



# Bayblend T65

## Standard grades / Non reinforced

General purpose injection molding grade; Vicat/B 120 temperature = 120 °C; good low temperature impact strength.

## ISO Shortname

| Property                                              | Test Condition                        | Unit                      | Standard          | Value       |
|-------------------------------------------------------|---------------------------------------|---------------------------|-------------------|-------------|
| <b>Rheological properties</b>                         |                                       |                           |                   |             |
| Spiral flow length                                    | 260 °C; 2 x 8.7 mm                    | mm                        | Bayer test        | 410         |
| C Melt volume-flow rate                               | 260 °C; 5 kg                          | cm <sup>3</sup> /(10 min) | ISO 1133          | 12          |
| Molding shrinkage, parallel                           | 150x105x3; 260 °C / MT 80 °C; 500 bar | %                         | acc. ISO 2577     | 0.55 - 0.75 |
| Molding shrinkage, normal                             | 150x105x3; 260 °C / MT 80 °C; 500 bar | %                         | acc. ISO 2577     | 0.55 - 0.75 |
| <b>Mechanical properties (23 °C/50 % r. h.)</b>       |                                       |                           |                   |             |
| C Tensile modulus                                     | 1 mm/min                              | MPa                       | ISO 527-1,-2      | 2200        |
| C Yield stress                                        | 50 mm/min                             | MPa                       | ISO 527-1,-2      | 52          |
| C Yield strain                                        | 50 mm/min                             | %                         | ISO 527-1,-2      | 4.2         |
| Stress at break                                       | 50 mm/min                             | MPa                       | ISO 527-1,-2      | 45          |
| Strain at break                                       | 50 mm/min                             | %                         | acc. ISO 527-1,-2 | > 50        |
| Izod impact strength                                  | 23 °C                                 | kJ/m <sup>2</sup>         | ISO 180-1U        | N           |
| Izod impact strength                                  | -30 °C                                | kJ/m <sup>2</sup>         | ISO 180-1U        | N           |
| Izod notched impact strength                          | 23 °C                                 | kJ/m <sup>2</sup>         | ISO 180-1A        | 45          |
| Izod notched impact strength                          | -30 °C                                | kJ/m <sup>2</sup>         | ISO 180-1A        | 41          |
| <b>Thermal properties</b>                             |                                       |                           |                   |             |
| C Temperature of deflection under load                | 1.80 MPa                              | °C                        | ISO 75-1,-2       | 100         |
| C Temperature of deflection under load                | 0.45 MPa                              | °C                        | ISO 75-1,-2       | 122         |
| C Vicat softening temperature                         | 50 N; 50 °C/h                         | °C                        | ISO 306           | 118         |
| Vicat softening temperature                           | 50 N; 120 °C/h                        | °C                        | ISO 306           | 120         |
| C Coefficient of linear thermal expansion, parallel   | 23 to 55 °C                           | 10 <sup>-4</sup> /K       | ISO 11359-1,-2    | 0.8         |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C                           | 10 <sup>-4</sup> /K       | ISO 11359-1,-2    | 0.85        |
| C Burning behavior UL 94 [UL recognition]             | 0.85 mm                               | Class                     | UL 94             | HB          |
| <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         | 30          |
| C Dissipation factor                                  | 1 MHz                                 | 10 <sup>-4</sup>          | IEC 60250         | 85          |
| C Volume resistivity                                  |                                       | Ohm·m                     | IEC 60093         | 1E14        |
| C Surface resistivity                                 |                                       | Ohm                       | IEC 60093         | 1E16        |
| C Electric strength                                   | 1 mm                                  | kV/mm                     | IEC 60243-1       | 35          |
| C Comparative tracking index CTI                      | Solution A                            | Rating                    | IEC 60112         | 250         |
| <b>Other properties (23 °C)</b>                       |                                       |                           |                   |             |
| C Water absorption (Saturation value)                 | Water at 23 °C                        | %                         | ISO 62            | 0.7         |
| C Water absorption (Equilibrium value)                | 23 °C; 50 % RH                        | %                         | ISO 62            | 0.2         |
| C Density                                             |                                       | kg/m <sup>3</sup>         | ISO 1183          | 1130        |
| <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.

