

Product Texts

- MVR (300 °C/1.2 kg) 34 cm³/10 min
- light guides
- optics and lenses
- PC with highest transmission
- low viscosity
- easy release

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|------------|-----------|-----------------|
| ISO Data | | | |
| ^[C] Melt volume-flow rate, MVR | 34 | cm³/10min | ISO 1133 |
| Temperature | 300 | °C | - |
| Load | 1.2 | kg | - |
| ^[C] Molding shrinkage, parallel | 0.7 | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 0.7 | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|--|---------------|-------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 2350 | MPa | ISO 527 |
| ^[C] Yield stress | 63 | MPa | ISO 527 |
| ^[C] Yield strain | 6 | % | ISO 527 |
| ^[C] Nominal strain at break | >50 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | N | kJ/m² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | N | kJ/m² | ISO 179/1eU |
| ^[C] Puncture - maximum force, +23°C | 4900 | N | ISO 6603-2 |
| ^[C] Puncture - maximum force, -30°C | 5900 | N | ISO 6603-2 |
| ^[C] Puncture energy, +23°C | 55 | J | ISO 6603-2 |
| ^[C] Puncture energy, -30°C | 60 | J | ISO 6603-2 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|--|------------|-------|-----------------|
| ISO Data | | | |
| ^[C] Glass transition temperature, 10°C/min | 145 | °C | ISO 11357-1/-2 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 125 | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 138 | °C | ISO 75-1/-2 |
| ^[C] Vicat softening temperature, B | 145 | °C | ISO 306 |
| ^[C] Coeff. of linear therm. expansion, parallel | 65 | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 65 | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning Behav. at thickness h | V-2 | class | IEC 60695-11-10 |
| Thickness tested | 0.8 | mm | - |
| ^[C] Oxygen index | 28 | % | ISO 4589-1/-2 |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|---|-----------------|-------|---------------|
| ISO Data | | | |
| ^[C] Relative permittivity, 100Hz | 3.1 | - | IEC 62631-2-1 |
| ^[C] Relative permittivity, 1MHz | 3 | - | IEC 62631-2-1 |
| ^[C] Dissipation factor, 100Hz | 5 | E-4 | IEC 62631-2-1 |
| ^[C] Dissipation factor, 1MHz | 95 | E-4 | IEC 62631-2-1 |
| ^[C] Volume resistivity | >1E13 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |
| ^[C] Electric strength | 34 | kV/mm | IEC 60243-1 |
| ^[C] Comparative tracking index | 250 | - | IEC 60112 |

[C]: CAMPUS

| Optical properties | Value | Unit | Test Standard |
|--------------------|-------|------|---------------|
| ISO Data | | | |

| | | | |
|----------------------------|----|---|-----------------|
| [C] Luminous transmittance | 90 | % | ISO 13468-1, -2 |
| [C]: CAMPUS | | | |

| Other properties | Value | Unit | Test Standard |
|-------------------------|-------|-------------------|----------------|
| [C] Water absorption | 0.3 | % | Sim. to ISO 62 |
| [C] Humidity absorption | 0.12 | % | Sim. to ISO 62 |
| [C] Density | 1190 | 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 |
| Injection Molding, injection velocity | 200 | mm/s | ISO 294 |
| [C]: CAMPUS | | | |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 120 | °C | - |
| Pre-drying - Time | 2 - 3 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 280 - 320 | °C | - |
| Mold temperature | 80 - 100 | °C | - |

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Transparent

Features

Light Guiding

Regional Availability

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

Other text information

Injection molding

PREPROCESSING

Max. Water content: 0.01 - 0.02 %

Drying temperature: 120 °C

Drying time:

Circulating air drying oven (50 % fresh air) 4-8 h

Fresh air dryer (high speed dryer) 2-4 h

Dry air dryer 2-3 h

PROCESSING

Melt temperature: 280-320 °C

Mold temperature: 80-100 °C

Use open nozzle.