

## HOSTAFORM® MT® SlideX® 2404 ECO-B

### Tribological modified

Hostaform® MT® SlideX® 2404 is a low melt viscosity injection molding grade for fast cycling and thin walled parts with tribological modification designed for use in demanding applications that require prevention of audible noise caused by stick-slip phenomenon and low friction and wear against plastics and metals.

Hostaform® MT® SlideX® 2404 is a special grade developed for medical industry applications and complies with:

- CFR 21 (177.2470) of the Food and Drug Administration (FDA) and is listed in the Drug Master File (DMF 11559) and the Device Master File (MAF 1079)
- the corresponding EU and national registry requirements
- biocompatibility in tests corresponding to USP < 88> Class VI/ISO 10993
- low residual monomers
- no animal-derived constituents

ECO-B: Hostaform ECO-B is a POM-Copolymer with the same properties and performance as standard grades but produced with sustainability in mind. Using a mass-balance approach, biogenic feedstocks are used to offset the use of fossil-based raw materials and decrease greenhouse gas emissions. The process is audited and certified according to the ISCC Plus mass balance approach.

### Rheological properties

|                              |                           |                 |
|------------------------------|---------------------------|-----------------|
| Melt volume-flow rate        | 25 cm <sup>3</sup> /10min | ISO 1133        |
| Temperature                  | 190 °C                    |                 |
| Load                         | 2.16 kg                   |                 |
| Moulding shrinkage, parallel | 1.9 %                     | ISO 294-4, 2577 |
| Moulding shrinkage, normal   | 1.8 %                     | ISO 294-4, 2577 |

### Typical mechanical properties

|  |                       |              |
|--|-----------------------|--------------|
| Tensile Modulus                        | 2550 MPa              | ISO 527-1/-2 |
| Yield stress, 50mm/min                 | 55 MPa                | ISO 527-1/-2 |
| Yield strain, 50mm/min                 | 7 %                   | ISO 527-1/-2 |
| Nominal strain at break                | 50 %                  | ISO 527-1/-2 |
| Flexural Modulus                       | 2300 MPa              | ISO 178      |
| Shear Modulus                          | 923 MPa               | ISO 6721     |
| Charpy impact strength, 23 °C          | 160 kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy impact strength, -30 °C         | 150 kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy notched impact strength, 23 °C  | 5.5 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Charpy notched impact strength, -30 °C | 5.5 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Ball indentation hardness, H 358/30    | 130 MPa               | ISO 2039-1   |

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### Thermal properties

|   |           |                |
|---|-----------|----------------|
| Melting temperature, 10 °C/min              | 166 °C    | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa     | 90 °C     | ISO 75-1/-2    |
| Vicat softening temperature, 50 °C/h, 50N   | 144 °C    | ISO 306        |
| Coeff. of linear therm. expansion, parallel | 140 E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal   | 140 E-6/K | ISO 11359-1/-2 |

### Other properties

|                          |            |                |
|--------------------------|------------|----------------|
| Humidity absorption, 2mm | 0.2 %      | Sim. to ISO 62 |
| Water absorption, 2mm    | 0.6 %      | Sim. to ISO 62 |
| Density                  | 1400 kg/m³ | ISO 1183       |

### Injection

|                                 |                |          |
|---------------------------------|----------------|----------|
| Drying Temperature              | 100 - 120 °C   |          |
| Drying Time, Dehumidified Dryer | 3 - 4 h        |          |
| Processing Moisture Content     | 0.15 %         |          |
| Melt Temperature Optimum        | 200 °C         | Internal |
| Screw tangential speed          | 0.2 - 0.21 m/s |          |
| Max. mould temperature          | 80 - 120 °C    |          |
| Back pressure                   | 4 MPa          |          |
| Injection speed                 | slow-very slow |          |

### Characteristics

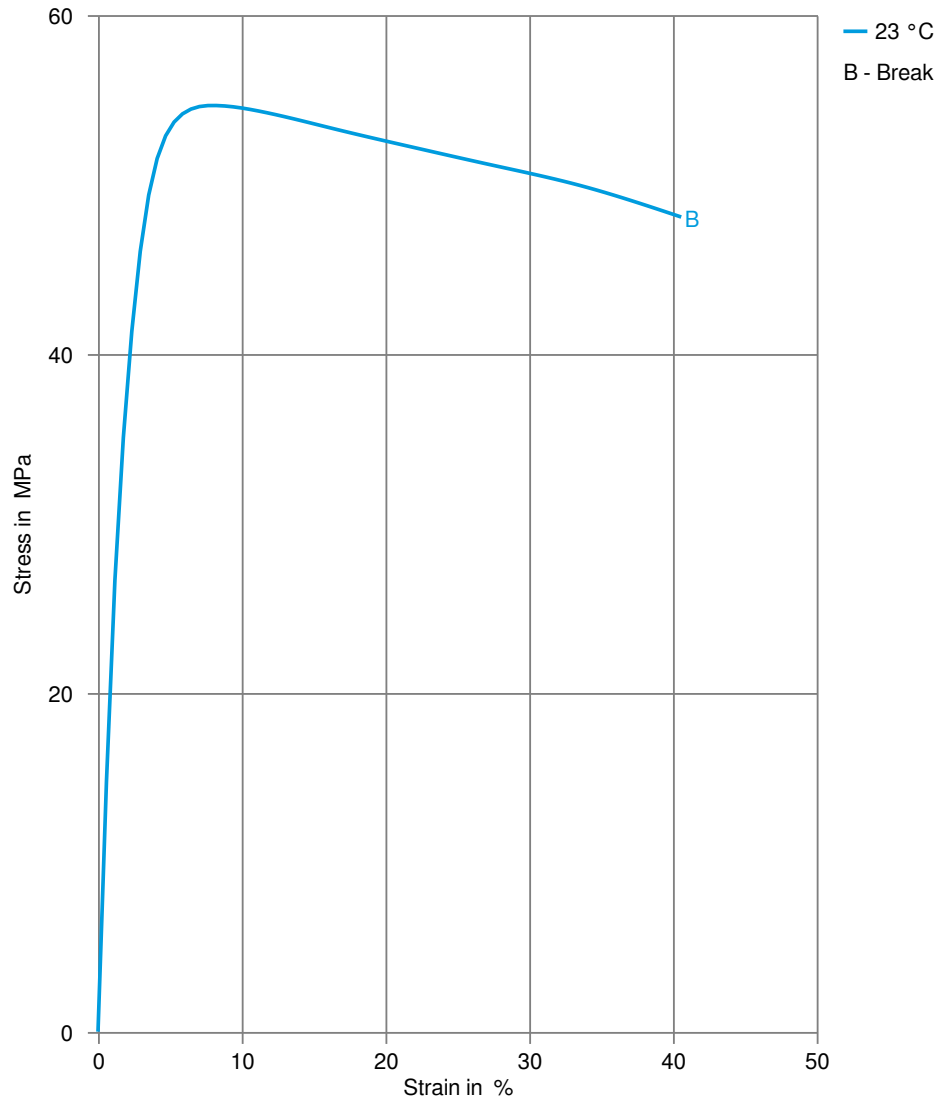
|           |          |
|-----------|----------|
| Additives | Biobased |
|-----------|----------|

### Additional information

|                   |  |
|-------------------|--|
| Injection molding | See Processing Guide and Involve Celanese FTS support to obtain best quality parts |
|-------------------|--|

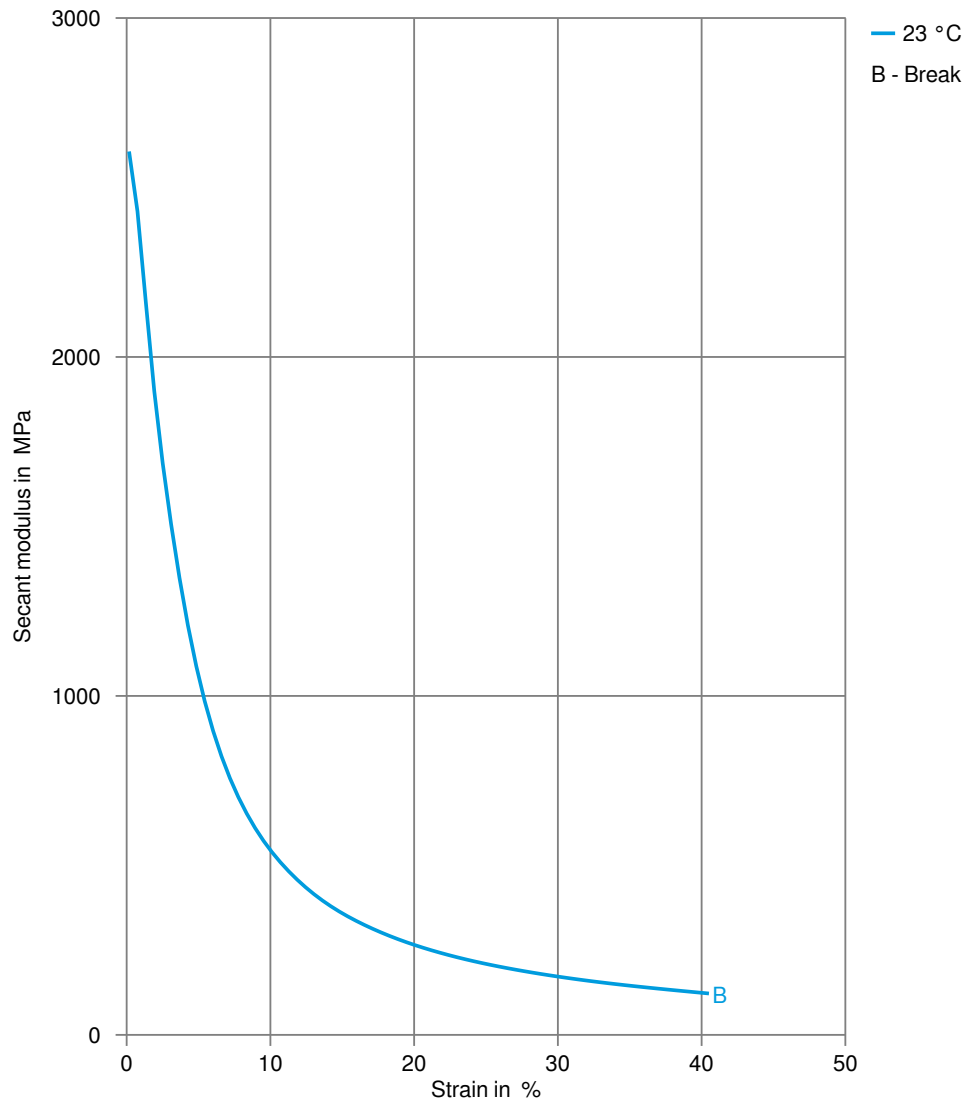
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### Stress-strain



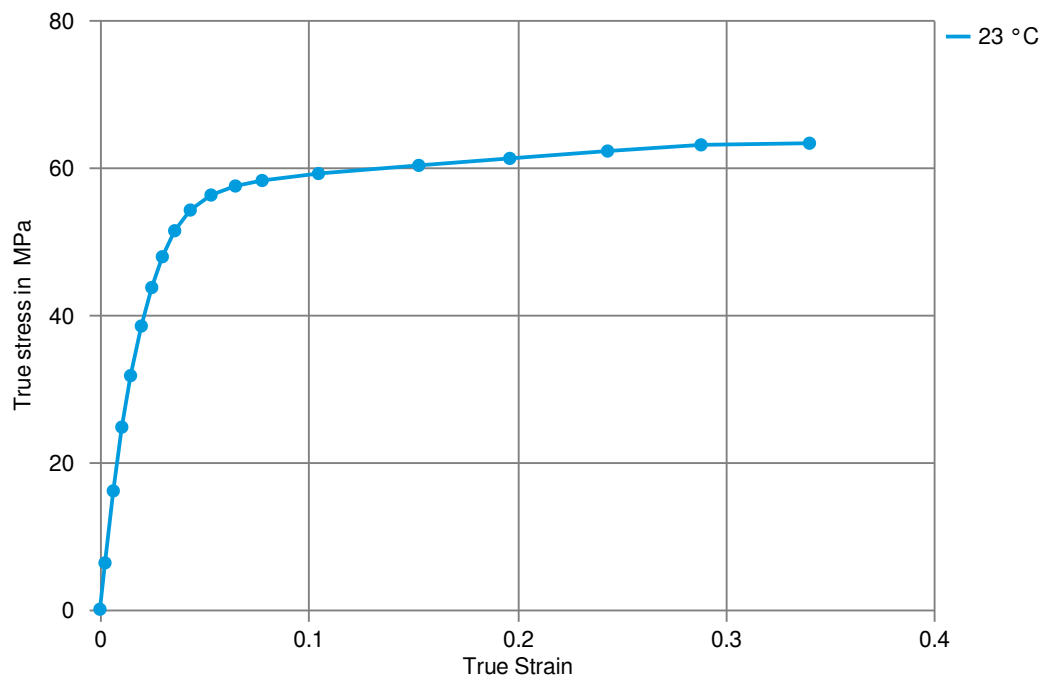
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Secant modulus-strain



## HOSTAFORM® MT® SlideX® 2404 ECO-B

### True stress-strain



## HOSTAFORM® MT® SlideX® 2404 ECO-B

### Processing Texts

|                   |  |
|-------------------|--|
| Pre-drying        | recommended  |
| Injection molding | See Processing Guide and Involve Celanese FTS support to obtain best quality parts |

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