

Ecolene[®] ENGINEERING RESIN

Guide to Molding <u>EcoLene[®] PP8030-BK1</u>

Unfilled Polypropylene Resin (Homopolymer)

Screw Machine	°F	⊃°
Rear Zone	480 - 520	248 - 270
Middle Zone	480 - 520	248 – 270
Front Zone	480 – 520	248 - 270
Nozzle Temp	500 - 520	260 – 270
Melt Temp	490 - 520	254 - 270
Mold Temp	70-110	21 – 43
Injection Pressure	10,000 - 15,000 PSI	69 - 103 MPa
Back Pressure	50 - 150 PSI	0.34 – 1.03 MPa
Screw RPM	30 – 100 RPM	30 – 100 RPM

<u>DRYING</u>

EcoLon® nylon resins shipped in bags are ready to mold with moisture content below 0.15%.

Nylon resins are hygroscopic and must be molded at a moisture level between .05% - .15% for best results. All EcoLon® nylon resins residing in opened bags or Gaylord boxes should be dried for 2 to 4 hours at 175°F prior to molding. It is highly recommended to check the moisture content of the material before and during the molding process. Maintaining a moisture level between .05% - .15% helps prevent degradation which manifests itself by splay marks, low physical properties, brittleness, and nozzle drool.

PROCESSING

Although not required, Wellman Engineering Resins highly recommends running a reverse heat profile on all **EcoLon**® nylon resins. This method produces a more homogenous melt and also assists in the control of nozzle drool. Reverse-taper nozzle tips are always recommended with the use of **EcoLon**® nylon resins also.

For further technical information please go to <u>www.wellmanam.com</u> or call 1 800 821-6022.