

Wellamid[®] ENGINEERING RESIN

Guide to Molding Wellamid[®] GF14-60 XE-NBK1

Glass Fiber Reinforced Nylon Resin (PA6)

| Screw Machine | °F | D ° |
|--------------------|--------------------|-----------------|
| Rear Zone | 500 - 550 | 260 - 288 |
| Middle Zone | 490 - 550 | 254 - 288 |
| Front Zone | 480 - 550 | 249 - 288 |
| Nozzle Temp | 470 – 550 | 243 – 288 |
| Melt Temp | 500 – 550 | 260 – 288 |
| 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>

Wellamid® 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 **Wellamid®** 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 **Wellamid®** 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 **Wellamid®** nylon resins also.

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