

# HOSTAFORM® MT® SlideX® 2404

## HOSTAFORM®

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

### Product information

Resin Identification	POM	ISO 1043
Part Marking Code	>POM<	ISO 11469

### 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
Tensile stress at yield, 50mm/min	55 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	7 %	ISO 527-1/-2
Nominal strain at break	50 %	ISO 527-1/-2
Flexural modulus	2300 MPa	ISO 178
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
Poisson's ratio	0.38 <sup>[C]</sup>	

[C]: Calculated

### Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	90 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	140 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	140 E-6/K	ISO 11359-1/-2

# HOSTAFORM® MT® SlideX® 2404

## HOSTAFORM®

### Physical/Other properties

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

### Injection

Drying Recommended	no
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	195 °C
Min. melt temperature	180 °C
Max. melt temperature	210 °C
Screw tangential speed	≤0.3 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	80 °C
Max. mould temperature	120 °C
Hold pressure range	60 - 120 MPa
Back pressure	4 MPa
Ejection temperature	133 °C

### Characteristics

Processing	Injection Moulding
Delivery form	Granules
Special characteristics	Low wear / Low friction

### Additional information

Injection molding

#### Processing

See Processing Guide and Involve Celanese FTS support to obtain best quality parts

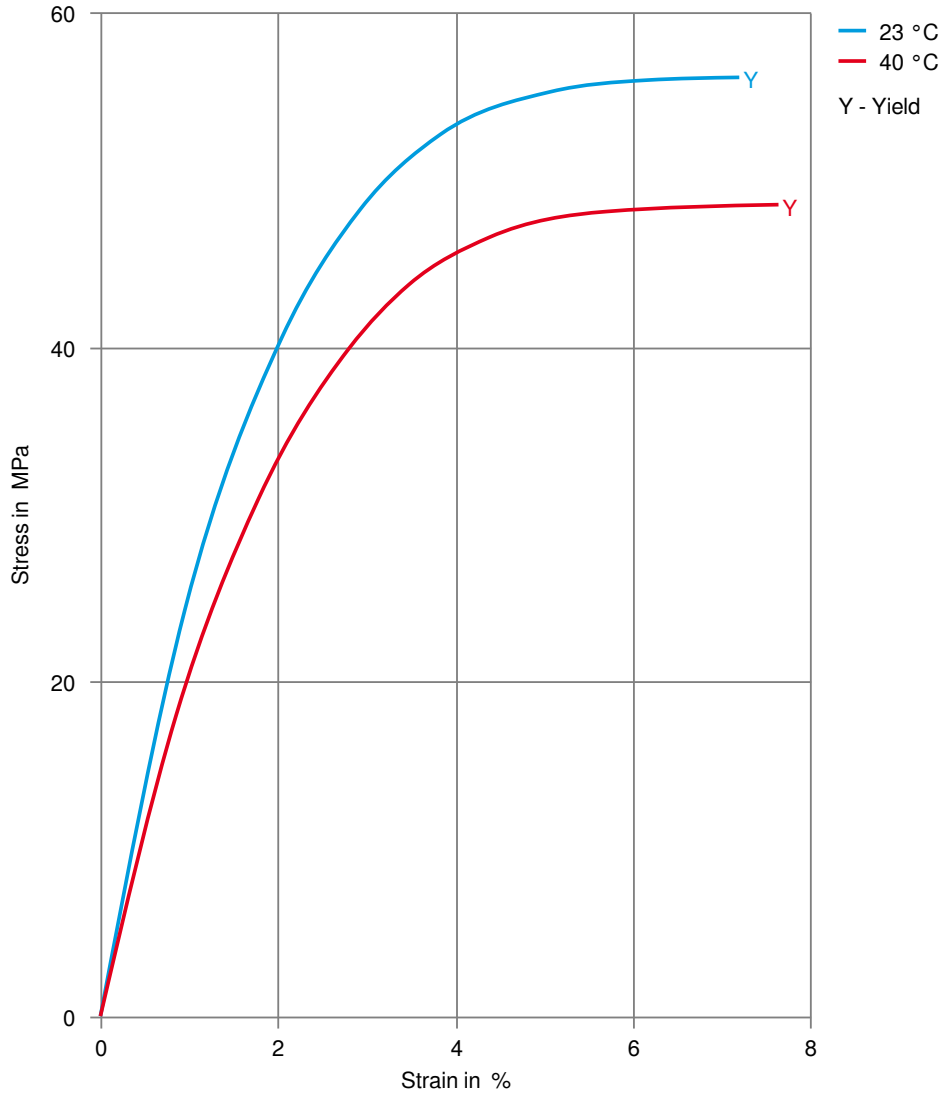
Processing Notes

#### Pre-Drying

recommended

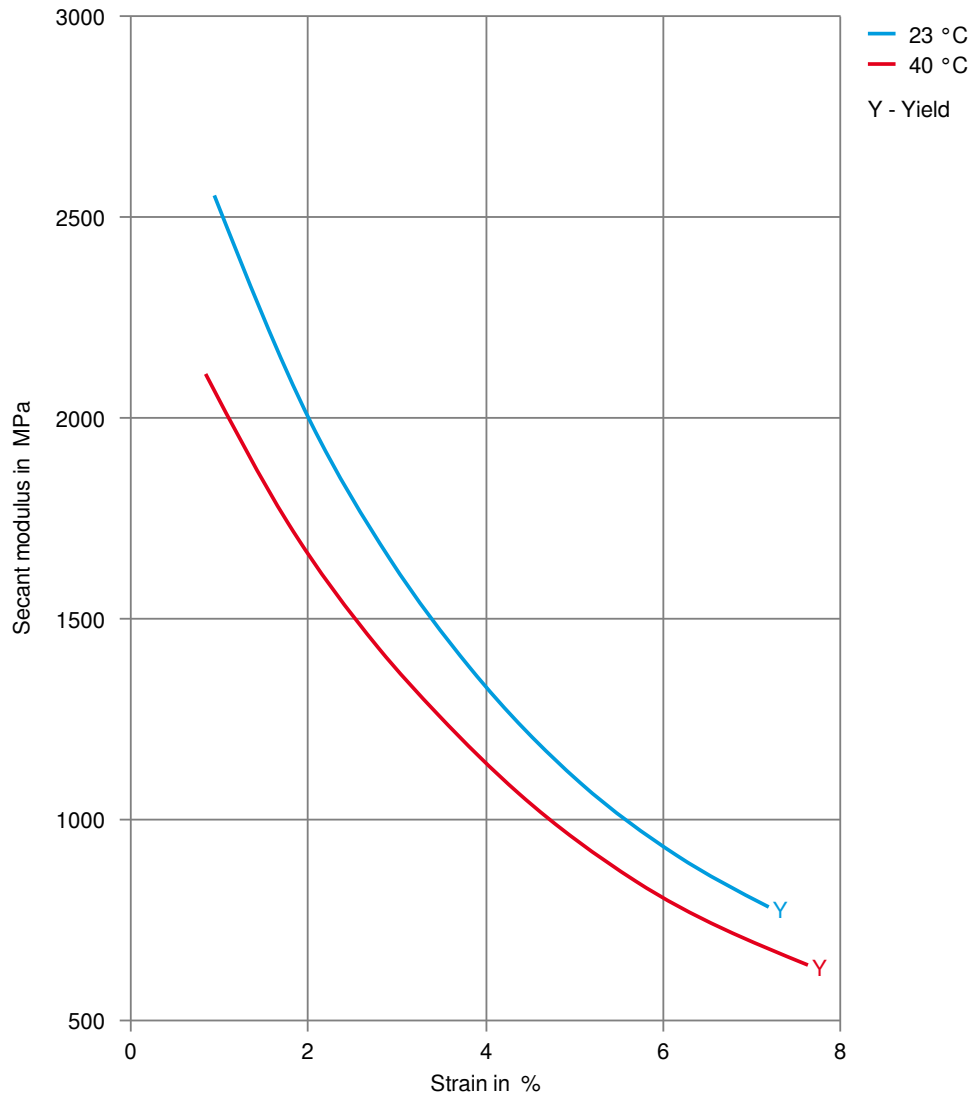
# HOSTAFORM® MT® SlideX® 2404 HOSTAFORM®

## Stress-strain



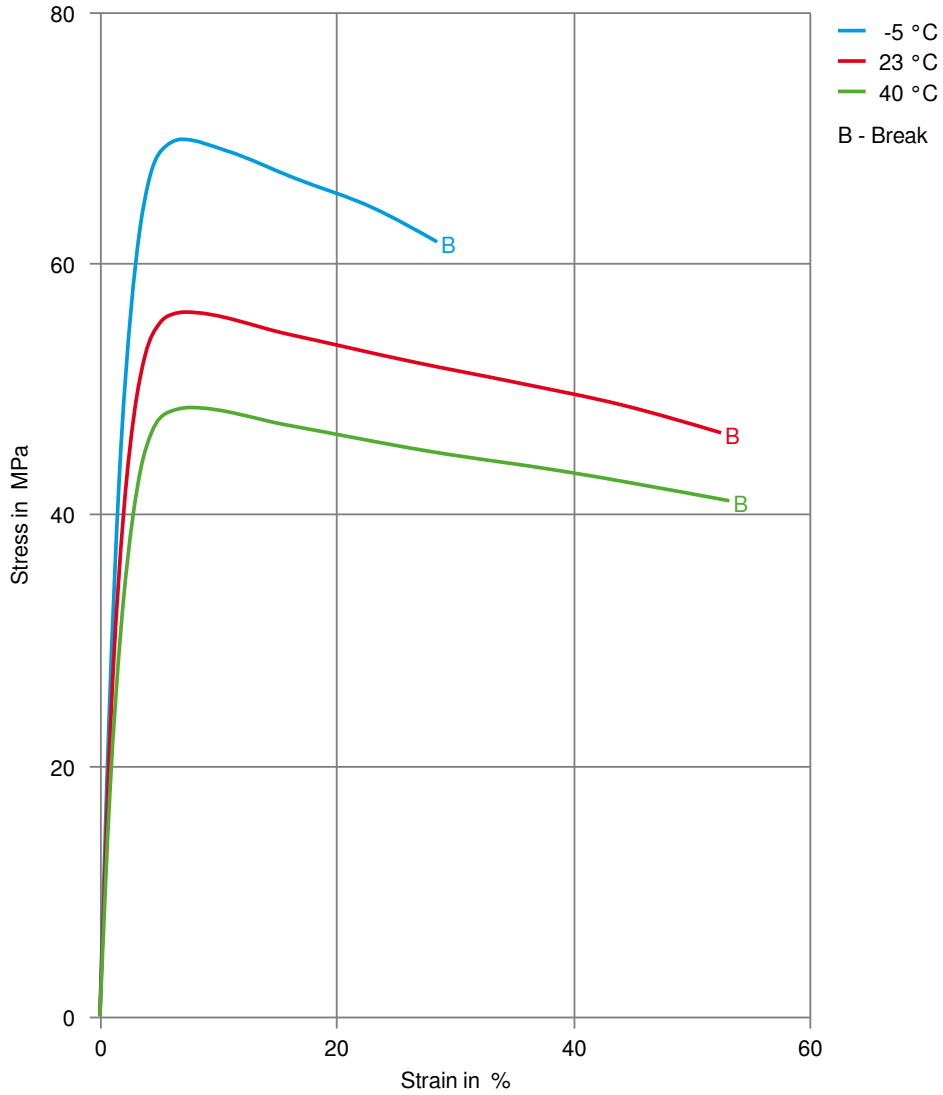
# HOSTAFORM® MT® SlideX® 2404 HOSTAFORM®

## Secant modulus-strain



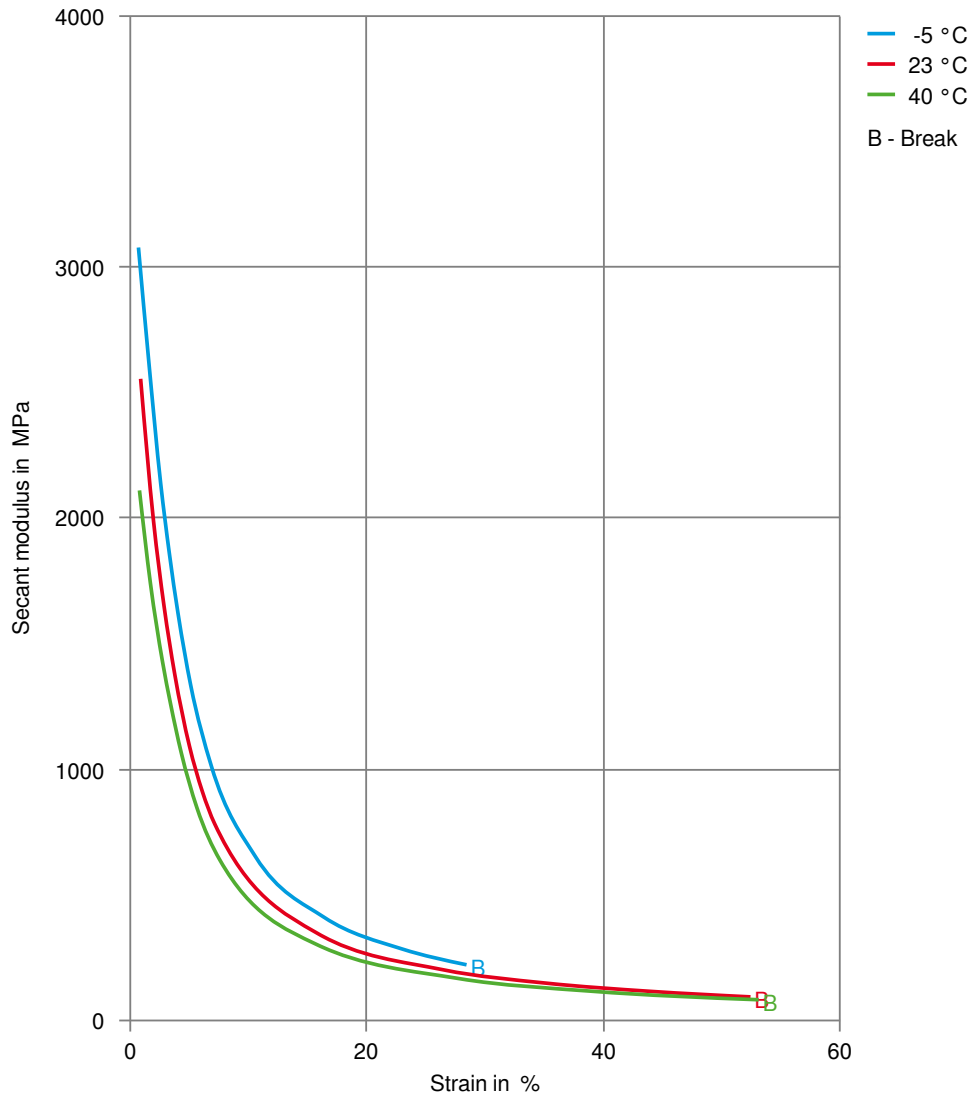
HOSTAFORM® MT® SlideX® 2404  
HOSTAFORM®

Stress-strain, 50mm/min



HOSTAFORM® MT® SlideX® 2404  
HOSTAFORM®

Secant modulus-strain, 50mm/min



NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.