

## Technical Data Sheet

### Polyfort PPI MGB 20 RD U NAT

Polypropylene Copolymer



#### Product Description

Hybrid filled PP-Copolymer with low density and UV-Stabilization

**Processing Method** Injection Molding

**Filler/Reinforcement** Glass Bubble; Mineral

| Typical Properties                                                  | Nominal Value | Units                   | Test Method          |
|---------------------------------------------------------------------|---------------|-------------------------|----------------------|
| <b>Physical</b>                                                     |               |                         |                      |
| Melt Volume Flow Rate, (230 °C/2.16 kg)                             | 7.0           | cm <sup>3</sup> /10 min | ISO 1133             |
| Density, (Method A)                                                 | 0.820         | g/cm <sup>3</sup>       | ISO 1183             |
| <b>Mechanical</b>                                                   |               |                         |                      |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                       | 10.0          | MPa                     | ISO 527-2            |
| Nominal Tensile Strain at Break                                     | 31            | %                       | ISO 527-2            |
| Flexural Modulus                                                    | 1500          | MPa                     | ISO 178              |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 1.2           | %                       | ISO 527-2            |
| Tensile Stress at Break, (Type 1A, 50 mm/min)                       | 8.00          | MPa                     | ISO 527-2            |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 1300          | MPa                     | ISO 527-1            |
| Flexural Stress                                                     | 17            | MPa                     | ISO 178              |
| <b>Impact</b>                                                       |               |                         |                      |
| Charpy Impact Strength - Notched                                    |               |                         |                      |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 17            | kJ/m <sup>2</sup>       | ISO 179              |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 1.8           | kJ/m <sup>2</sup>       | ISO 179              |
| Charpy Impact Strength - Unnotched                                  |               |                         |                      |
| (23 °C, Type 1, Edgewise)                                           | No Break      |                         | ISO 179              |
| (-30 °C, Type 1, Edgewise)                                          | 54            | kJ/m <sup>2</sup>       | ISO 179              |
| <b>Thermal</b>                                                      |               |                         |                      |
| Vicat Softening Temperature, (A (10N), 50 °C/h)                     | 124           | °C                      | ISO 306              |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 69.0          | °C                      | ISO 75-2/B           |
| <b>UL Information</b>                                               |               |                         |                      |
| Flammability Classification                                         |               |                         |                      |
| (1.5 mm)                                                            | HB            |                         | IEC 60695-11-10, -20 |
| (3.0 mm)                                                            | HB            |                         | IEC 60695-11-10, -20 |
| <b>Injection Parameters</b>                                         |               |                         |                      |
| Drying Time                                                         | 2.0 to 3.0    | hr                      |                      |
| Drying Temperature                                                  | 80            | °C                      |                      |
| Processing (Melt) Temp                                              | 220 to 260    | °C                      |                      |
| Mold Temperature                                                    | 30 to 60      | °C                      |                      |