

Product Texts

Injection Molding, 40% Mineral Reinforced, Heat Stabilized, Low Warpage

ISO 1043 PA66-MX40

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|------------|------|-----------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 1.3 / * | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 1.1 / * | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|-------------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 6100 / 2700 | MPa | ISO 527 |
| ^[C] Stress at break | 85 / 38 | MPa | ISO 527 |
| ^[C] Strain at break | 2.5 / 10 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | 40 / 65 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 45 / 35 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | - / 10 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | - / 10 | kJ/m ² | ISO 179/1eA |
| ^[C] Puncture - maximum force, +23°C | 610 / 640 | N | ISO 6603-2 |
| ^[C] Puncture - maximum force, -30°C | 610 / 610 | N | ISO 6603-2 |
| ^[C] Puncture energy, +23°C | 2.2 / 2.9 | J | ISO 6603-2 |
| ^[C] Puncture energy, -30°C | 2.2 / 2 | J | ISO 6603-2 |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|--|------------|--------|----------------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 265 / * | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 110 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 230 / * | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 60 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 80 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning rate, FMVSS, Thickness 1 mm | 56.6 | mm/min | ISO 3795 (FMVSS 302) |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|------------|------|---------------|
| ISO Data | | | |
| ^[C] Comparative tracking index | 600 / - | - | IEC 60112 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|------------|-------------------|----------------|
| ^[C] Water absorption | 4.5 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 1.7 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1490 / - | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| ^[C] Injection Molding, melt temperature | 290 | °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 | 280 - 300 | °C | - |
| Mold temperature | 80 - 120 | °C | - |

Characteristics**Processing**

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets

Regional AvailabilityNorth 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): 280 - 300 °C

Mold temperature: 80 - 120 °C