Celanese
The chemistry inside innovation™

HOSTAFORM® MT®24U01 ECO-B

HOSTAFORM®

Hostaform® MT®24U01 ECO-B is a low melt viscosity for fast cycling, thin walled injection molding.

Hostaform® MT®24U01 ECO-B 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

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.

Product information

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

Rheological properties

Melt volume-flow rate	24	cm^3/10min	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	2900	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	65	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	7.5	%	ISO 527-1/-2
Nominal strain at break	17	%	ISO 527-1/-2
Flexural modulus	2800	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	170	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	170	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	5.5	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	5.5	kJ/m^2	ISO 179/1eA
Ball indentation hardness, H 358/30	147	MPa	ISO 2039-1
Poisson's ratio	0.37[C]		

[C]: Calculated

Celanese
The chemistry inside innovation™

HOSTAFORM® MT®24U01 ECO-B

HOSTAFORM®

Thermal properties

Melting temperature, 10 °C/min	165	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	106	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	110	E-6/K	ISO 11359-1/-2

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
Back pressure	4	MPa

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	High Flow
Sustainability	Bio-Content

Additional information

Processing Notes

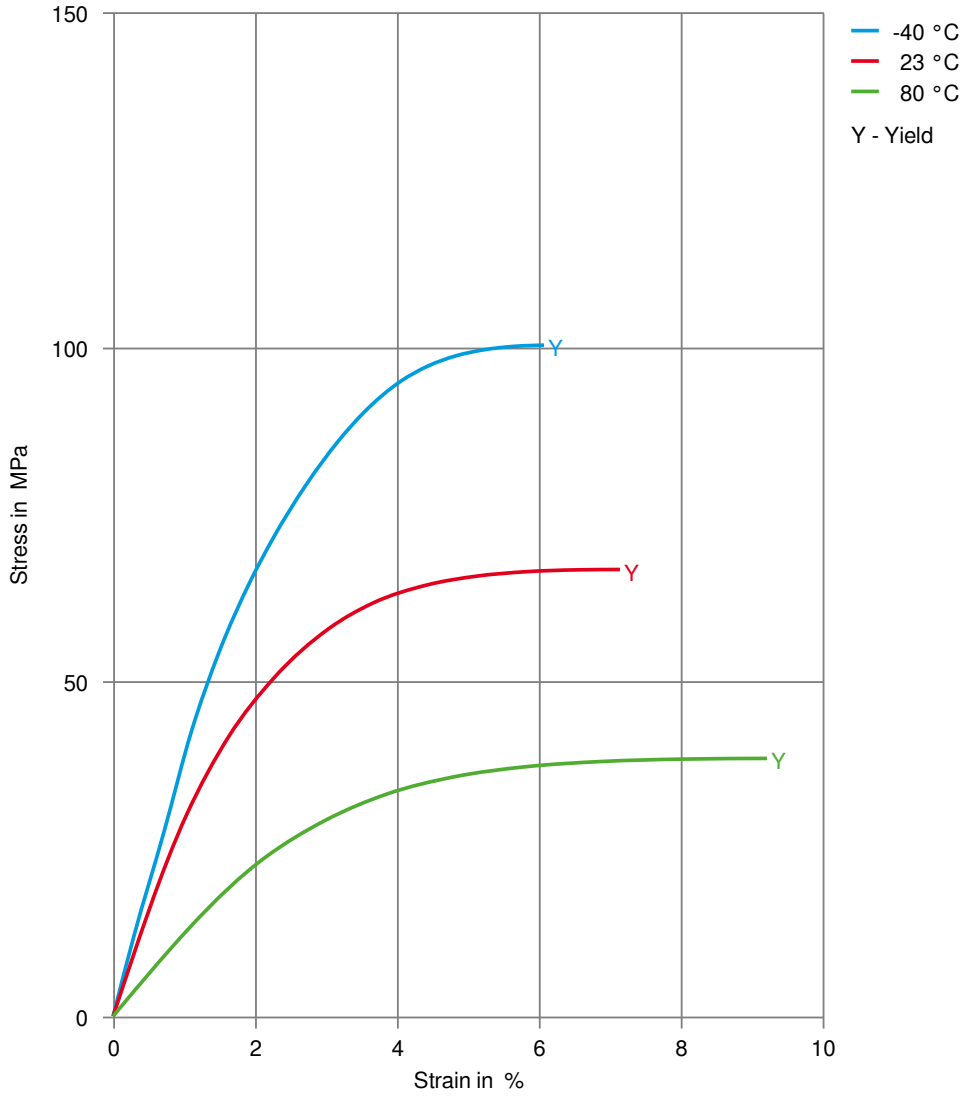
Pre-Drying

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.

Celanese
The chemistry inside innovation™

HOSTAFORM® MT®24U01 ECO-B
HOSTAFORM®

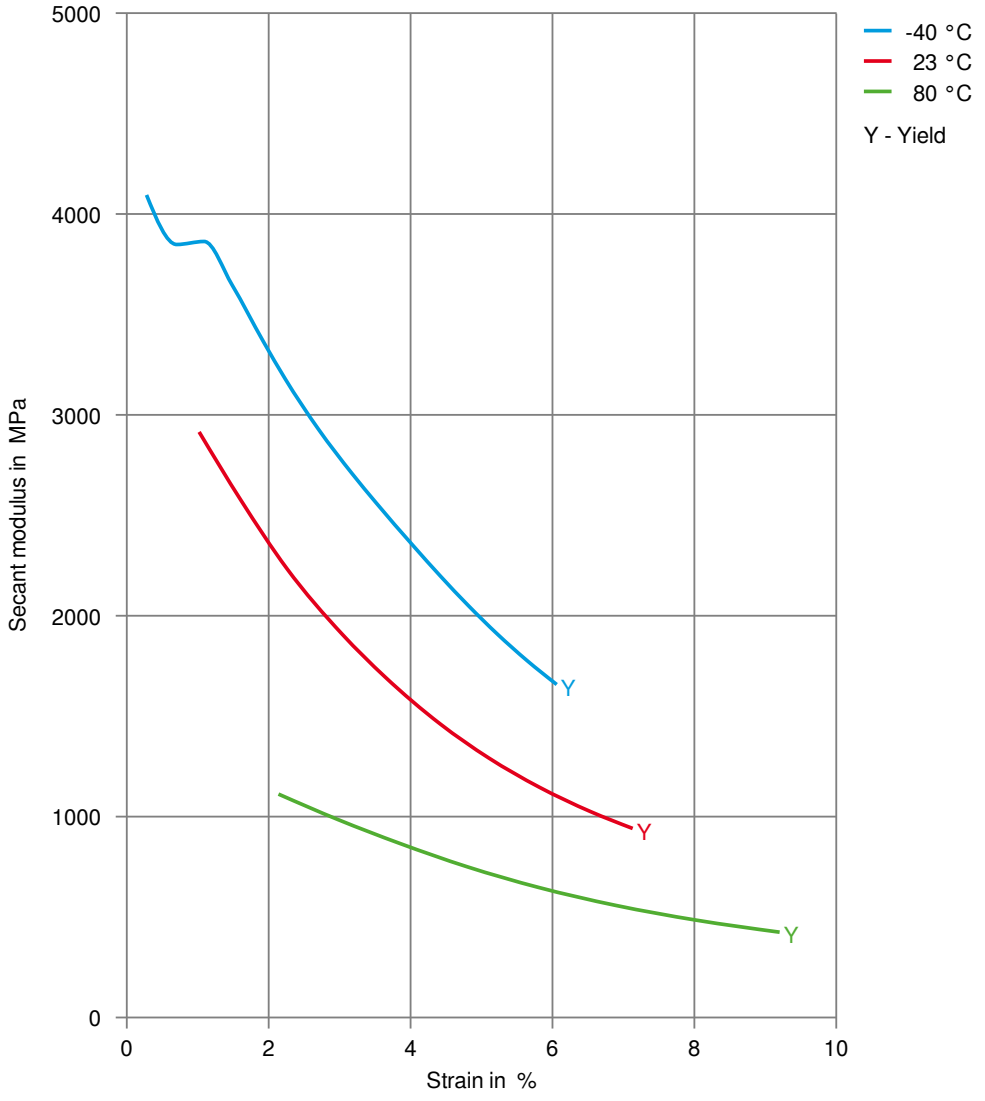
Stress-strain



Celanese
The chemistry inside innovation™

HOSTAFORM® MT®24U01 ECO-B
HOSTAFORM®

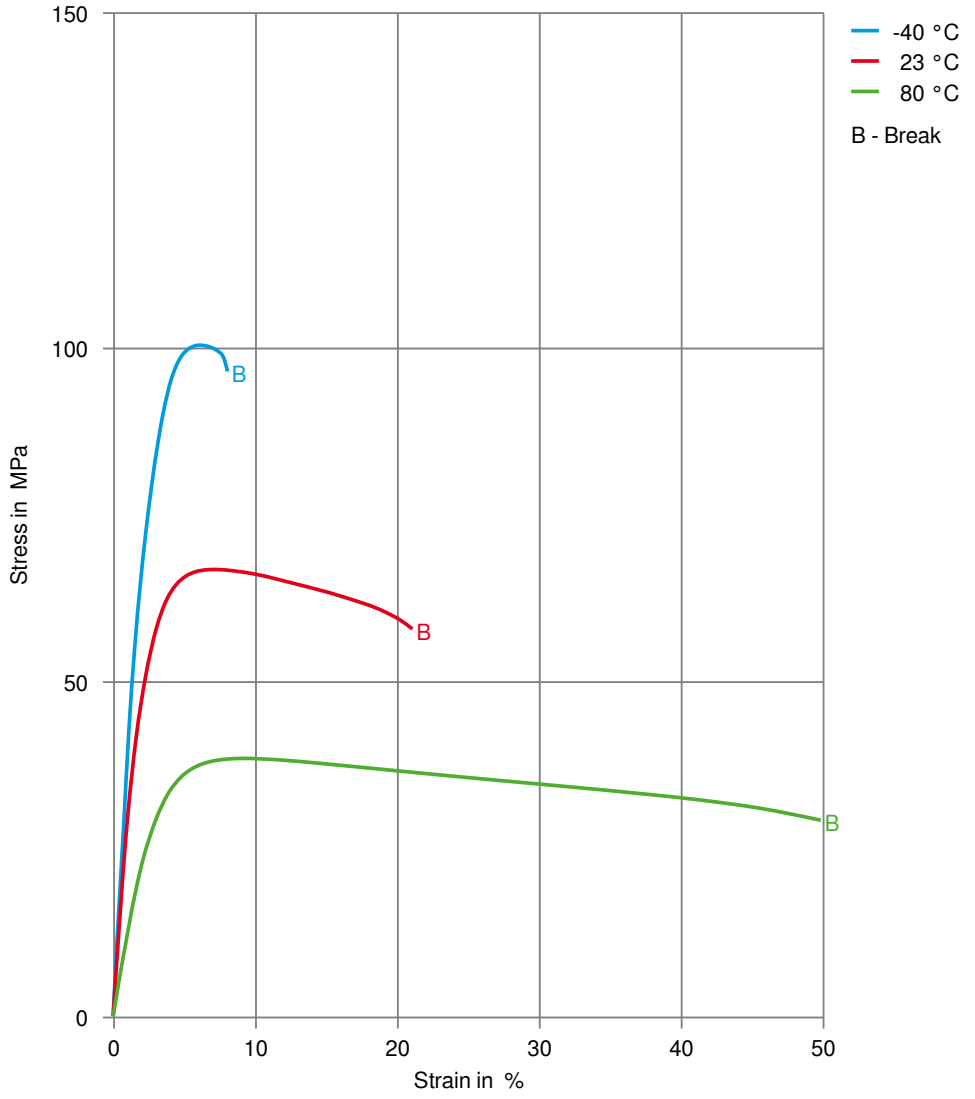
Secant modulus-strain



Celanese
The chemistry inside innovation™

HOSTAFORM® MT®24U01 ECO-B
HOSTAFORM®

Stress-strain, 50mm/min

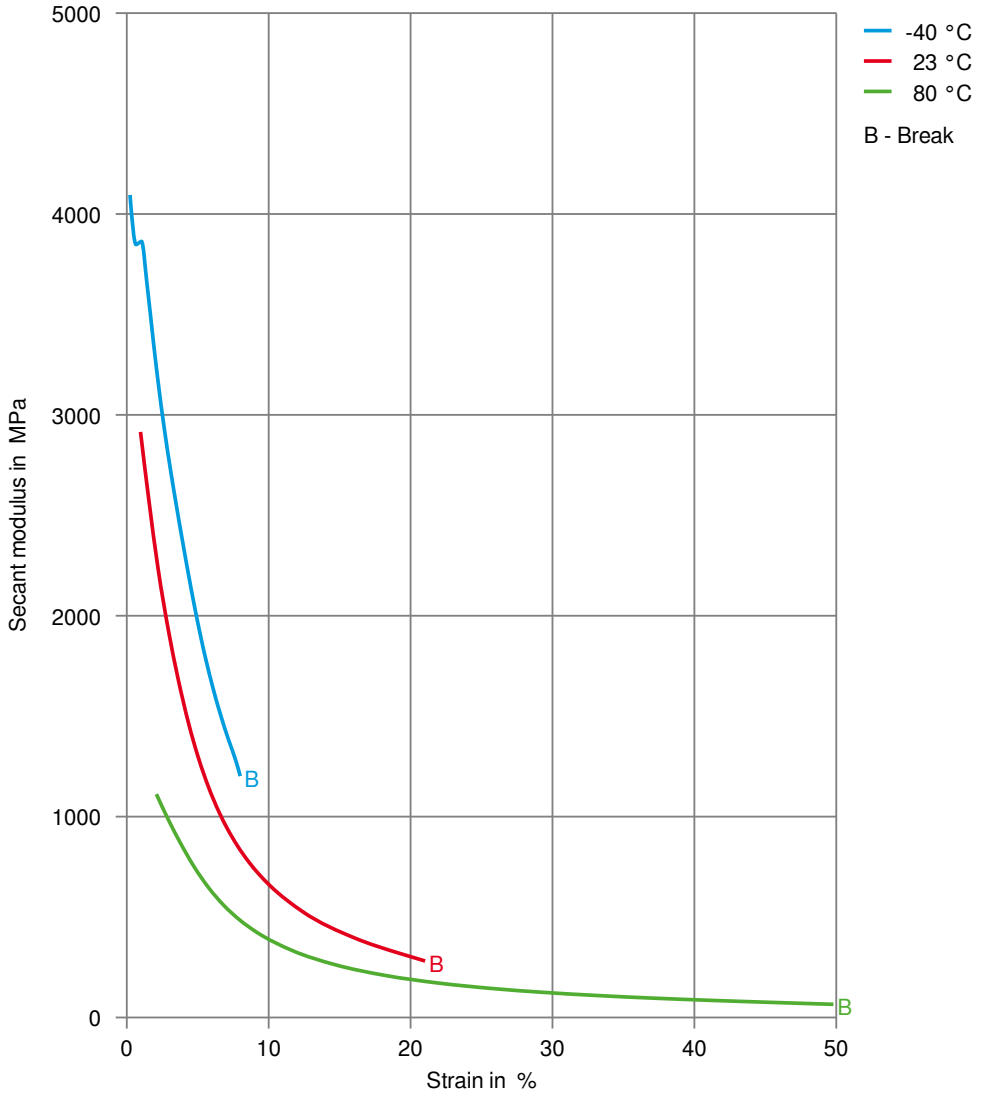


Celanese
The chemistry inside innovation™

HOSTAFORM® MT®24U01 ECO-B

HOSTAFORM®

Secant modulus-strain, 50mm/min



Revised: 2024-11-05 Source: Celanese Materials Database