

# Material Specifications

## Duraflex

<p><b>Usage</b></p>	<p>For functional engineering plastic models. Patterns for secondary tooling processes where a durable master pattern is required. Excellent surface quality, outstanding feature definition (0.75mm/0.030in), machinable, heat, &amp; chemical resistant, may be joined mechanically or with adhesives. This material is stable, no long-term creep. Buffs to high gloss with wet sanding.</p>
<p><b>Test Method</b></p>	<p><b>Results in English (SI) Units</b></p>
<p><b>Specific Gravity</b> determinations were made in accordance with the procedures of ASTM D792-00.</p>	<p>0.985g/cm<sup>3</sup></p>
<p><b>Tensile Property</b> determinations were made in accordance with the procedures of ASTM D638-02. Specimens were tested utilizing a crosshead speed of 5 mm per minute.</p>	<p>Strength: 45.1 MPa Elongation: 11.2 % Modulus: 1860 Mpa</p>
<p><b>Melting Point</b> determinations was utilizing a TA Instruments Model 2010 Differential Scanning Calorimeter in accordance with procedures of ASTM D3418-99.</p>	<p>Melt Point: 182°C</p>
<p><b>Heat Deflection</b> Temperature test was performed, at outer fiber stresses of 66 psi and 264 psi, in accordance with the procedures of ASTM D648-01.</p>	<p>66 psi: 179°C 264 psi: 63°C</p>
<p><b>Flexural Modulus</b> determinations were made in accordance with the procedures of ASTM D790-02.</p>	<p>1560 Mpa</p>
<p><b>Notched Izod Impact</b> test was performed in accordance with the procedures of ASTM D256-02.</p>	<p>36.8 J/M</p>
<p><b>Unnotched Izod Impact</b> test was performed in accordance with the procedures of ASTM D4812-99.</p>	<p>261 J/M</p>
<p><b>Chemical Resistance</b></p>	<p>Alkalines, Hydrocarbons, Fuels, and Solvents</p>