

HOSTAFORM® MT® SlideX® 1203

Tribological modified

Hostaform® MT® SlideX® 1203 is a standard flow injection molding grade 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® 1203 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 regulatory requirements
- biocompatibility in tests corresponding to USP <88> Class VI/ISO 10993
- low residual monomers
- no animal-derived constituents

Rheological properties

Melt volume-flow rate	13 cm ³ /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage, parallel	2.0 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.6 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	2650 MPa	ISO 527-1/-2
Yield stress, 50mm/min	58 MPa	ISO 527-1/-2
Yield strain, 50mm/min	12 %	ISO 527-1/-2
Nominal strain at break	45 %	ISO 527-1/-2
Flexural Modulus	2500 MPa	ISO 178
Shear Modulus	966 MPa	ISO 6721
Charpy impact strength, 23°C	160 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	150 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	6 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	6 kJ/m ²	ISO 179/1eA
Ball indentation hardness, H 358/30	138 MPa	ISO 2039-1

Thermal properties

Melting temperature, 10°C/min	170 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	93 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	151 °C	ISO 306
Coeff. of linear therm. expansion, parallel	130 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	130 E-6/K	ISO 11359-1/-2

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Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.6 %	Sim. to ISO 62
Density	1400 kg/m ³	ISO 1183

Injection

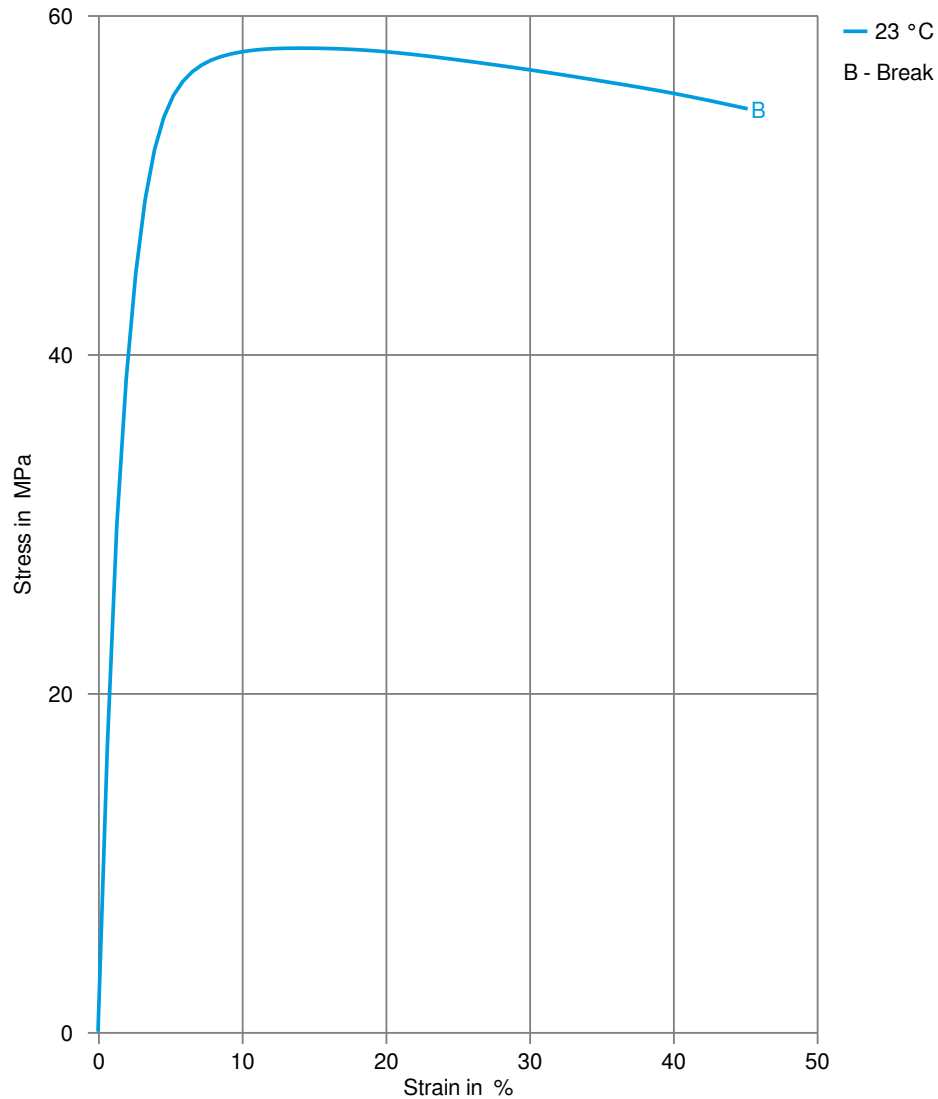
Drying Temperature	100 - 120 °C	
Drying Time, Dehumidified Dryer	3 - 4 h	
Processing Moisture Content	0.15 %	
Melt Temperature Optimum	200 °C	Internal
Screw tangential speed	0.2 - 0.21 m/s	
Max. mould temperature	80 - 120 °C	
Back pressure	4 MPa	
Injection speed	slow-very slow	

Additional information

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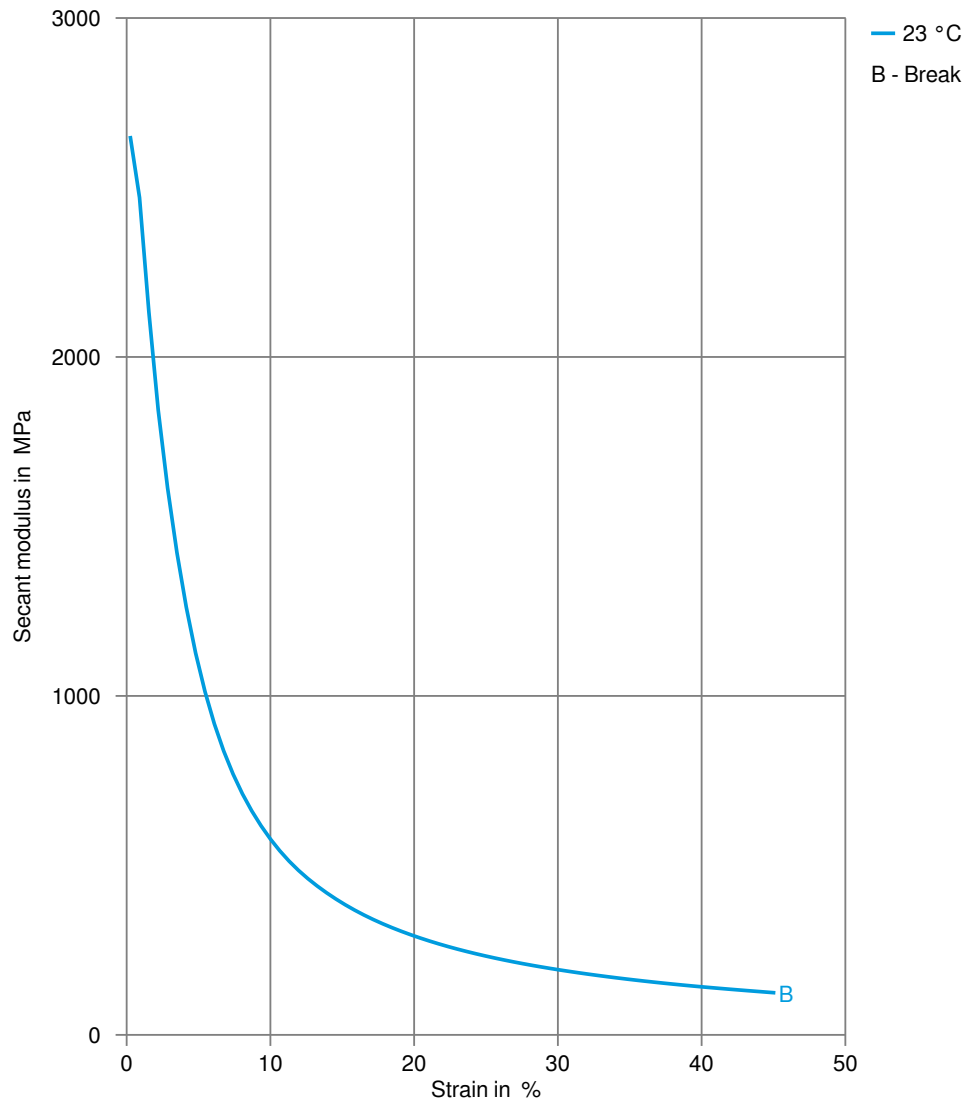
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Stress-strain



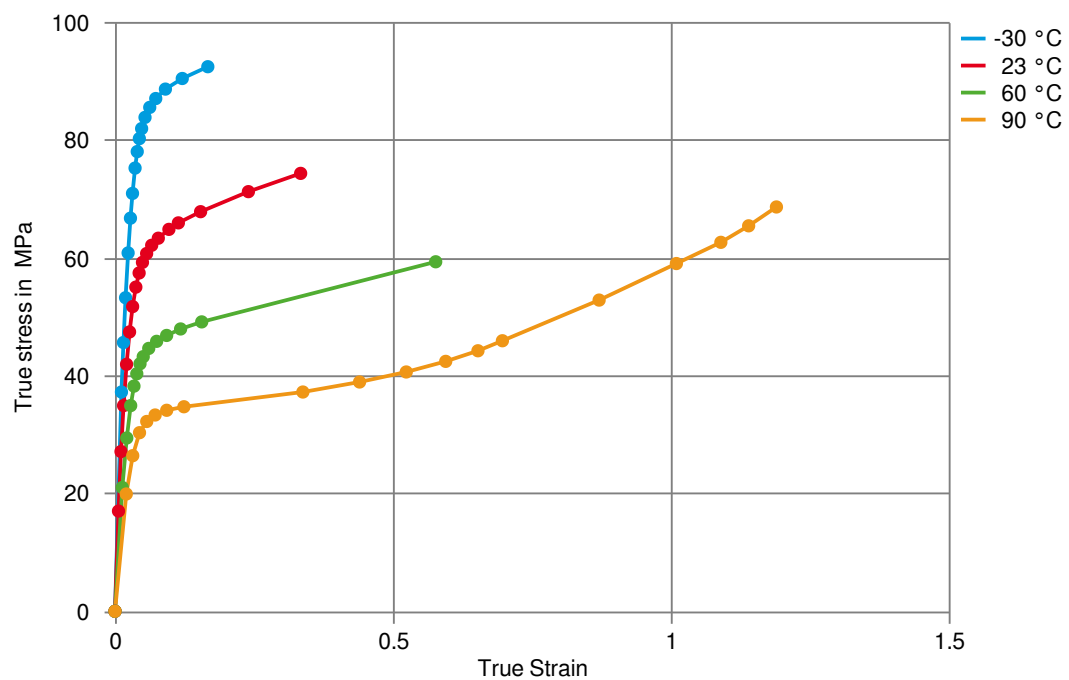
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Secant modulus-strain



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True stress-strain



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Processing Texts

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

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