



## Bayblend® M850 XF RE

(PC+ABS)

Covestro Deutschland AG

- (PC+ABS)-Blend
- easy flowing
- Vicat/B 120 temperature = 131 °C
- meet certain requirements of ISO Standard 10993-1
- for further information please contact [plastics@covestro.com](mailto:plastics@covestro.com)

| Rheological properties     | Value | Unit                   | Test Standard |
|----------------------------|-------|------------------------|---------------|
| <b>ISO Data</b>            |       |                        |               |
| Melt volume-flow rate, MVR | 25    | cm <sup>3</sup> /10min | ISO 1133      |
| Temperature                | 260   | °C                     | -             |
| Load                       | 5     | kg                     | -             |

| Mechanical Properties                 | Value    | Unit              | Test Standard |
|---------------------------------------|----------|-------------------|---------------|
| <b>ISO Data</b>                       |          |                   |               |
| Tensile Modulus                       | 2500     | MPa               | ISO 527       |
| Yield stress                          | 62       | MPa               | ISO 527       |
| Yield strain                          | 4.9      | %                 | ISO 527       |
| Notched Impact Strength (Izod), 23 °C | 48       | kJ/m <sup>2</sup> | ISO 180/1A    |
| Notched Impact Strength (Izod)        | 15       | kJ/m <sup>2</sup> | ISO 180/1A    |
| Temperature                           | -30      | °C                | -             |
| Impact Strength (Izod), 23 °C         | no break | kJ/m <sup>2</sup> | ISO 180/1U    |

| Thermal Properties                          | Value | Unit  | Test Standard  |
|---------------------------------------------|-------|-------|----------------|
| <b>ISO Data</b>                             |       |       |                |
| Temp. of deflection under load (1.80 MPa)   | 109   | °C    | ISO 75-1/-2    |
| Temp. of deflection under load (0.45 MPa)   | 127   | °C    | ISO 75-1/-2    |
| Vicat softening temperature, 50 °C/h 50N    | 129   | °C    | ISO 306        |
| Coeff. of Linear Therm. Expansion, parallel | 70    | E-6/K | ISO 11359-1/-2 |
| Coeff. of Linear Therm. Expansion, normal   | 70    | E-6/K | ISO 11359-1/-2 |
| Burning Behav. at thickness h               | HB    | class | UL 94          |
| Thickness tested                            | 0.8   | mm    | -              |

| Electrical Properties        | Value | Unit  | Test Standard |
|------------------------------|-------|-------|---------------|
| <b>ISO Data</b>              |       |       |               |
| Relative permittivity, 100Hz | 2.9   | -     | IEC 62631-2-1 |
| Relative permittivity, 1MHz  | 2.9   | -     | IEC 62631-2-1 |
| Dissipation Factor, 100Hz    | 30    | E-4   | IEC 62631-2-1 |
| Dissipation Factor, 1MHz     | 90    | E-4   | IEC 62631-2-1 |
| Volume Resistivity           | >1E13 | Ohm*m | IEC 62631-3-1 |
| Surface Resistivity          | >1E15 | Ohm   | IEC 62631-3-2 |
| Electric Strength            | 35    | kV/mm | IEC 60243-1   |
| Comparative tracking index   | 250   | -     | IEC 60112     |
| Relative permittivity, 100Hz | 2.9   | -     | IEC 60250     |
| Relative permittivity, 1MHz  | 2.9   | -     | IEC 60250     |
| Dissipation Factor, 100Hz    | 30    | E-4   | IEC 60250     |
| Dissipation Factor, 1MHz     | 90    | E-4   | IEC 60250     |
| Volume Resistivity           | 1E14  | Ohm*m | IEC 60093     |
| Surface Resistivity          | 1E17  | Ohm   | IEC 60093     |

| Other Properties    | Value | Unit              | Test Standard  |
|---------------------|-------|-------------------|----------------|
| <b>ISO Data</b>     |       |                   |                |
| Water Absorption    | 0.7   | %                 | Sim. to ISO 62 |
| Humidity absorption | 0.2   | %                 | Sim. to ISO 62 |
| Density             | 1140  | kg/m <sup>3</sup> | ISO 1183       |

| Test specimen production              | Value | Unit | Test Standard |
|---------------------------------------|-------|------|---------------|
| <b>ISO Data</b>                       |       |      |               |
| Injection Molding, melt temperature   | 260   | °C   | ISO 294       |
| Injection Molding, mold temperature   | 80    | °C   | ISO 294       |
| Injection Molding, injection velocity | 240   | mm/s | ISO 294       |

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| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---------------------------------------------|-----------|------|---------------|
| Pre-drying - Temperature                    | 95 - 110  | °C   | -             |
| Pre-drying - Time                           | 4         | h    | -             |
| Processing humidity                         | ≤0.02     | %    | -             |
| Melt temperature                            | 260 - 280 | °C   | -             |
| Mold temperature                            | 70 - 90   | °C   | -             |
| Zone 1                                      | 230 - 240 | °C   | -             |
| Zone 2                                      | 235 - 245 | °C   | -             |
| Zone 3                                      | 240 - 270 | °C   | -             |
| Nozzle temperature                          | 265 - 275 | °C   | -             |
| Back pressure                               | 5 - 15    | MPa  | -             |

### Characteristics

#### Processing

Injection Molding

#### Certifications

Contains renewable resources, Biocompatibility ISO 10993, ISCC Plus