

HOSTAFORM® MT®8U01 - POM

Description

Hostaform® MT®8U01 is an injection molding grade 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

Physical properties	Value	Unit	Test Standard
Density	1410	kg/m ³	ISO 1183
Melt volume rate, MVR	8	cm ³ /10min	ISO 1133
MVR temperature	190	°C	ISO 1133
MVR load	2,16	kg	ISO 1133
Molding shrinkage, parallel	2,0	%	ISO 294-4, 2577
Molding shrinkage, normal	1,8	%	ISO 294-4, 2577
Water absorption, 23 °C-sat	0,65	%	ISO 62
Humidity absorption, 23 °C/50%RH	0,2	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	2850	MPa	ISO 527-2/1A
Tensile stress at yield, 50mm/min	64	MPa	ISO 527-2/1A
Tensile strain at yield, 50mm/min	9	%	ISO 527-2/1A
Tensile nominal strain at break, 50mm/min	30	%	ISO 527-2/1A
Tensile creep modulus, 1h	2500	MPa	ISO 899-1
Tensile creep modulus, 1000h	1300	MPa	ISO 899-1
Flexural modulus, 23 °C	2700	MPa	ISO 178
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

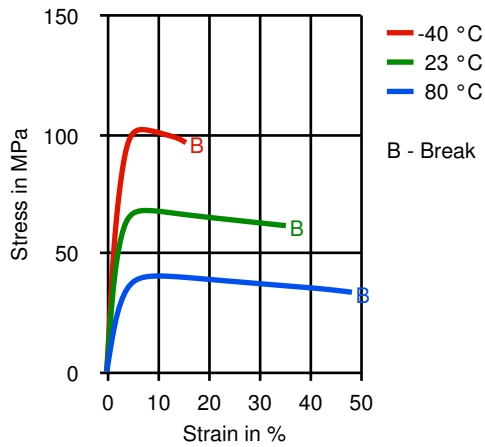
P: Partial Break

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10 °C/min	166	°C	ISO 11357-1/-3
DTUL at 1.8 MPa	104	°C	ISO 75-1, -2
Vicat softening temperature, 50 °C/h 50N	150	°C	ISO 306
Coeff. of linear therm expansion, parallel	1,1	E-4/°C	ISO 11359-2

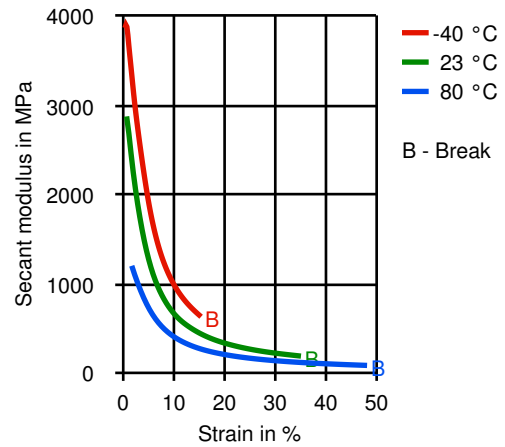
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Diagrams

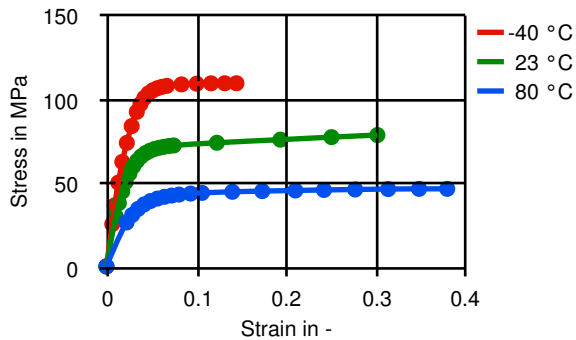
Stress-strain



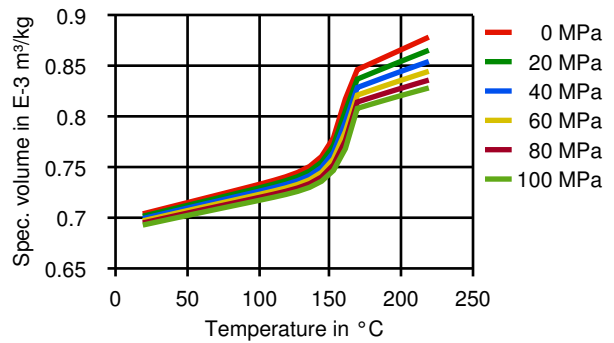
Secant modulus-strain



True Stress-strain



Moldflow Specific volume-temperature (pvT)



Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0,15	%	-
Drying time	3 - 4	h	-
Drying temperature	100 - 120	°C	-
Temperature	Value	Unit	Test Standard
Hopper temperature	20 - 30	°C	-
Feeding zone temperature	60 - 80	°C	-
Zone1 temperature	170 - 180	°C	-
Zone2 temperature	180 - 190	°C	-
Zone3 temperature	190 - 200	°C	-
Zone4 temperature	190 - 210	°C	-
Nozzle temperature	190 - 210	°C	-
Melt temperature	190 - 220	°C	-
Mold temperature	80 - 120	°C	-
Hot runner temperature	190 - 210	°C	-

Other text information

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.

Characteristics

Product Categories

Medical technology

Additives

Release agent

Contact Information

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General Disclaimer

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