

ENGINEERING RESIN

Guide to Molding <u>EcoLon[®] NYT3000-BK1</u>

Unfilled, Impact-Modified Nylon Resin (PA66)

Screw Machine	°F	⊃°
Rear Zone	510 - 560	266 - 293
Middle Zone	500 - 560	260 - 293
Front Zone	500 - 560	260 - 293
Nozzle Temp	490 - 560	254 - 293
Melt Temp	520 - 560	271 - 293
Mold Temp	160 - 200	71 - 93
Injection Pressure	5,000 – 20,000 PSI	34 – 138 MPa
Back Pressure	50 - 150 PSI	0.34 – 1.03 MPa
Screw RPM	30 – 120 RPM	30 – 120 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.wellmaner.com</u> or call 1 800 821-6022.