

Product Texts

Injection Molding, 30% Glass Reinforced, Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA6-GF30 FR(40+30)

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|------------|------|-----------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 0.6 / * | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 0.7 / * | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|-------------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 7600 / 3400 | MPa | ISO 527 |
| ^[C] Stress at break | 95 / 50 | MPa | ISO 527 |
| ^[C] Strain at break | 4 / 28 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | 50 / 85 | kJ/m ² | ISO 179/1eU |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|--|------------|-------|-----------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 222 / * | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 180 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 210 / * | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 30 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 90 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning Behav. at 1.5 mm nom. thickn. | V-2 / * | class | IEC 60695-11-10 |
| Thickness tested | 1.5 / * | mm | - |
| ^[C] Oxygen index | 30 / * | % | ISO 4589-1/-2 |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|------------|-------|---------------|
| ISO Data | | | |
| ^[C] Volume resistivity | 1E13 / - | Ohm*m | IEC 62631-3-1 |
| ^[C] Electric strength | 38 / - | kV/mm | IEC 60243-1 |
| ^[C] Comparative tracking index | 550 / - | - | IEC 60112 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|------------|-------------------|----------------|
| ^[C] Water absorption | 5.9 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 1.8 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1400 / - | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Material specific properties | dry / cond | Unit | Test Standard |
|---------------------------------|------------|--------------------|---------------------|
| ISO Data | | | |
| ^[C] Viscosity number | 104 / * | cm ³ /g | ISO 307, 1157, 1628 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| ^[C] 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 | 80 | °C | - |
| Pre-drying - Time | 2 - 6 | h | - |
| Processing humidity | ≤0.07 | % | - |
| Melt temperature | 250 - 270 | °C | - |
| Mold temperature | 80 - 100 | °C | - |

Characteristics**Processing**

Injection Molding

Delivery form

Pellets

Additives

Lubricants

Special Characteristics

Flame retardant, Halogen-free, 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 - 0.07%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

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

Mold temperature: 80 - 100 °C