

## Bayblend® M850 XF (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       |

| 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     |

| 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       |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---------------------------------------------|-----------|------|---------------|
| Pre-drying - Temperature                    | 100 - 110 | °C   | -             |
| Pre-drying - Time                           | 2 - 4     | h    | -             |
| Processing humidity                         | ≤0.02     | %    | -             |
| Melt temperature                            | 240 - 280 | °C   | -             |
| Mold temperature                            | 70 - 100  | °C   | -             |

## Characteristics

**Processing**

Injection Molding

**Delivery form**

Pellets

**Additives**

Release agent

**Special Characteristics**

Sterilizable, Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization

**Certifications**

Medical, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved

**Applications**

Medical

**Injection Molding**

**PREPROCESSING**

Max. Water content: 0.02 %

Drying temperature: 100 - 110 °C

(depending on the grade 10 °C below the Vicat VST/B120 temperature, but not higher as the recommended values).

Drying time:

Circulating air drying oven (50 % fresh air) 4-8 h

Fresh air dryer (high speed dryer) 2-4 h

Dry air dryer 2-4 h

**PROCESSING**

Melt temperature: 240-280 °C

Mold temperature: 70-100 °C

Use open nozzle.

**Disclaimer**

**Liability Exclusion**

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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