

# Bayblend® T90 XG

Standard grades / Non reinforced

(PC+ABS)-Blend; Vicat/B 120 temperature = 135 °C; easy flowing; optimized surface quality for metallization (steam treatment)

ISO Shortname

PC+ABS

| Property                                              | Test Condition                | Unit                | Standard          | typical Value |
|-------------------------------------------------------|-------------------------------|---------------------|-------------------|---------------|
| <b>Rheological properties</b>                         |                               |                     |                   |               |
| C Melt volume-flow rate                               | 260 °C; 5 kg                  | cm³/10 min          | ISO 1133          | 26            |
| Melt viscosity                                        | 1000 s <sup>-1</sup> ; 260 °C | Pa·s                | b.o. ISO 11443-A  | 225           |
| C Molding shrinkage, parallel                         | 60x60x2 mm; 260 °C / MT 80 °C | %                   | ISO 294-4         | 0.55-0.75     |
| C Molding shrinkage, normal                           | 60x60x2 mm; 260 °C / MT 80 °C | %                   | ISO 294-4         | 0.55-0.75     |
| <b>Mechanical properties (23 °C/50 % r. h.)</b>       |                               |                     |                   |               |
| C Tensile modulus                                     | 1 mm/min                      | MPa                 | ISO 527-1,-2      | 2400          |
| C Yield stress                                        | 50 mm/min                     | MPa                 | ISO 527-1,-2      | 61            |
| C Yield strain                                        | 50 mm/min                     | %                   | ISO 527-1,-2      | 5.1           |
| Stress at break                                       | 50 mm/min                     | MPa                 | ISO 527-1,-2      | 56            |
| Strain at break                                       | 50 mm/min                     | %                   | b.o. ISO 527-1,-2 | > 50          |
| Izod impact strength                                  | 23 °C                         | kJ/m²               | ISO 180-U         | N             |
| Izod notched impact strength                          | 23 °C                         | kJ/m²               | ISO 180-A         | 52            |
| Izod notched impact strength                          | -30 °C                        | kJ/m²               | ISO 180-A         | 18            |
| C Puncture energy                                     | 23 °C                         | J                   | ISO 6603-2        | 51            |
| C Puncture energy                                     | -30 °C                        | J                   | ISO 6603-2        | 57            |
| <b>Thermal properties</b>                             |                               |                     |                   |               |
| C Temperature of deflection under load                | 1.80 MPa                      | °C                  | ISO 75-1,-2       | 112           |
| C Temperature of deflection under load                | 0.45 MPa                      | °C                  | ISO 75-1,-2       | 130           |
| C Vicat softening temperature                         | 50 N; 50 °C/h                 | °C                  | ISO 306           | 134           |
| Vicat softening temperature                           | 50 N; 120 °C/h                | °C                  | ISO 306           | 135           |
| C Coefficient of linear thermal expansion, parallel   | 23 to 55 °C                   | 10 <sup>-4</sup> /K | ISO 11359-1,-2    | 0.70          |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C                   | 10 <sup>-4</sup> /K | ISO 11359-1,-2    | 0.70          |
| <b>Electrical properties (23 °C/50 % r. h.)</b>       |                               |                     |                   |               |
| C Relative permittivity                               | 100 Hz                        | -                   | IEC 60250         | 3.1           |
| C Relative permittivity                               | 1 MHz                         | -                   | IEC 60250         | 3.0           |
| C Dissipation factor                                  | 100 Hz                        | 10 <sup>-4</sup>    | IEC 60250         | 25            |
| C Dissipation factor                                  | 1 MHz                         | 10 <sup>-4</sup>    | IEC 60250         | 100           |
| 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            |
| <b>Other properties (23 °C)</b>                       |                               |                     |                   |               |
| C Water absorption (saturation value)                 | Water at 23 °C                | %                   | ISO 62            | 0.5           |
| C Water absorption (equilibrium value)                | 23 °C; 50 % r. h.             | %                   | ISO 62            | 0.2           |
| C Density                                             |                               | kg/m³               | ISO 1183-1        | 1150          |
| <b>Processing conditions for test specimens</b>       |                               |                     |                   |               |
| C Injection molding-Melt temperature                  |                               | °C                  | ISO 294           | 260           |
| C Injection molding-Mold temperature                  |                               | °C                  | ISO 294           | 80            |
| C Injection molding-Injection velocity                |                               | mm/s                | ISO 294           | 240           |

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.

Impact properties: N = non-break, P = partial break, C = complete break





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## Disclaimer

Information Impact properties

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Typical value

These values are typical values only. Unless explicitly agreed in written form, they do not constitute a binding material specification or warranted values. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the property values given have been established on standardized test specimens at room temperature.

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