


Base Resin	<b>NYLON 12</b> (Polyamide 12)
Compound Type	 Ecomass Compound 1700 Series - High Density
Processing Method	Injection Molding

### Process Guidelines

Processing Conditions	Material Drying
<ul style="list-style-type: none"> <li>Melt Temperature Range..... 400 - 490 °F</li> <li>Mold Temperature Range..... 135 - 175 °F</li> <li>Injection Pressure..... As required</li> <li>Pack (Hold) Pressure..... 65 - 75% of Inj. Psi</li> <li>Back Pressure..... 15 - 25 psi</li> <li>Injection Speed..... Medium - Fast</li> <li>Screw Speed..... 100 - 250 rpm</li> <li>Fill Time..... 1.0 - 2.0 in. / sec.</li> <li>Pack (Hold) Time<sup>2</sup>..... 10 - 15 sec.</li> <li>Cooling Time..... As required</li> <li>Cushion..... .25 - .50 in.</li> </ul>	<ul style="list-style-type: none"> <li>Dryer Type(s)..... Dehumidifying</li> <li>Drying Temperature Range... 165 °F</li> <li>Typical Drying Time<sup>1</sup>..... 4 hrs</li> <li><b>Do Not Exceed</b>..... 200 °F</li> <li>Dryer Dew Point..... -20 to -40°F</li> <li>Minimum Air Flow..... 0.8 - 1.0 CFM</li> <li>Properly Functioning..... Desiccant Beds Filters Volatiles Trap</li> </ul>
Molding Machine Requirements	Safety / Purging
<ul style="list-style-type: none"> <li>Screw L/D..... 20:1 min.</li> <li>Screw Compression Ratio.... 2.5:1 min.</li> <li>Feed Throat..... Cooled</li> <li>Nozzle Type..... Reverse taper</li> <li>Check Ring Type..... Free flow</li> <li>Typical Clamp Tonnage..... 2.5 - 4.0 tons/in<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Maintain adequate ventilation.</li> <li>Wear safety glasses &amp; protective clothing.</li> <li>Do not mix with other materials.</li> <li>Avoid excessive residence time in the barrel. (Purge if extended residence time is anticipated)</li> <li><b>Use extreme caution at melt temp. &gt; 600°F</b></li> </ul>
Abrasion Resistant Screw, Barrel & Check Ring	Purge with high viscosity HDPE or high temperature commercial purge compound as recommended.

#### Notes

<sup>1</sup> Typical Drying time assumes unopened packaging and utilization of a dehumidifying dryer with a dew point of -40° with sufficient air flow.

<sup>2</sup> Pack time can depend on wall thickness and gate design

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