

Product Texts

33% Glass Reinforced, Heat Stabilized, UV Stabilized

ISO 1043 PA6-GF33

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|---|-------------------|-------------------|----------------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 0.4 / * | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 0.9 / * | % | ISO 294-4, 2577 |
| ^[C] Density of melt | 1200 | kg/m ³ | - |
| ^[C] Thermal conductivity of melt | 0.29 | W/(m K) | - |
| ^[C] Spec. heat capacity of melt | 2140 | J/(kg K) | - |
| ^[C] Eff. thermal diffusivity | 1.13E-7 | m ² /s | - |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|---------------------|-------------------|----------------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 10500 / 6600 | MPa | ISO 527 |
| ^[C] Stress at break | 185 / 110 | MPa | ISO 527 |
| ^[C] Strain at break | 3.5 / 5 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | 95 / 110 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 75 / 70 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 13 / 30 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | 12 / 11 | kJ/m ² | ISO 179/1eA |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|--|-------------------|-------------|----------------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 220 / * | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 210 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 220 / * | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 20 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 70 / * | E-6/K | ISO 11359-1/-2 |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|--------------------|-------------|----------------------|
| ISO Data | | | |
| ^[C] Relative permittivity, 100Hz | 3.5 / 20 | - | IEC 62631-2-1 |
| ^[C] Relative permittivity, 1MHz | 3.3 / 5 | - | IEC 62631-2-1 |
| ^[C] Dissipation factor, 100Hz | 50 / 3000 | E-4 | IEC 62631-2-1 |
| ^[C] Dissipation factor, 1MHz | 150 / 1200 | E-4 | IEC 62631-2-1 |
| ^[C] Volume resistivity | 1E12 / 1E10 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | * / 1E13 | Ohm | IEC 62631-3-2 |
| ^[C] Electric strength | 30 / 25 | kV/mm | IEC 60243-1 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|-------------------|-------------------|----------------------|
| ^[C] Water absorption | 6.3 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 1.9 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1380 / * | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|--|--------------|-------------|----------------------|
| ISO Data | | | |
| ^[C] Processing conditions acc. ISO | 1874 | - | ISO-2 |
| ^[C] Injection Molding, melt temperature | 280 | °C | ISO 294 |
| ^[C] Injection Molding, mold temperature | 80 | °C | ISO 294 |

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Regional Availability

North America, Asia Pacific

Other text information

Injection molding

[Steel recommendations for molds screws and barrels](#)

[Trouble shooting guideline for injection molding](#)