

Datasheet of Polycarbonate used for SG - Series

Product Texts

Low Viscosity, UV Stabilized, Molding Release

ISO 1043 PC

| Rheological properties | Value | Unit | Test Standard |
|------------------------------|-------|------------------------|-----------------|
| CAMPUS/ISO Data | | | |
| Melt volume-flow rate | 10 | cm ³ /10min | ISO 1133 |
| Temperature | 300 | °C | ISO 1133 |
| Load | 1.2 | kg | ISO 1133 |
| Molding shrinkage (parallel) | 0.6 | % | ISO 294-4, 2577 |

| Mechanical properties | Value | Unit | Test Standard |
|-------------------------|-------|------|---------------|
| CAMPUS/ISO Data | | | |
| Tensile Modulus | 2300 | MPa | ISO 527-1/-2 |
| Yield stress | 60 | MPa | ISO 527-1/-2 |
| Yield strain | 6 | % | ISO 527-1/-2 |
| Nominal strain at break | >50 | % | ISO 527-1/-2 |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|-------|-----------------|
| CAMPUS/ISO Data | | | |
| Temp. of deflection under load (1.80 MPa) | 130 | °C | ISO 75-1/-2 |
| Vicat softening temperature (50°C/h 50N) | 148 | °C | ISO 306 |
| Coeff. of linear therm. expansion (parallel) | 65 | E-6/K | ISO 11359-1/-2 |
| Burning Behav. at 1.5 mm nom. thickn. | V-2 | class | IEC 60695-11-10 |
| Thickness tested | 1.5 | mm | IEC 60695-11-10 |
| UL recognition | UL | - | - |
| Burning Behav. at thickness h | V-2 | class | IEC 60695-11-10 |
| Thickness tested | 0.8 | mm | IEC 60695-11-10 |
| UL recognition | UL | - | - |
| Oxygen index | 26 | % | ISO 4589-1/-2 |

| Electrical properties | Value | Unit | Test Standard |
|-------------------------------|-------|-------|---------------|
| CAMPUS/ISO Data | | | |
| Relative permittivity (100Hz) | 3 | - | IEC 60250 |
| Relative permittivity (1MHz) | 2.9 | - | IEC 60250 |
| Dissipation factor (100Hz) | 6.6 | E-4 | IEC 60250 |
| Dissipation factor (1MHz) | 92 | E-4 | IEC 60250 |
| Volume resistivity | >1E13 | Ohm*m | IEC 60093 |
| Surface resistivity | >1E15 | Ohm | IEC 60093 |
| Electric strength | 29 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 225 | - | IEC 60112 |

| Other properties | Value | Unit | Test Standard |
|------------------------|-------|-------------------|----------------|
| CAMPUS/ISO Data | | | |
| Water absorption | 0.35 | % | Sim. to ISO 62 |
| Density | 1200 | kg/m ³ | ISO 1183 |

| Material specific properties | Value | Unit | Test Standard |
|------------------------------|-------|--------------------|---------------------|
| CAMPUS/ISO Data | | | |
| Viscosity number | 55 | cm ³ /g | ISO 307, 1157, 1628 |

| Rheological calculation properties | Value | Unit | Test Standard |
|------------------------------------|-------|-------------------|---------------|
| CAMPUS/ISO Data | | | |
| Density of melt | 1010 | kg/m ³ | - |

| | | | |
|------------------------------|---------|-------------------|---|
| Thermal conductivity of melt | 0.24 | W/(m K) | - |
| Spec. heat capacity melt | 1710 | J/(kg K) | - |
| Eff. thermal diffusivity | 1.40E-7 | m ² /s | - |
| Ejection temperature | 131 | °C | - |

| Test specimen production | Value | Unit | Test Standard |
|-------------------------------------|-------|------|---------------|
| CAMPUS/ISO Data | | | |
| Injection Molding, melt temperature | 300 | °C | ISO 294 |
| mold temperature | 90 | °C | ISO 10724 |

Characteristics

Processing

Injection Molding, Blow Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat, Transparent

Regional Availability

Europe

Other text information

Injection molding

The datasheet provided to you is based on our present knowledge and experience. All descriptions, drawings, photographs, data, proportions, weights, etc. provided herein are subject to change without prior notice and do not constitute assured properties or conditions of the product. Compliance with any existing laws and regulations is the responsibility of the recipient.