

**Product Texts**

Injection Molding, 30% Glass Reinforced, Hydrolysis resistant, Laser Weldable, Laser Transparent Black

ISO 1043 PBT-GF30

| Processing/Physical Characteristics        | Value | Unit | Test Standard   |
|--|-------|------|-----------------|
| <b>ISO Data</b>                            |       |      |                 |
| <sup>[C]</sup> Molding shrinkage, parallel | 0.3   | %    | ISO 294-4, 2577 |
| <sup>[C]</sup> Molding shrinkage, normal   | 0.8   | %    | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties                        | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                              |       |                   |               |
| <sup>[C]</sup> Tensile Modulus               | 10000 | MPa               | ISO 527       |
| <sup>[C]</sup> Stress at break               | 140   | MPa               | ISO 527       |
| <sup>[C]</sup> Strain at break               | 2.8   | %                 | ISO 527       |
| <sup>[C]</sup> Charpy impact strength, +23°C | 60    | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Puncture energy, +23°C        | 2.3   | J                 | ISO 6603-2    |

[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    | 215   | °C    | ISO 75-1/-2    |
| <sup>[C]</sup> Coeff. of linear therm. expansion, parallel | 20    | E-6/K | ISO 11359-1/-2 |
| <sup>[C]</sup> Coeff. of linear therm. expansion, normal   | 100   | E-6/K | ISO 11359-1/-2 |

[C]: CAMPUS

| Electrical properties                     | Value | Unit | Test Standard |
|---|-------|------|---------------|
| <b>ISO Data</b>                           |       |      |               |
| <sup>[C]</sup> Comparative tracking index | 275   | -    | IEC 60112     |

[C]: CAMPUS

| Other properties       | Value | Unit              | Test Standard |
|------------------------|-------|-------------------|---------------|
| <sup>[C]</sup> Density | 1520  | kg/m <sup>3</sup> | ISO 1183      |

[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

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

**Characteristics****Processing**

Injection Molding

**Features**

Weldable

**Delivery form**

Pellets, Black

**Chemical Resistance**

Hydrolytically Stable

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

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

**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: 60 - 100 °C