Celanese
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HOSTAFORM® M15HP

HOSTAFORM®

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	374	°F	
Load	4.76	lb	
Melt mass-flow rate	1.8	g/10min	ISO 1133
Melt mass-flow rate, Temperature	374	°F	
Melt mass-flow rate, Load	4.76	lb	
Molding shrinkage, parallel	2.6	%	ISO 294-4, 2577
Molding shrinkage, normal	2.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	392000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	9600	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	20	%	ISO 527-1/-2
Flexural modulus	363000	psi	ISO 178
Flexural strength	13500	psi	ISO 178
Flexural stress at 3.5%	10300	psi	ISO 178
Compressive stress at 1% strain	4210	psi	ISO 604
Charpy impact strength, 23°C	133	$ftlb/in^2$	ISO 179/1eU
Charpy impact strength, -30°C	105	$ftlb/in^2$	ISO 179/1eU
Charpy notched impact strength, 23°C	5.71	$ftlb/in^2$	ISO 179/1eA
Charpy notched impact strength, -30°C	4.04	$ftlb/in^2$	ISO 179/1eA
Izod notched impact strength, 23°C	4.52	$ftlb/in^2$	ISO 180/1A
Hardness, Rockwell, M-scale	84		ISO 2039-2

Thermal properties

Melting temperature, 10°C/min	343	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	214	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	316	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.72	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.667	E-4/°F	ISO 11359-1/-2

Flammability

FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	1.1	in/min	ISO 3795 (FMVSS 302)

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Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.75	%	Sim. to ISO 62
Density	0.0509	lb/in³	ISO 1183

Injection

Drying Recommended	no	
Drying Temperature	212	°F
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	392	°F
Min. melt temperature	374	°F
Max. melt temperature	410	°F
Max. screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	221	°F
Min. mold temperature	194	°F
Max. mold temperature	248	°F
Hold pressure range	8700 - 17400	psi
Hold Pressure Time (h is the max. wall thickness of the part in mm)	2h²-3	s
Back pressure	580	psi

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

Characteristics

Processing	Injection Molding, Film Extrusion, Extrusion, Other Extrusion, Blow Molding, Calendering
Additives	Release agent
Special characteristics	High viscosity

Additional information

Processing Notes

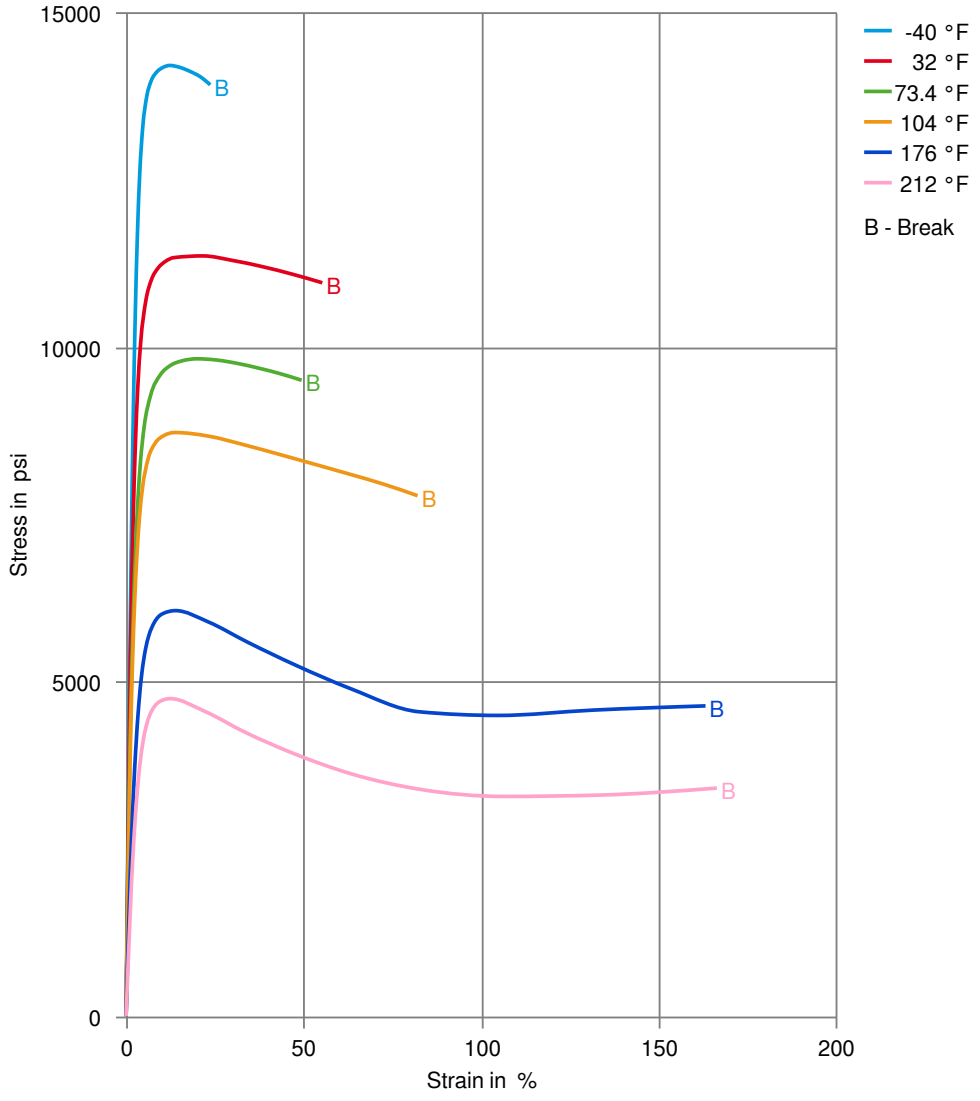
Pre-Drying

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.

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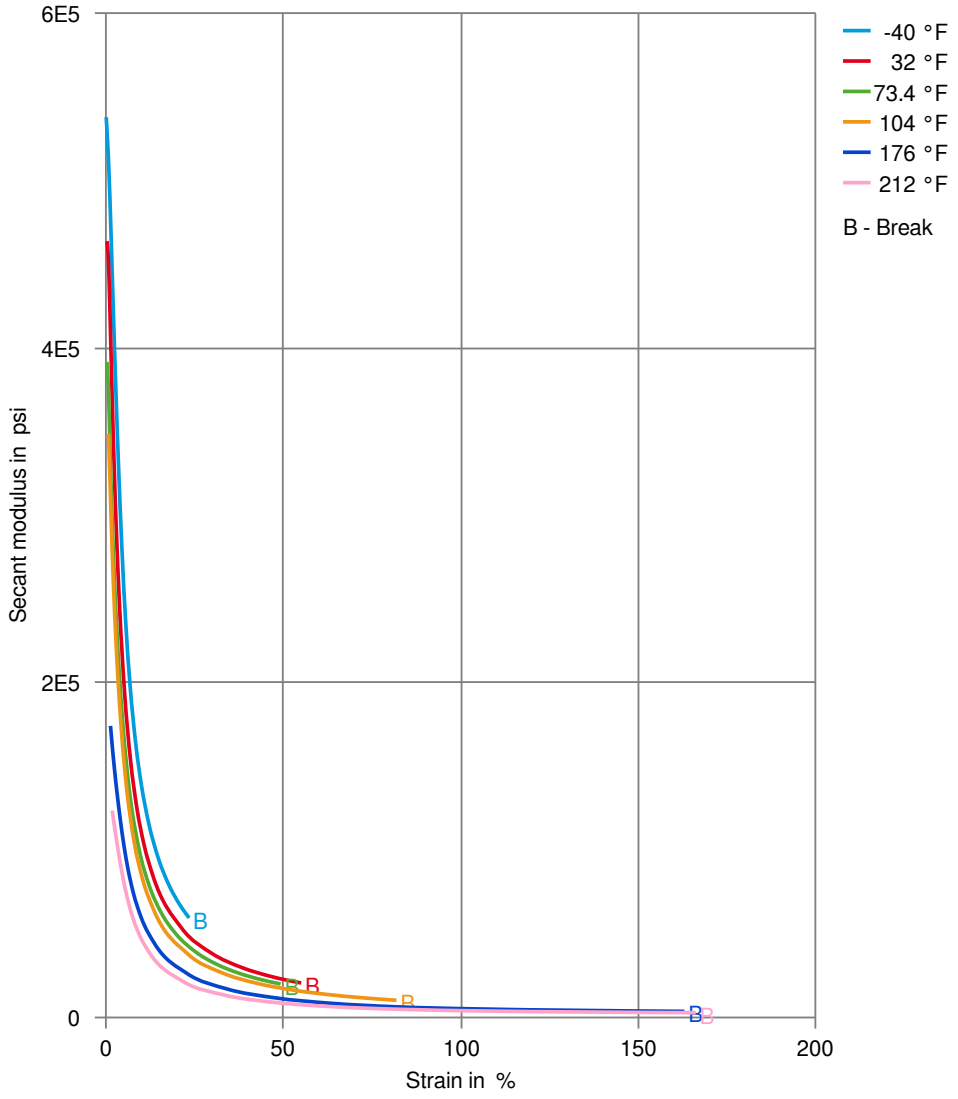
Stress-strain



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Secant modulus-strain



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