

Material Specifications

25% GLASS FILLED NYLON 12

<p>Usage</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, & 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>Test Method</p>	<p>Results in English (SI) Units</p>
<p>Specific Gravity determinations were made in accordance with the procedures of ASTM D792-00.</p>	<p>1.12g/cm³</p>
<p>Tensile Property 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: 41.9 MPa Elongation: 11.2 % Modulus: 1990 Mpa</p>
<p>Melting Point determinations was utilizing a TA Instruments Model 2010 Differential Scanning Calorimeter in accordance with procedures of ASTM D3418-99.</p>	<p>Melt Point: 177°C</p>
<p>Heat Deflection 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: 152°C 264 psi: 133°C</p>
<p>Flexural Modulus determinations were made in accordance with the procedures of ASTM D790-02.</p>	<p>1940 Mpa</p>
<p>Notched Izod Impact test was performed in accordance with the procedures of ASTM D256-02.</p>	<p>35.4 J/M</p>
<p>Unnotched Izod Impact test was performed in accordance with the procedures of ASTM D4812-99.</p>	<p>284 J/M</p>
<p>Chemical Resistance</p>	<p>Alkalines, Hydrocarbons, Fuels, and Solvents</p>