

Product Texts

Injection Molding, 30% Glass Reinforced, Heat Stabilized, Improved Impact

ISO 1043 PA6-I-GF30

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|------------|------|-----------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 0.3 / * | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 0.8 / * | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|-------------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 9300 / 5200 | MPa | ISO 527 |
| ^[C] Stress at break | 160 / 100 | MPa | ISO 527 |
| ^[C] Strain at break | 4 / 8 | % | ISO 527 |
| Flexural modulus, 23°C | 8600 / 4700 | MPa | ISO 178 |
| ^[C] Charpy impact strength, +23°C | 90 / 90 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 75 / 75 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 13 / 20 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | - / 10 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C | 80 / 85 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C | 15 / 22 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 10 / 10 | kJ/m ² | ISO 180/1A |
| Temperature | -30 | °C | - |
| ^[C] Puncture - maximum force, +23°C | 990 / - | N | ISO 6603-2 |
| ^[C] Puncture - maximum force, -30°C | 765 / - | N | ISO 6603-2 |
| ^[C] Puncture energy, +23°C | 4.3 / - | J | ISO 6603-2 |
| ^[C] Puncture energy, -30°C | 2.5 / - | J | ISO 6603-2 |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|--|------------|-------|----------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 221 / * | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 202 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 218 / * | °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 | 100 / * | E-6/K | ISO 11359-1/-2 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|------------|-------------------|----------------|
| ^[C] Water absorption | 6.6 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 2 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1360 / - | kg/m ³ | ISO 1183 |

[C]: CAMPUS

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

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 80 | °C | - |
| Pre-drying - Time | 2 - 6 | h | - |
| Processing humidity | ≤0.12 | % | - |
| Melt temperature | 260 - 290 | °C | - |
| Mold temperature | 80 - 100 | °C | - |

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

High impact or impact modified, 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: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 260 - 290 °C

Mold temperature: 80 - 100 °C