

**Product Texts**

Injection Molding, 16% Glass Reinforced, Hydrolysis resistant, Improved Impact

ISO 1043 PBT-I-GF16

| Processing/Physical Characteristics        | Value | Unit                   | Test Standard   |
|--|-------|------------------------|-----------------|
| <b>ISO Data</b>                            |       |                        |                 |
| <sup>[C]</sup> Melt volume-flow rate, MVR  | 24    | cm <sup>3</sup> /10min | ISO 1133        |
| Temperature                                | 260   | °C                     | -               |
| Load                                       | 2.16  | kg                     | -               |
| <sup>[C]</sup> Molding shrinkage, parallel | 0.6   | %                      | ISO 294-4, 2577 |
| <sup>[C]</sup> Molding shrinkage, normal   | 1.0   | %                      | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties                                | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                                      |       |                   |               |
| <sup>[C]</sup> Tensile Modulus                       | 5900  | MPa               | ISO 527       |
| <sup>[C]</sup> Stress at break                       | 100   | MPa               | ISO 527       |
| <sup>[C]</sup> Strain at break                       | 3.7   | %                 | ISO 527       |
| Flexural modulus, 23°C                               | 5600  | MPa               | ISO 178       |
| <sup>[C]</sup> Charpy impact strength, +23°C         | 50    | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy impact strength, -30°C         | 35    | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy notched impact strength, +23°C | 10    | kJ/m <sup>2</sup> | ISO 179/1eA   |
| <sup>[C]</sup> Charpy notched impact strength, -30°C | 10    | kJ/m <sup>2</sup> | ISO 179/1eA   |
| Izod impact strength, +23°C                          | 45    | kJ/m <sup>2</sup> | ISO 180/1U    |
| Izod notched impact strength, +23°C                  | 10    | kJ/m <sup>2</sup> | ISO 180/1A    |
| Izod notched impact strength                         | 10    | kJ/m <sup>2</sup> | ISO 180/1A    |
| Temperature  | -30   | °C                | -             |

[C]: CAMPUS

| Thermal properties   | Value | Unit  | Test Standard   |
|--|-------|-------|-----------------|
| <b>ISO Data</b>  |       |       |                 |
| <sup>[C]</sup> Melting temperature, 10°C/min               | 225   | °C    | ISO 11357-1/-3  |
| <sup>[C]</sup> Temp. of deflection under load, 1.80 MPa    | 190   | °C    | ISO 75-1/-2     |
| <sup>[C]</sup> Temp. of deflection under load, 0.45 MPa    | 220   | °C    | ISO 75-1/-2     |
| <sup>[C]</sup> Coeff. of linear therm. expansion, parallel | 40    | E-6/K | ISO 11359-1/-2  |
| <sup>[C]</sup> Coeff. of linear therm. expansion, normal   | 130   | E-6/K | ISO 11359-1/-2  |
| <sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.       | HB    | class | IEC 60695-11-10 |
| Thickness tested   | 1.5   | mm    | -               |

[C]: CAMPUS

| Electrical properties                     | Value | Unit  | Test Standard |
|---|-------|-------|---------------|
| <b>ISO Data</b>                           |       |       |               |
| <sup>[C]</sup> Volume resistivity         | >1E13 | Ohm*m | IEC 62631-3-1 |
| <sup>[C]</sup> Surface resistivity        | >1E15 | Ohm   | IEC 62631-3-2 |
| <sup>[C]</sup> Electric strength          | 36    | kV/mm | IEC 60243-1   |
| <sup>[C]</sup> Comparative tracking index | 300   | -     | IEC 60112     |

[C]: CAMPUS

| Other properties       | Value | Unit              | Test Standard |
|------------------------|-------|-------------------|---------------|
| <sup>[C]</sup> Density | 1400  | kg/m <sup>3</sup> | ISO 1183      |
| Bulk density           | 700   | kg/m <sup>3</sup> | -             |

[C]: CAMPUS

| Test specimen production                           | Value | Unit | Test Standard |
|--|-------|------|---------------|
| <b>ISO Data</b>                                    |       |      |               |
| <sup>[C]</sup> Injection Molding, melt temperature | 260   | °C   | ISO 294       |
| Injection Molding, mold temperature                | 80    | °C   | ISO 294       |

[C]: CAMPUS

| <b>Processing Recommendation Injection Molding</b> | <b>Value</b>     | <b>Unit</b> | <b>Test Standard</b> |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature                           | <b>120</b>       | °C          | -                    |
| Pre-drying - Time                                  | <b>4 - 8</b>     | h           | -                    |
| Processing humidity                                | <b>≤0.02</b>     | %           | -                    |
| Melt temperature                                   | <b>250 - 270</b> | °C          | -                    |
| Mold temperature                                   | <b>80 - 100</b>  | °C          | -                    |

**Characteristics**

**Processing**

Injection Molding

**Chemical Resistance**

Hydrolytically Stable

**Delivery form**

Pellets

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

**Special Characteristics**

High impact or impact modified, Heat stabilized or stable to heat

**Other text information**

**Injection molding**

**PREPROCESSING**

Residual moisture content: 0.00 - 0.02 %

Drying temperature circulating air dryer: 120 °C

Drying time circulating air dryer: 4 - 8 h

**PROCESSING**

Melt temperature (Tmin - Tmax): 250 - 270 °C

Mold temperature: 80 - 100 °C