# Apec 2097

**Easy-flow grades / UV-stabilized, easy-release** Easy flowing, easy to demold, UV-stabilized, softening temperature (VST/B 120)=202 °C

**ISO Shortname**

| | Property | Test Condition | Unit | Standard | Value |
|---|---|---|---|---|---|
| **Rheological properties** | | | | | |
| C | Melt volume-flow rate | 330 °C; 2.16 kg | cm³/(10 min) | ISO 1133 | 8 |
| | Melt mass-flow rate | 330 °C; 2.16 kg | g/(10 min) | ISO 1133 | 8 |
| **Mechanical properties (23 °C/50 % r. h.)** | | | | | |
| C | Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 2400 |
| C | Yield stress | 50 mm/min | MPa | ISO 527-1,-2 | 76 |
| C | Yield strain | 50 mm/min | % | ISO 527-1,-2 | 6.9 |
| C | Nominal strain at break | 50 mm/min | % | ISO 527-1,-2 | > 50 |
| C | Charpy impact strength | 23 °C | kJ/m² | ISO 179/1eU | N |
| C | Charpy impact strength | -30 °C | kJ/m² | ISO 179/1eU | N |
| | Flexural modulus | 2 mm/min | MPa | ISO 178 | 2400 |
| | Flexural strength | 2 mm/min | MPa | ISO 178 | 110 |
| | Ball indentation hardness | | N/mm² | ISO 2039-1 | 125 |
| **Thermal properties** | | | | | |
| C | Temperature of deflection under load | 1.80 MPa | °C | ISO 75-1,-2 | 172 |
| C | Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | 191 |
| | Vicat softening temperature | 50 N; 120 °C/h | °C | ISO 306 | 202 |
| C | Coefficient of linear thermal expansion, parallel | 23 to 55 °C | $10^{-4}$/K | ISO 11359-1,-2 | 0.7 |
| C | Coefficient of linear thermal expansion, transverse | 23 to 55 °C | $10^{-4}$/K | ISO 11359-1,-2 | 0.7 |
| C | Burning behavior UL 94 | | Class | UL 94 | HB |
| C | Oxygen index | Method A | % | ISO 4589-2 | 25 |
| | Glow wire test (GWFI) | | °C | IEC 60695-2-12 | 850 |
| **Electrical properties (23 °C/50 % r. h.)** | | | | | |
| C | Relative permittivity | 100 Hz | - | IEC 60250 | 3 |
| C | Relative permittivity | 1 MHz | - | IEC 60250 | 3 |
| C | Dissipation factor | 100 Hz | $10^{-4}$ | IEC 60250 | 7 |
| C | Dissipation factor | 1 MHz | $10^{-4}$ | IEC 60250 | 80 |
| C | Volume resistivity | | Ohm·m | IEC 60093 | 1E14 |
| C | Surface resistivity | | Ohm | IEC 60093 | 1E16 |
| C | Electrical strength | 1 mm | kV/mm | IEC 60243-1 | 35 |
| C | Comparative tracking index CTI | Solution A | Rating | IEC 60112 | 600 |
| | Comparative tracking index CTI M | Solution B | Rating | IEC 60112 | <100 |
| | Electrolytic corrosion | | Rating | IEC 60426 | A1 |
| **Other properties (23 °C)** | | | | | |
| C | Water absorption (Saturation value) | Water at 23 °C | % | ISO 62 | 0.3 |
| C | Water absorption (Equilibrium value) | 23 °C; 50 % RH | % | ISO 62 | 0.12 |
| C | Density | | kg/m³ | ISO 1183 | 1140 |
| **Material specific properties** | | | | | |
| | Refractive index | Procedure A | - | ISO 489 | 1.566 |
| | Luminous transmittance (clear transparent materials) | 1 mm | % | ISO 13468-2 | 90 |

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| | Property | Test Condition | Unit | Standard | Value |
|---|---|---|---|---|---|
| **Processing conditions for test specimens** | | | | | |
| C | Injection molding-Melt temperature | | °C | ISO 294 | 330 |
| C | Injection molding-Mold temperature | | °C | ISO 294 | 100 |
| C | Injection molding-Injection velocity | | mm/s | ISO 294 | 200 |

**C** These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

## Disclaimer

Disclaimer for Sales products

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Test values

Unless specified to the contrary, the values given have been established on standardised test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the colouring.

Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing.To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded.Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.