



**Wellamid®**  
**ENGINEERING RESIN**

## Guide to Molding

### Wellamid® GFX1743-BK1 (PTFE)

*Glass Fiber Reinforced, Lubricated Nylon Resin (PA66)*

| Screw Machine      | °F                 | °C              |
|--------------------|--------------------|-----------------|
| 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    |

#### **DRYING**

**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 [www.wellmanam.com](http://www.wellmanam.com) or call 1 800 821-6022.