

**Product Texts**

Injection Molding, 35% Glass Reinforced, Heat Stabilized, Recycled Content

ISO 1043 PA66-GF35

| <b>Processing/Physical Characteristics</b> | <b>dry / cond</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|-------------------|-------------|----------------------|
| <b>ISO Data</b>                            |                   |             |                      |
| <sup>[C]</sup> Molding shrinkage, parallel | <b>0.4 / *</b>    | %           | ISO 294-4, 2577      |
| <sup>[C]</sup> Molding shrinkage, normal   | <b>1.1 / *</b>    | %           | ISO 294-4, 2577      |

[C]: CAMPUS

| <b>Mechanical properties</b>                         | <b>dry / cond</b>   | <b>Unit</b>       | <b>Test Standard</b> |
|--|---------------------|-------------------|----------------------|
| <b>ISO Data</b>                                      |                     |                   |                      |
| <sup>[C]</sup> Tensile Modulus                       | <b>11200 / 7500</b> | MPa               | ISO 527              |
| <sup>[C]</sup> Stress at break                       | <b>200 / 135</b>    | MPa               | ISO 527              |
| <sup>[C]</sup> Strain at break                       | <b>3 / 5</b>        | %                 | ISO 527              |
| <sup>[C]</sup> Tensile creep modulus, 1h             | <b>* / 7000</b>     | MPa               | ISO 899-1            |
| <sup>[C]</sup> Tensile creep modulus, 1000h          | <b>* / 5800</b>     | MPa               | ISO 899-1            |
| <sup>[C]</sup> Charpy impact strength, +23°C         | <b>85 / 90</b>      | kJ/m <sup>2</sup> | ISO 179/1eU          |
| <sup>[C]</sup> Charpy impact strength, -30°C         | <b>70 / 75</b>      | kJ/m <sup>2</sup> | ISO 179/1eU          |
| <sup>[C]</sup> Charpy notched impact strength, +23°C | <b>12 / 20</b>      | kJ/m <sup>2</sup> | ISO 179/1eA          |
| <sup>[C]</sup> Charpy notched impact strength, -30°C | <b>10 / 10</b>      | kJ/m <sup>2</sup> | ISO 179/1eA          |
| <sup>[C]</sup> Puncture - maximum force, +23°C       | <b>1030 / -</b>     | N                 | ISO 6603-2           |
| <sup>[C]</sup> Puncture - maximum force, -30°C       | <b>900 / -</b>      | N                 | ISO 6603-2           |
| <sup>[C]</sup> Puncture energy, +23°C                | <b>3.9 / -</b>      | J                 | ISO 6603-2           |
| <sup>[C]</sup> Puncture energy, -30°C                | <b>2.8 / -</b>      | J                 | ISO 6603-2           |

[C]: CAMPUS

| <b>Thermal properties</b>  | <b>dry / cond</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|-------------------|-------------|----------------------|
| <b>ISO Data</b>  |                   |             |                      |
| <sup>[C]</sup> Melting temperature, 10°C/min                             | <b>263 / *</b>    | °C          | ISO 11357-1/-3       |
| <sup>[C]</sup> Temp. of deflection under load, 1.80 MPa                  | <b>250 / *</b>    | °C          | ISO 75-1/-2          |
| <sup>[C]</sup> Temp. of deflection under load, 0.45 MPa                  | <b>250 / *</b>    | °C          | ISO 75-1/-2          |
| <sup>[C]</sup> Coeff. of linear therm. expansion, parallel               | <b>20 / *</b>     | E-6/K       | ISO 11359-1/-2       |
| <sup>[C]</sup> Coeff. of linear therm. expansion, normal                 | <b>100 / *</b>    | E-6/K       | ISO 11359-1/-2       |
| <sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.<br>Thickness tested | <b>HB / *</b>     | class       | IEC 60695-11-10      |
| <sup>[C]</sup> Oxygen index  | <b>1.5 / *</b>    | mm          | -                    |
| <sup>[C]</sup> Oxygen index  | <b>23 / *</b>     | %           | ISO 4589-1/-2        |

[C]: CAMPUS

| <b>Electrical properties</b>                | <b>dry / cond</b> | <b>Unit</b> | <b>Test Standard</b> |
|---|-------------------|-------------|----------------------|
| <b>ISO Data</b>                             |                   |             |                      |
| <sup>[C]</sup> Relative permittivity, 100Hz | <b>5 / -</b>      | -           | IEC 62631-2-1        |
| <sup>[C]</sup> Relative permittivity, 1MHz  | <b>4 / -</b>      | -           | IEC 62631-2-1        |
| <sup>[C]</sup> Dissipation factor, 100Hz    | <b>300 / -</b>    | E-4         | IEC 62631-2-1        |
| <sup>[C]</sup> Dissipation factor, 1MHz     | <b>270 / -</b>    | E-4         | IEC 62631-2-1        |
| <sup>[C]</sup> Volume resistivity           | <b>1E13 / -</b>   | Ohm*m       | IEC 62631-3-1        |
| <sup>[C]</sup> Electric strength            | <b>39 / -</b>     | kV/mm       | IEC 60243-1          |
| <sup>[C]</sup> Comparative tracking index   | <b>600 / -</b>    | -           | IEC 60112            |

[C]: CAMPUS

| <b>Other properties</b>            | <b>dry / cond</b> | <b>Unit</b>       | <b>Test Standard</b> |
|------------------------------------|-------------------|-------------------|----------------------|
| <sup>[C]</sup> Water absorption    | <b>5 / *</b>      | %                 | Sim. to ISO 62       |
| <sup>[C]</sup> Humidity absorption | <b>1.8 / *</b>    | %                 | Sim. to ISO 62       |
| <sup>[C]</sup> Density             | <b>1410 / -</b>   | 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 | <b>290</b> | °C   | ISO 294       |
| Injection Molding, mold temperature                | <b>80</b>  | °C   | ISO 294       |

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Special Characteristics**

Heat stabilized or stable to heat

**Certifications**

Recycled Resin Content

**Regional Availability**

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

**Other text information**

**Injection molding**

**PREPROCESSING**

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

**PROCESSING**

Melt temperature (Tmin - Tmax): 280 - 300 °C

Mold temperature: 80 - 120 °C