

## Technical Data Sheet

### Polyfort FPP 1006U-31 32 BLACK



Polypropylene, Homopolymer

#### Product Description

20% talc filled PP Homo Compound, UV stabilized

|                      |                   |
|----------------------|-------------------|
| Processing Method    | Injection Molding |
| Attribute            | UV Stabilized     |
| Appearance           | Colors Available  |
| Filler/Reinforcement | Talc, 20%         |
| Resin ID             | PP T20 UV         |

| Typical Properties                                                   | Nominal Value | Units                   | Test Method |
|----------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                      |               |                         |             |
| Melt Volume Flow Rate, (230 °C/2.16 kg)                              | 14            | cm <sup>3</sup> /10 min | ISO 1133    |
| Density, (Method A)                                                  | 1.05          | g/cm <sup>3</sup>       | ISO 1183    |
| <b>Mechanical</b>                                                    |               |                         |             |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                        | 28.0          | MPa                     | ISO 527-2   |
| Flexural Modulus, (2.0 mm/min)                                       | 2900          | MPa                     | ISO 178     |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                        | 5.0           | %                       | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                 | 2600          | MPa                     | ISO 527-1   |
| Flexural Stress                                                      |               |                         |             |
| (2.0 mm/min, 3.5%)                                                   | 45.0          | MPa                     | ISO 178     |
| (2.0 mm/min, 5.8%)                                                   | 50.0          | MPa                     | ISO 178     |
| <b>Impact</b>                                                        |               |                         |             |
| Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A) | 2.1           | kJ/m <sup>2</sup>       | ISO 179     |
| Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)        | 32            | kJ/m <sup>2</sup>       | ISO 179     |
| Notched Izod Impact Strength, (23 °C, Type 1, Notch A)               | 2.3           | kJ/m <sup>2</sup>       | ISO 180     |
| Unnotched Izod Impact Strength, (23 °C, Type 1)                      | 24            | kJ/m <sup>2</sup>       | ISO 180     |
| <b>Thermal</b>                                                       |               |                         |             |
| Vicat Softening Temperature                                          |               |                         |             |
| (B (50N), 50 °C/h)                                                   | 93.0          | °C                      | ISO 306     |
| (A (10N), 50 °C/h)                                                   | 152           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)  | 123           | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)  | 65.0          | °C                      | ISO 75-2/A  |
| <b>Flammable</b>                                                     |               |                         |             |

|              |    |        |           |
|--------------|----|--------|-----------|
| Burning Rate |    |        |           |
| (2.00 mm)    | 43 | mm/min | FMVSS 302 |
| (2.00 mm)    | 43 | mm/min | ISO 3795  |

| Injection Parameters   | Nominal Value | Units |
|------------------------|---------------|-------|
| Drying Time            | 2.0 to 3.0    | hr    |
| Drying Temperature     | 80            | °C    |
| Processing (Melt) Temp | 220 to 260    | °C    |
| Injection Rate         | Moderate-Fast |       |
| Mold Temperature       | 30 to 60      | °C    |