

Product Texts

Opaque PC-Siloxane copolymer with excellent processability. Non-chlorinated, non-brominated flame retardant product in most colors. UV-stabilized. UL rated f1/V-0/5VA.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|------------------------|---------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 9 | cm ³ /10min | ISO 1133 |
| Temperature | 300 | °C | - |
| Load | 1.2 | kg | - |
| ASTM Data | | | |
| Melt Flow Index, MFI | 10 | g/10min | ASTM D 1238 |
| Temperature | 300 | °C | - |
| Load | 1.2 | kg | - |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2100 | MPa | ISO 527 |
| Yield stress | 55 | MPa | ISO 527 |
| Yield strain | 6 | % | ISO 527 |
| Stress at break | 60 | MPa | ISO 527 |
| Strain at break | 50 | % | ISO 527 |
| Flexural modulus | 2200 | MPa | ISO 178 |
| Charpy impact strength, +23°C, 3mm | N | kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C, 3mm | N | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C, 3mm | 75 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C, 3mm | 60 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C | N | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 3mm | 70 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -30°C, 3mm | 55 | kJ/m ² | ISO 180/1A |
| Ball indentation hardness | 90 | MPa | ISO 2039-1 |
| ASTM Data | | | |
| Tensile Modulus | 2100 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 58 | MPa | ASTM D 638 |
| Tensile Strength at Break | 61 | MPa | ASTM D 638 |
| Elongation at Yield | 6 | % | ASTM D 638 |
| Elongation at Break | 130 | % | ASTM D 638 |
| Flexural Modulus | 2060 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 801 | J/m | ASTM D 256 |
| Izod Impact notched, 1/4 in | 641 | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | 678 | J/m | ASTM D 256 |
| Temperature | -30 | °C | - |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|-------|-----------------|
| ISO Data | | | |
| Vicat softening temperature, B | 140 | °C | ISO 306 |
| Vicat softening temperature, 120°C/h 50N | 142 | °C | ISO 306 |
| Burning behav. at 1.5 mm nom. thickn. | V-0 | class | IEC 60695-11-10 |
| Thickness tested | 1.5 | mm | - |
| Burning behav. at thickness h | V-1 | class | IEC 60695-11-10 |
| Thickness tested | 0.8 | mm | - |
| Burning behav. 5V at thickness h | 5VA | class | IEC 60695-11-20 |
| Thickness tested | 3.0 | mm | - |
| Glow Wire Flammability Index (GWFI) | 960 | °C | IEC 60695-2-12 |
| GWFI - thickness tested (3) | 1 | mm | - |
| Glow Wire Ignition Temperature (GWIT) | 825 | °C | IEC 60695-2-13 |
| GWIT - thickness tested (1) | 1 | mm | - |
| ASTM Data | | | |
| DTUL @ 66 psi | 134 | °C | ASTM D 648 |
| DTUL @ 264 psi | 120 | °C | ASTM D 648 |
| Vicat Temperature | 142 | °C | ASTM D 1525 |

| Electrical properties | Value | Unit | Test Standard |
|---------------------------------|-----------------|-------------|----------------------|
| ISO Data | | | |
| Dissipation factor, 1MHz | 85 | E-4 | IEC 62631-2-1 |
| Volume resistivity | >1E13 | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |
| Comparative tracking index | 225 | - | IEC 60112 |
| ASTM Data | | | |
| Dielectric Strength, Short Time | 17 | kV/mm | ASTM D 149 |
| Dissipation Factor, 60 Hz | 0.0024 | - | ASTM D 150 |
| Dissipation Factor, 1 MHz | 0.0085 | - | ASTM D 150 |

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| Water absorption | 0.35 | % | Sim. to ISO 62 |
| Humidity absorption | 0.15 | % | Sim. to ISO 62 |
| Density | 1190 | kg/m ³ | ISO 1183 |
| Density | 1180 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature | 120 | °C | - |
| Pre-drying - Time | 3 - 4 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 295 - 315 | °C | - |
| Mold temperature | 70 - 95 | °C | - |
| Zone 1 | 270 - 295 | °C | - |
| Zone 2 | 280 - 305 | °C | - |
| Zone 3 | 295 - 315 | °C | - |
| Screw speed | 40 - 70 | rpm | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

Europe