HOSTAFORM® MT®8U01

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Hostaform® MT®8U01 is a POM copolymer for injection molding with a molecular weight for excellent moldability and optimum properties in demanding applications.

Hostaform® MT®8U01 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

Product information

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

Rheological properties

Melt volume-flow rate	8	cm^3/10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.8	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	2850	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	64	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	9	%	ISO 527-1/-2
Nominal strain at break	30	%	ISO 527-1/-2
Flexural modulus	2700	MPa	ISO 178
Tensile creep modulus, 1h	2500	MPa	ISO 899-1
Tensile creep modulus, 1000h	1300	MPa	ISO 899-1
Charpy impact strength, 23°C	220[P]	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	220	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	6.5	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m^2	ISO 179/1eA
Poisson's ratio	0.37[C]		

[P]: Partial Break

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	104	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	110	E-6/K	ISO 11359-1/-2

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Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.65	%	Sim. to ISO 62
Density	1410	kg/m³	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	200	°C
Min. melt temperature	190	°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
Ejection temperature	127	°C

Characteristics

Processing	Injection Moulding

Additional information

Processing Notes

Pre-Drying

Drying is not normally required. If material has come in contact with moisture through improper storage or handling, drying may be necessary to prevent splay and odor problems.

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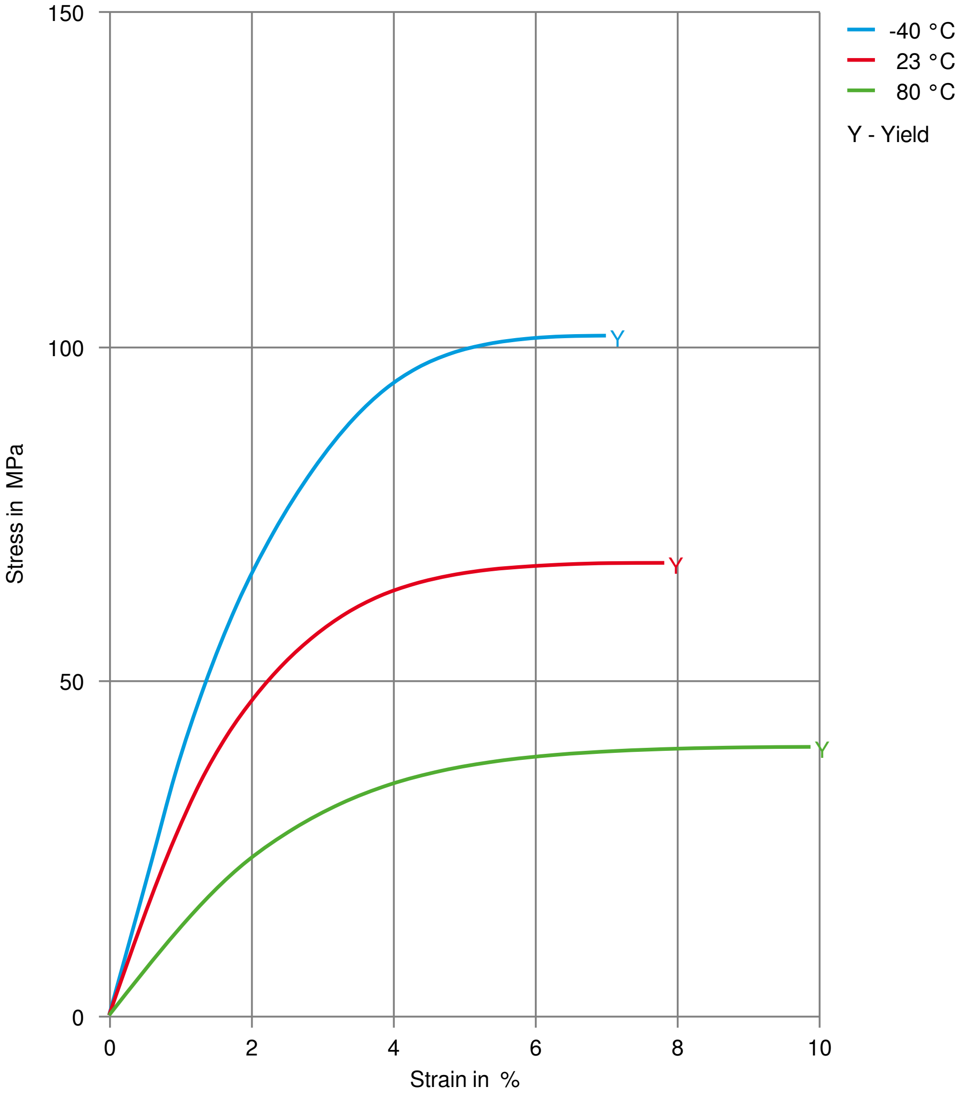
Stress-strain



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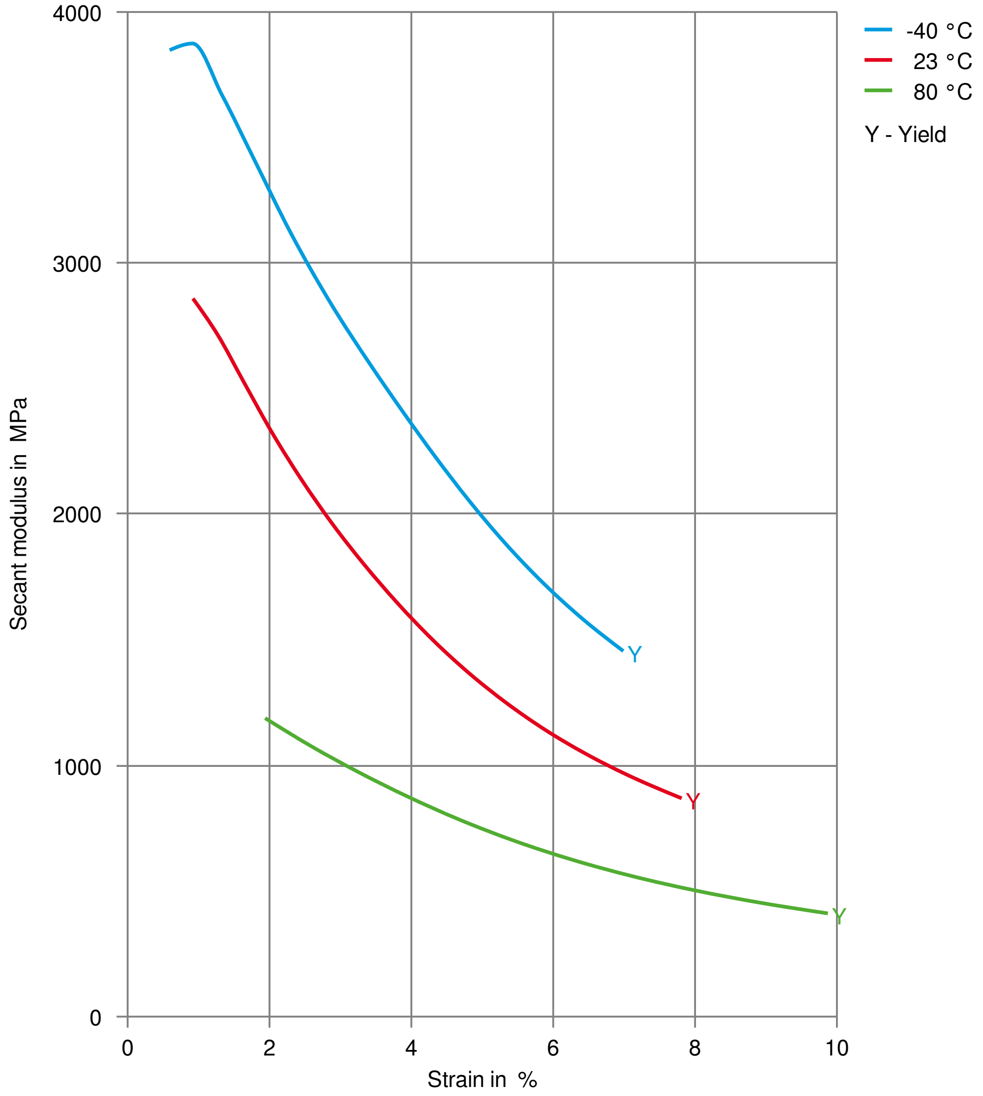
Secant modulus-strain



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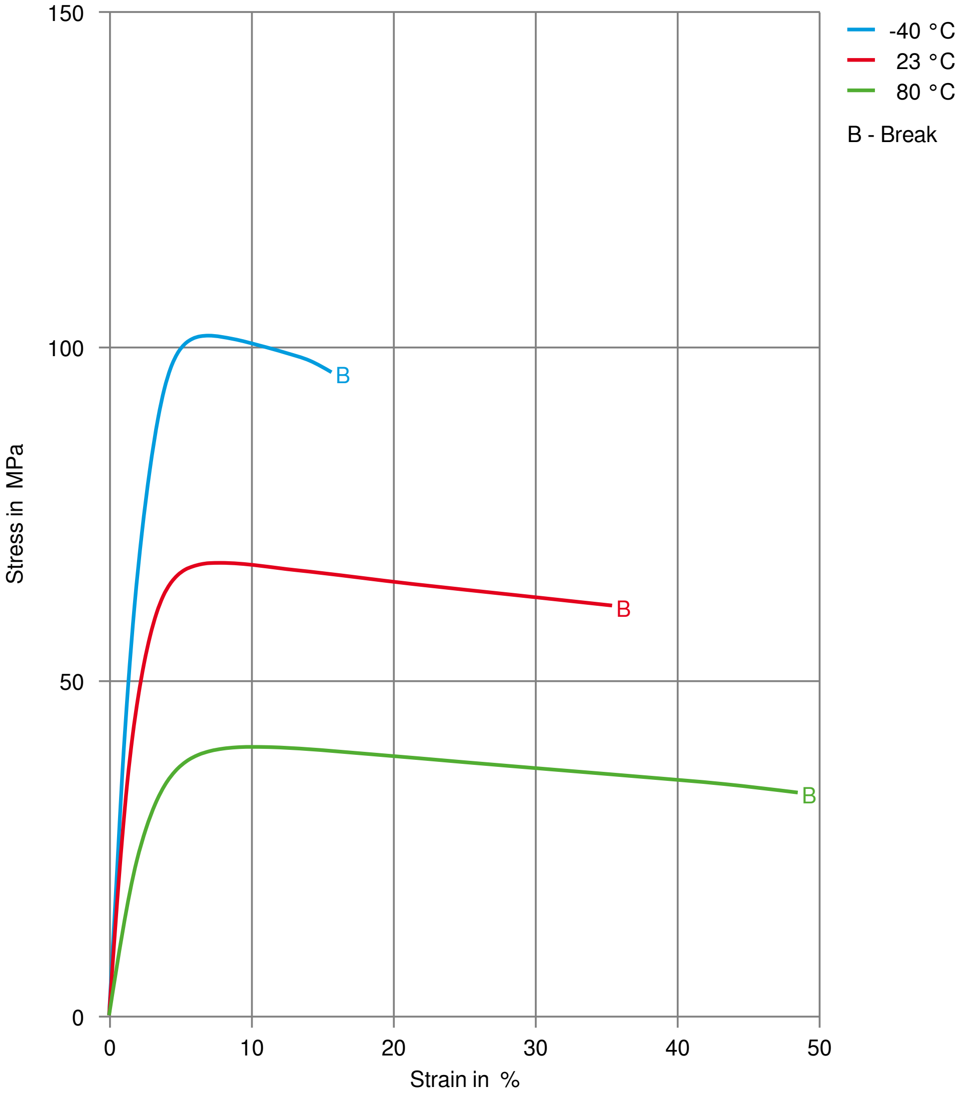
Stress-strain, 50mm/min



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Secant modulus-strain, 50mm/min