# Bayblend® T85 X RE

(PC+ABS) Covestro Deutschland AG

## Product Texts

- (PC+ABS)-Blend
- General Purpose Grade
- Vicat/B 120 temperature = 131 °C
- good injection molding processing behaviour (easy flowing)
- excellent long-term ageing behaviour under humid conditions and painting performance
- improved chemical resistance
- low VOC emissions and odour

Partially bio-circular grade / Attributed via mass balance (according to ISCC PLUS Standard).

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melt volume-flow rate, MVR | **18** | cm³/10min | ISO 1133 |
| Temperature | **260** | °C | - |
| Load | **5** | kg | - |
| [C] Molding shrinkage, parallel | **0.8** | % | ISO 294-4, 2577 |
| [C] Molding shrinkage, normal | **0.8** | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **2300** | MPa | ISO 527 |
| [C] Yield stress | **56** | MPa | ISO 527 |
| [C] Yield strain | **4.9** | % | ISO 527 |
| [C] Nominal strain at break | **>50** | % | ISO 527 |
| [C] Charpy impact strength, +23°C | **N** | kJ/m² | ISO 179/1eU |
| [C] Charpy impact strength, -30°C | **N** | kJ/m² | ISO 179/1eU |
| [C] Charpy notched impact strength, +23°C | **60** | kJ/m² | ISO 179/1eA |
| [C] Charpy notched impact strength, -30°C | **47** | kJ/m² | ISO 179/1eA |
| Izod impact strength, +23°C | **N** | kJ/m² | ISO 180/1U |
| Izod notched impact strength, +23°C | **57** | kJ/m² | ISO 180/1A |
| Izod notched impact strength | **46** | kJ/m² | ISO 180/1A |
| Temperature | **-30** | °C | - |
| [C] Puncture - maximum force, +23°C | **4500** | N | ISO 6603-2 |
| [C] Puncture - maximum force, -30°C | **5400** | N | ISO 6603-2 |
| [C] Puncture energy, +23°C | **48** | J | ISO 6603-2 |
| [C] Puncture energy, -30°C | **56** | J | ISO 6603-2 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Temp. of deflection under load, 1.80 MPa | **106** | °C | ISO 75-1/-2 |
| [C] Temp. of deflection under load, 0.45 MPa | **127** | °C | ISO 75-1/-2 |
| [C] Vicat softening temperature, B | **129** | °C | ISO 306 |
| [C] Coeff. of linear therm. expansion, parallel | **70** | E-6/K | ISO 11359-1/-2 |
| [C] Coeff. of linear therm. expansion, normal | **70** | E-6/K | ISO 11359-1/-2 |
| [C] Burning Behav. at thickness h | **HB** | class | IEC 60695-11-10 |
| Thickness tested | **0.8** | mm | - |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Relative permittivity, 100Hz | **3** | - | IEC 62631-2-1 |
| [C] Relative permittivity, 1MHz | **3** | - | IEC 62631-2-1 |
| [C] Dissipation factor, 100Hz | **20** | E-4 | IEC 62631-2-1 |
| [C] Dissipation factor, 1MHz | **90** | E-4 | IEC 62631-2-1 |
| [C] Volume resistivity | **>1E13** | Ohm*m | IEC 62631-3-1 |

| | | | |
|---|---|---|---|
| [C] Surface resistivity | **>1E15** | Ohm | IEC 62631-3-2 |
| [C] Electric strength | **40** | kV/mm | IEC 60243-1 |
| [C] Comparative tracking index | **225** | - | IEC 60112 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| [C] Water absorption | **0.4** | % | Sim. to ISO 62 |
| [C] Humidity absorption | **0.1** | % | Sim. to ISO 62 |
| [C] Density | **1140** | kg/m³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Injection Molding, melt temperature | **280** | °C | ISO 294 |
| Injection Molding, mold temperature | **80** | °C | ISO 294 |
| Injection Molding, injection velocity | **240** | mm/s | ISO 294 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **95 - 110** | °C | - |
| Pre-drying - Time | **4** | h | - |
| Processing humidity | **≤0.01** | % | - |
| Melt temperature | **270 - 290** | °C | - |
| Mold temperature | **70 - 90** | °C | - |

## Characteristics

**Processing**
Injection Molding

**Certifications**
Contains renewable resources, ISCC Plus

**Features**
Low Emission, Low Odor

**Applications**
General Purpose

**Chemical Resistance**
General Chemical Resistance

**Regional Availability**
North America, Europe, Asia Pacific, South and Central America, Near East/Africa