



# Bayblend® M750

Standard grades / Non reinforced

(PC+ABS)-Blend; Vicat/B 120 temperature = 126 °C; meet certain requirements of ISO Standard 10993-1; for further information please contact [plastics@covestro.com](mailto:plastics@covestro.com)

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         | 11            |
| C Melt viscosity                                      | 1000 s <sup>-1</sup> / 260 °C          | Pa·s                | b.o. ISO 11443-A | 265           |
| C Molding shrinkage, parallel                         | 60x60x2 mm/ 260 °C / MT 80 °C/ 500 bar | %                   | ISO 294-4        | 0.7 - 0.9     |
| C Molding shrinkage, normal                           | 60x60x2 mm/ 260 °C / MT 80 °C/ 500 bar | %                   | ISO 294-4        | 0.7 - 0.9     |
| <b>Mechanical properties (23 °C/50 % r. h.)</b>       |                                        |                     |                  |               |
| C Tensile modulus                                     | 1 mm/min                               | MPa                 | ISO 527-1,-2     | 2000          |
| C Yield stress                                        | 50 mm/min                              | MPa                 | ISO 527-1,-2     | 47            |
| C Yield strain                                        | 50 mm/min                              | %                   | ISO 527-1,-2     | 4.8           |
| C Nominal strain at break                             | 50 mm/min                              | %                   | ISO 527-1,-2     | > 50          |
| C Izod impact strength                                | 23 °C                                  | kJ/m²               | ISO 180-U        | N             |
| C Izod notched impact strength                        | 23 °C                                  | kJ/m²               | ISO 180-A        | 45            |
| C Izod notched impact strength                        | -30 °C                                 | kJ/m²               | ISO 180-A        | 35            |
| <b>Thermal properties</b>                             |                                        |                     |                  |               |
| C Temperature of deflection under load                | 1.80 MPa                               | °C                  | ISO 75-1,-2      | 104           |
| C Temperature of deflection under load                | 0.45 MPa                               | °C                  | ISO 75-1,-2      | 127           |
| C Vicat softening temperature                         | 50 N; 120 °C/h                         | °C                  | ISO 306          | 126           |
| C Coefficient of linear thermal expansion, parallel   | 23 to 55 °C                            | 10 <sup>-4</sup> /K | ISO 11359-1,-2   | 0.85          |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C                            | 10 <sup>-4</sup> /K | ISO 11359-1,-2   | 0.85          |
| <b>Electrical properties (23 °C/50 % r. h.)</b>       |                                        |                     |                  |               |
| C Relative permittivity                               | 100 Hz                                 | -                   | IEC 60250        | 3.0           |
| C Relative permittivity                               | 1 MHz                                  | -                   | IEC 60250        | 2.9           |
| C Dissipation factor                                  | 100 Hz                                 | 10 <sup>-4</sup>    | IEC 60250        | 25            |
| C Dissipation factor                                  | 1 MHz                                  | 10 <sup>-4</sup>    | IEC 60250        | 105           |
| 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        | 325           |
| <b>Other properties (23 °C)</b>                       |                                        |                     |                  |               |
| C Water absorption (saturation value)                 | Water at 23 °C                         | %                   | ISO 62           | 0.6           |
| C Water absorption (equilibrium value)                | 23 °C; 50 % r. h.                      | %                   | ISO 62           | 0.2           |
| C Density                                             |                                        | kg/m³               | ISO 1183-1       | 1120          |
| <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            |





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| Property                                     | Test Condition | Unit | Standard | typical Value |
|----------------------------------------------|----------------|------|----------|---------------|
| Recommended Processing and Drying Conditions |                |      |          |               |
| Melt Temperatures                            |                | °C   | -        | 260 - 280     |
| Standard Melt Temperature                    |                | °C   | -        | 270           |
| Barrel Temperatures - Rear                   |                | °C   | -        | 230 - 240     |
| Barrel Temperatures - Middle                 |                | °C   | -        | 235 - 245     |
| Barrel Temperatures - Front                  |                | °C   | -        | 240 - 270     |
| Barrel Temperatures - Nozzle                 |                | °C   | -        | 265 - 275     |
| Mold Temperatures                            |                | °C   | -        | 70 - 90       |
| Hold Pressure (% of injection pressure)      |                | %    | -        | 50 - 75       |
| Plastic Back Pressure (specific)             |                | bar  | -        | 50 - 150      |
| Peripheral Screw Speed                       |                | m/s  | -        | 0.05 - 0.2    |
| Shot-to-Cylinder Size                        |                | %    | -        | 30 - 70       |
| Dry Air Drying Temperature                   |                | °C   | -        | 95 - 110      |
| Dry Air Drying Time                          |                | h    | -        | 4             |
| Moisture Content max. (%)                    |                | %    | -        | <= 0,02       |
| Vent Depth                                   |                | mm   | -        | 0.025 - 0.075 |

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

