

## Product Texts

- MVR (300 °C/1.2 kg) 12 cm<sup>3</sup>/10 min
- flame retardant
- UL 94V-0/3.0 mm
- medium viscosity
- easy release

| Processing/Physical Characteristics        | Value | Unit                   | Test Standard   |
|--|-------|------------------------|-----------------|
| <b>ISO Data</b>                            |       |                        |                 |
| <sup>[C]</sup> Melt volume-flow rate, MVR  | 12    | cm <sup>3</sup> /10min | ISO 1133        |
| Temperature                                | 300   | °C                     | -               |
| Load                                       | 1.2   | kg                     | -               |
| <sup>[C]</sup> Molding shrinkage, parallel | 0.7   | %                      | ISO 294-4, 2577 |
| <sup>[C]</sup> Molding shrinkage, normal   | 0.7   | %                      | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties                          | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                                |       |                   |               |
| <sup>[C]</sup> Tensile Modulus                 | 2400  | MPa               | ISO 527       |
| <sup>[C]</sup> Yield stress                    | 66    | MPa               | ISO 527       |
| <sup>[C]</sup> Yield strain                    | 6.1   | %                 | ISO 527       |
| <sup>[C]</sup> Nominal strain at break         | >50   | %                 | ISO 527       |
| <sup>[C]</sup> Charpy impact strength, +23°C   | N     | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy impact strength, -30°C   | N     | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Puncture - maximum force, +23°C | 5400  | N                 | ISO 6603-2    |
| <sup>[C]</sup> Puncture - maximum force, -30°C | 6300  | N                 | ISO 6603-2    |
| <sup>[C]</sup> Puncture energy, +23°C          | 60    | J                 | ISO 6603-2    |
| <sup>[C]</sup> Puncture energy, -30°C          | 65    | J                 | ISO 6603-2    |

[C]: CAMPUS

| Thermal properties   | Value | Unit  | Test Standard   |
|--|-------|-------|-----------------|
| <b>ISO Data</b>  |       |       |                 |
| <sup>[C]</sup> Glass transition temperature, 10°C/min      | 145   | °C    | ISO 11357-1/-2  |
| <sup>[C]</sup> Temp. of deflection under load, 1.80 MPa    | 124   | °C    | ISO 75-1/-2     |
| <sup>[C]</sup> Temp. of deflection under load, 0.45 MPa    | 136   | °C    | ISO 75-1/-2     |
| <sup>[C]</sup> Vicat softening temperature, B              | 143   | °C    | ISO 306         |
| <sup>[C]</sup> Coeff. of linear therm. expansion, parallel | 65    | E-6/K | ISO 11359-1/-2  |
| <sup>[C]</sup> Coeff. of linear therm. expansion, normal   | 65    | E-6/K | ISO 11359-1/-2  |
| <sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.       | V-2   | class | IEC 60695-11-10 |
| Thickness tested   | 1.5   | mm    | -               |
| <sup>[C]</sup> Burning Behav. at thickness h               | V-0   | class | IEC 60695-11-10 |
| Thickness tested   | 3.0   | mm    | -               |
| <sup>[C]</sup> Oxygen index                                | 35    | %     | ISO 4589-1/-2   |

[C]: CAMPUS

| Electrical properties                       | Value | Unit  | Test Standard |
|---|-------|-------|---------------|
| <b>ISO Data</b>                             |       |       |               |
| <sup>[C]</sup> Relative permittivity, 100Hz | 3.1   | -     | IEC 62631-2-1 |
| <sup>[C]</sup> Relative permittivity, 1MHz  | 3     | -     | IEC 62631-2-1 |
| <sup>[C]</sup> Dissipation factor, 100Hz    | 8     | E-4   | IEC 62631-2-1 |
| <sup>[C]</sup> Dissipation factor, 1MHz     | 90    | E-4   | IEC 62631-2-1 |
| <sup>[C]</sup> Volume resistivity           | >1E13 | Ohm*m | IEC 62631-3-1 |
| <sup>[C]</sup> Surface resistivity          | >1E15 | Ohm   | IEC 62631-3-2 |
| <sup>[C]</sup> Electric strength            | 34    | kV/mm | IEC 60243-1   |
| <sup>[C]</sup> Comparative tracking index   | 225   | -     | IEC 60112     |

[C]: CAMPUS

| Optical properties                    | Value | Unit | Test Standard   |
|---------------------------------------|-------|------|-----------------|
| <b>ISO Data</b>                       |       |      |                 |
| <sup>[C]</sup> Luminous transmittance | 89    | %    | ISO 13468-1, -2 |
| <sup>[C]</sup> : CAMPUS               |       |      |                 |

| Other properties                   | Value | Unit              | Test Standard  |
|------------------------------------|-------|-------------------|----------------|
| <sup>[C]</sup> Water absorption    | 0.3   | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Humidity absorption | 0.12  | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Density             | 1200  | kg/m <sup>3</sup> | ISO 1183       |
| <sup>[C]</sup> : CAMPUS            |       |                   |                |

| Test specimen production                           | Value | Unit | Test Standard |
|--|-------|------|---------------|
| <b>ISO Data</b>                                    |       |      |               |
| <sup>[C]</sup> Injection Molding, melt temperature | 290   | °C   | ISO 294       |
| Injection Molding, mold temperature                | 80    | °C   | ISO 294       |
| Injection Molding, injection velocity              | 200   | mm/s | ISO 294       |
| <sup>[C]</sup> : 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

Flame retardant, Transparent

### 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.