness.
V-50 test conducted using 0.22-caliber, 17-grain FSP.

| | TEST CONDI- TIONS | UNITS | POLYCARBON- | | | |
|----------------------------------|------------------------|-------------------------------------|-------------|----------|--------|---------|
| | | | PSS-1000 | PSS-1400 | ATE | ACRYLIC |
| PHYSICAL | | | | | | |
| Specific Gravity | - | - | 1.11 | 1.11 | 1.20 | 1.20 |
| Areal Density | 0.25" Thickness | lbs / ft ² | 1.44 | 1.44 | 1.56 | 1.56 |
| MECHANICAL | | | | | | |
| Tensile Modulus | 2" / min | MPa | 1655 | 696 | 2380 | 3100 |
| Yield Stress | 2" / min | MPa | 52 | 44 | 62 | 72 |
| Strain at Break | 2" / min | % | 112 | 190 | 100 | 5 |
| IMPACT | | | | | | |
| V50 | 0.22 cal, 17 gr FSP | (ft / s) | 1282 | 1125 | 889 | 775 |
| V50 / AD | | (ft / s) / (lbs / ft ²) | 890 | 782 | 570 | 497 |
| HARDNESS | | | | | | |
| Durometer, Shore D | 23°C, 50% RH | - | 84 | 73 | 84 -86 | 92 - 93 |
| Taber Abrasion | 100 Cycles | Δ% Haze | 27% | 11% | 45% | 36% |
| THERMAL | | | | | | |
| Coefficient of Thermal Expansion | - | μm / m ⁰ C | 120 | - | 110 | 50 |
| OPTICAL | | | | | | |
| Light Transmission | - | % | 90% | 90% | 86% | 91% |
| Haze | - | % | 0.2 | 0.3 | 0.8 | 1.0 |
| Refractive Index | - | - | 1.53 | 1.52 | 1.59 | 1.49 |

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