

## Technical Data Sheet

### *Polyfort* FPP3A20HBNA



Polypropylene, Homopolymer

#### Product Description

*Polyfort* FPP3A20HBNA is a Polypropylene Homopolymer Glass Fiber, 20% filled material and is typically used in Injection Molding applications. Features include: Homopolymer, and Medium Impact Resistance.

|                             |                                       |
|-----------------------------|---------------------------------------|
| <b>Processing Method</b>    | Injection Molding                     |
| <b>Attribute</b>            | Homopolymer; Medium Impact Resistance |
| <b>Forms</b>                | Pellets                               |
| <b>Filler/Reinforcement</b> | Glass Fiber, 20%                      |

| Typical Properties                                     | Nominal Value | Units             | Test Method |
|--------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                        |               |                   |             |
| Melt Flow Rate                                         | 3.5           | g/10 min          | ASTM D1238  |
| Density - Specific Gravity                             | 0.968         | g/cm <sup>3</sup> | ASTM D792   |
| <b>Mechanical</b>                                      |               |                   |             |
| Tensile Strength at Yield, (23 °C)                     | 44.1          | MPa               | ASTM D638   |
| Flexural Modulus, (Tangent)                            | 3380          | MPa               | ASTM D790   |
| <b>Impact</b>                                          |               |                   |             |
| Gardner Impact                                         | 2.26          | J                 | ASTM D3029  |
| Notched Izod Impact, (23 °C, 3.18 mm)                  | 110           | J/m               | ASTM D256   |
| <b>Hardness</b>                                        |               |                   |             |
| Durometer Hardness, (Shore D)                          | 75            |                   | ASTM D2240  |
| <b>Thermal</b>                                         |               |                   |             |
| Deflection Temperature Under Load Unannealed (264 psi) | 135           | °C                | ASTM D648   |
| Deflection Temperature Under Load Unannealed (66 psi)  | 135           | °C                | ASTM D648   |

| Injection Parameters   | Nominal Value | Units |
|------------------------|---------------|-------|
| Drying Time            | 2.0 to 4.0    | hr    |
| Drying Temperature     | 82 to 104     | °C    |
| Screw Speed            | 20 to 60      | rpm   |
| Processing (Melt) Temp | 199 to 243    | °C    |
| Front Temperature      | 199 to 243    | °C    |
| Middle Temperature     | 199 to 243    | °C    |
| Rear Temperature       | 199 to 243    | °C    |
| Injection Rate         | Moderate      |       |
| Back Pressure          | <0.345        | MPa   |
| Mold Temperature       | 16 to 66      | °C    |
| Cushion                | 6.35 to 12.7  | mm    |