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HOSTAFORM® M15HP

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Hostaform® acetal copolymer grade M15HP is a high viscosity polymer providing optimum performance in injection molding. This grade provides overall excellent performance in applications requiring high stiffness.

Product information

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

Rheological properties

Melt volume-flow rate	1.5	cm^3/10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Melt mass-flow rate	1.8	g/10min	ISO 1133
Melt mass-flow rate, Temperature	190	°C	
Melt mass-flow rate, Load	2.16	kg	
Moulding shrinkage, parallel	2.6	%	ISO 294-4, 2577
Moulding shrinkage, normal	2.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	2700	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	66	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	20	%	ISO 527-1/-2
Flexural modulus	2500	MPa	ISO 178
Compressive stress at 1% strain	29	MPa	ISO 604
Charpy impact strength, 23°C	280	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	220	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	12	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	8.5	kJ/m^2	ISO 179/1eA
Izod notched impact strength, 23°C	9.5	kJ/m^2	ISO 180/1A
Hardness, Rockwell, M-scale	84		ISO 2039-2
Poisson's ratio	0.38[C]		

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	173	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	101	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	158	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	130	E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	120	E-6/K	ISO 11359-1/-2

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.75	%	Sim. to ISO 62
Density	1410	kg/m^3	ISO 1183

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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	105	°C
Min. mould temperature	90	°C
Max. mould temperature	120	°C
Hold pressure range	60 - 120	MPa
Back pressure	4	MPa

Characteristics

Processing	Injection Moulding, Film Extrusion, Extrusion, Other Extrusion, Blow Moulding, Calendering
Delivery form	Pellets
Additives	Release agent

Additional information

Processing Notes

Pre-Drying

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

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Continental	TST N 055 54.40	(TST N 055 54.40-001)
General Motors	GMW22P-POM-C1	Black
General Motors	GMW22P-POM-C1	Natural

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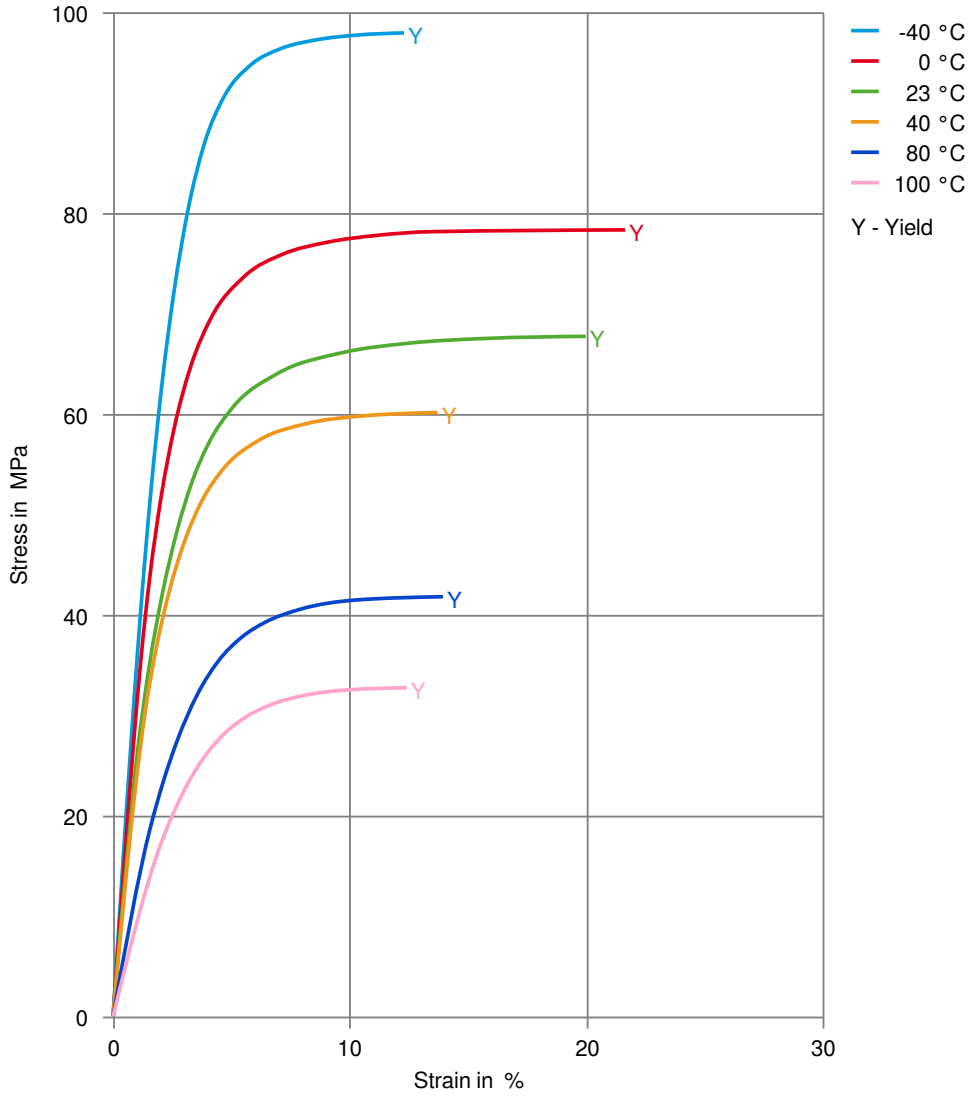
Stress-strain



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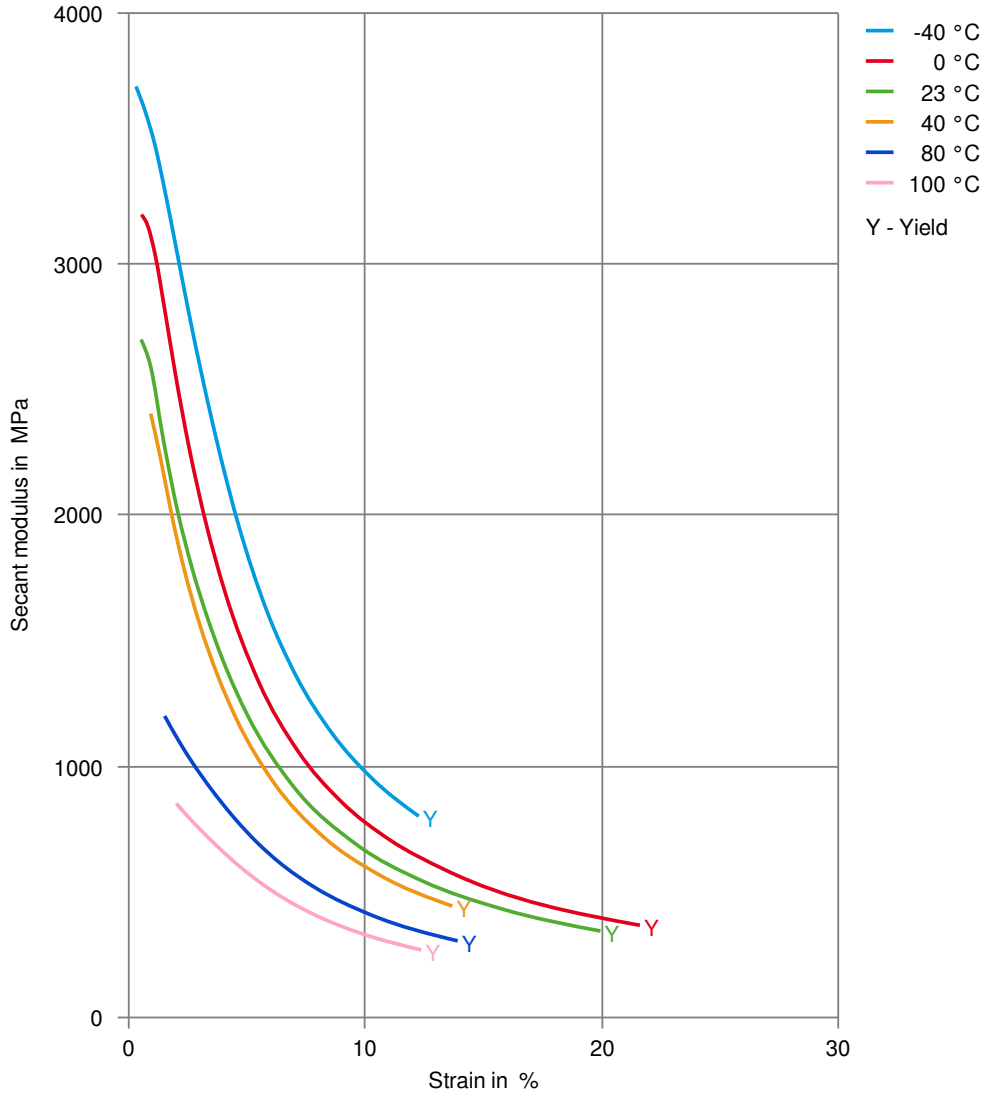
Secant modulus-strain



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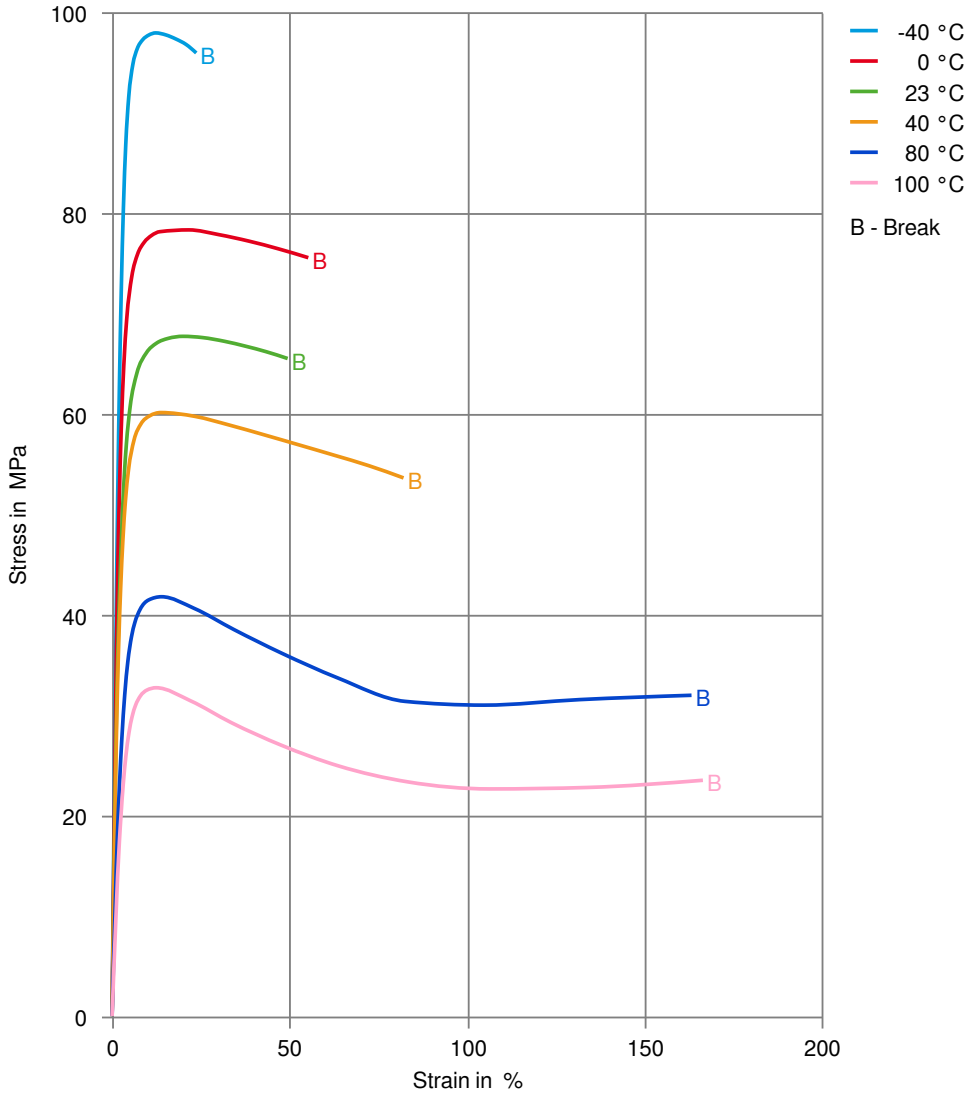
Stress-strain, 50mm/min



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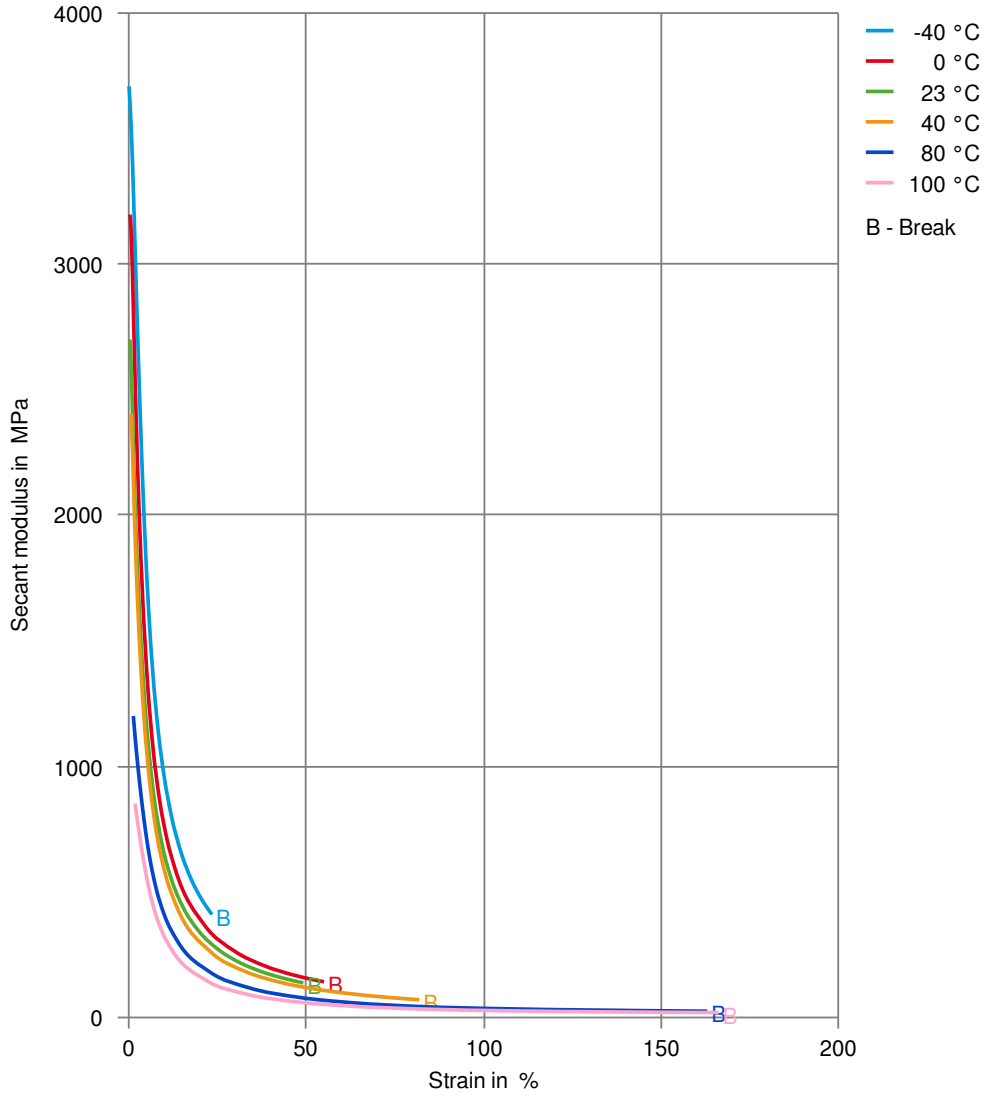
Secant modulus-strain, 50mm/min



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