



Wellamid®
ENGINEERING RESIN

Guide to Molding

Wellamid® MR410 42H-NBK1

Mineral Reinforced Nylon Resin (PA6)

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

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 or call 1 800 821-6022.