

Product Texts

Product-nomenclature: ISO 16396-PA12,,M1H,C18-010

Product Attributes

Hydrolysis resistant, Improved impact resistance, Improved heat resistance, Improved UV resistance (outdoor use)

Markets

Industry & Consumer goods

Heating systems, Housewares, Sanitary, water and gas supply

Approvals

Food Contact

EU Requirements, FDA

Potable Water Contact

NSF 61, KTW, WRAS, ACS, DVGW W270

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|------------|------|-----------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 0.8 / * | % | 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 | - / 1100 | MPa | ISO 527 |
| ^[C] Yield stress | - / 40 | MPa | ISO 527 |
| ^[C] Yield strain | - / 12 | % | ISO 527 |
| ^[C] Nominal strain at break | - / >50 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | - / N | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | - / N | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | - / 7 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | - / 6 | kJ/m ² | ISO 179/1eA |
| ^[C] Shore D hardness | 70 / * | - | ISO 7619-1 |

^[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|--|------------|-------|-----------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 178 / * | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 45 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 115 / * | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 120 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 140 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning Behav. at thickness h | HB / * | class | IEC 60695-11-10 |
| Thickness tested | 0.8 / * | mm | - |

^[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|------------|-------|---------------|
| ISO Data | | | |
| ^[C] Volume resistivity | - / 1E11 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | * / 1E12 | Ohm | IEC 62631-3-2 |
| ^[C] Electric strength | - / 32 | kV/mm | IEC 60243-1 |
| ^[C] Comparative tracking index | - / 600 | - | IEC 60112 |

^[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|------------|------|----------------|
| ^[C] Water absorption | 1.5 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 0.7 / * | % | Sim. to ISO 62 |

[C] Density

1010 / -

kg/m³

ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Granules, Natural Color

Special Characteristics

High impact or impact modified, Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Chemical Resistance

Hydrolytically Stable

Certifications

Food contact, Food approval FDA 21 CFR, Drinking water contact, Drinking water contact KTW, Drinking water contact DVGW W270, Drinking water contact NSF 61

Regional Availability

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