



# Ecomass Compounds

<b>Base Resin</b>	<b>High Density Polyethylene (HDPE)</b>
Compound Type	Ecomass Compound 3600 Series - Medium and High Density
Processing Method	Injection and Compression Molding

## Process Guidelines

Processing Conditions	Material Drying
<ul style="list-style-type: none"> <li>● Melt Temperature Range..... 175 - 225C (350 - 440F)*</li> <li>● Mold Temperature Range..... 20 - 65C (70 - 150F) * can be significantly less for compression molding</li> <li>● Injection Pressure..... As required</li> <li>● Pack (Hold) Pressure..... 65 - 75% of IP</li> <li>● Back Pressure..... 3 -7 bar (50 - 100 psi)</li>   <li>● Injection Speed..... Medium - Fast</li> <li>● Screw Speed..... 100 - 250 rpm</li>   <li>● Fill Time..... 2.5-5 cm/s (1.0 - 2.0"/s)</li> <li>● Pack (Hold) Time<sup>2</sup>..... 10 - 15 sec.</li> <li>● Cooling Time..... As required</li>   <li>● Cushion..... 6 - 12mm (0.25 - 0.50")</li> </ul>	<ul style="list-style-type: none"> <li>● Dryer Type(s)..... Dehumidifying</li> <li>● Drying Temperature Range... 80C (180F)</li> <li>● Typical Drying Time<sup>1</sup>..... 2 hours</li> <li>● <b>Do Not Exceed</b>..... 4 hours</li> <li>● Dryer Dew Point..... -20 to -40C</li> <li>● Minimum Air Flow..... 0.8 - 1.0 CFM</li> <li>● Properly Functioning..... Dessicant 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/in2</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; 300C</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> Drying required only if surface moisture is present

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

The processor of these materials is advised and cautioned to make an independent determination and assessment of the safety and suitability of the material for the specific use in question and is further advised against relying on the information herein as it may relate to any specific use or application. Because conditions under which this material may be processed, tested or used cannot be anticipated, no warranty is given, either expressed or implied, as to the accuracy or reproducibility of this information or for the fitness of this material for any particular use. This material is sold with the express understanding that purchasers, processors or other users of this material have sole responsibility, through performance of their own testing, to determine the suitability of this material for any particular use.