HOSTAFORM® C 52021 LS

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POM copolymer

Extremely easy flowing Injection molding type for very thin-walled precision molded parts with unfavourite flow-path-wall thickness relation; permits processing at reduced temperature and also shorter cycle times; for mechanical lower requirements; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high esistance to thermal and oxidative degradation. With UV Additives

Ranges of applications: For very thin-walled precision molded parts with unfavourite flow-path-wall thickness relation; permits processing at reduced temperature and also shorter cycle times.

Product information

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

Rheological properties

Melt volume-flow rate	39	cm^3/10min	ISO 1133
Temperature	374	°F	
Load	4.76	lb	
Molding shrinkage, parallel	1.9	%	ISO 294-4, 2577
Molding shrinkage, normal	1.8	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	435000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	9400	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	7	%	ISO 527-1/-2
Nominal strain at break	15	%	ISO 527-1/-2
Flexural modulus	406000	psi	ISO 178
Tensile creep modulus, 1h	363000	psi	ISO 899-1
Tensile creep modulus, 1000h	189000	psi	ISO 899-1
Charpy impact strength, 23°C	71.4	$ftlb/in^2$	ISO 179/1eU
Charpy impact strength, -30°C	71.4	$ftlb/in^2$	ISO 179/1eU
Charpy notched impact strength, 23°C	2.38	$ftlb/in^2$	ISO 179/1eA
Charpy notched impact strength, -30°C	2.38	$ftlb/in^2$	ISO 179/1eA
Ball indentation hardness, H 358/30	21500	psi	ISO 2039-1

Thermal properties

Melting temperature, 10°C/min	331	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	223	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.61	E-4/°F	ISO 11359-1/-2
Thermal conductivity of melt	0.19	W/(m K)	ISO 22007-2
Specific heat capacity of melt	2060	J/(kg K)	ISO 22007-4

Electrical properties

Relative permittivity, 100Hz	4		IEC 62631-2-1
Relative permittivity, 1MHz	4		IEC 62631-2-1
Dissipation factor, 100Hz	30	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	50	E-4	IEC 62631-2-1
Volume resistivity	1E12	Ohm.m	IEC 62631-3-1

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Surface resistivity	1E14	Ohm	IEC 62631-3-2
Electric strength	889	kV/in	IEC 60243-1
Comparative tracking index	600		IEC 60112

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.65	%	Sim. to ISO 62
Density	0.0509	lb/in^3	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	212	°F
Min. mold temperature	176	°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)	2h^2-3	s
Back pressure	580	psi
Ejection temperature	284	°F

Characteristics

Processing	Injection Molding
Additives	Release agent
Special characteristics	U.V. stabilized or stable to weather, High Flow

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.

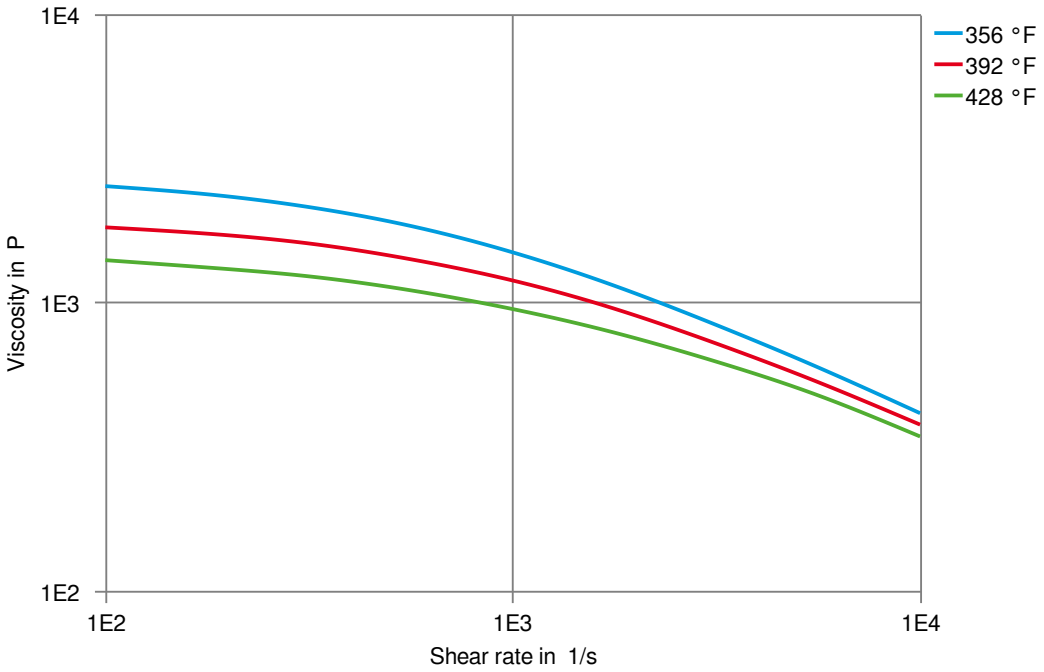
Storage

The product can then be stored in standard conditions until processed.

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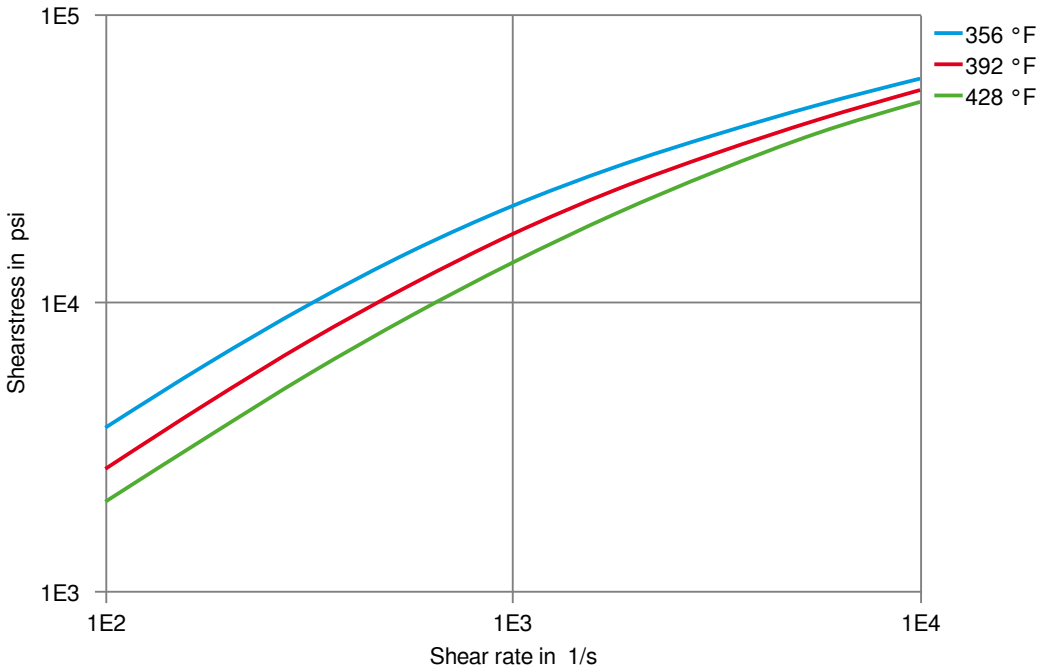
Viscosity-shear rate



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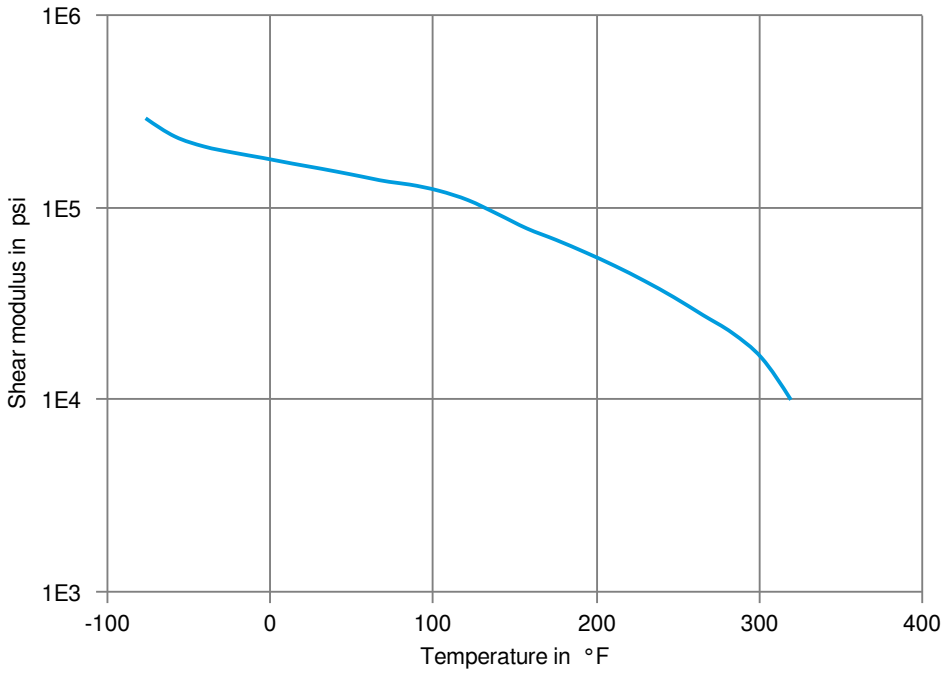
Shearstress-shear rate



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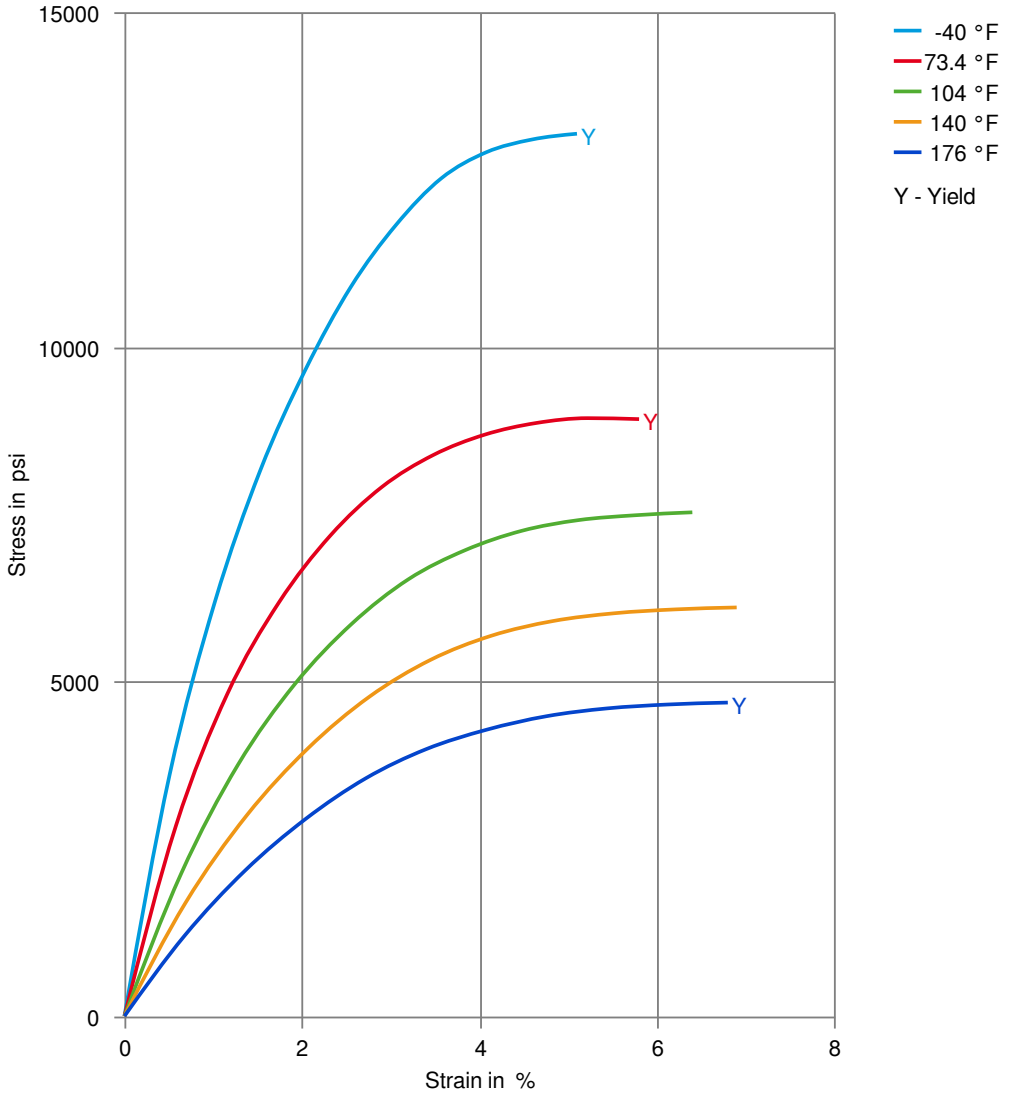
Dynamic Shear modulus-temperature



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Stress-strain

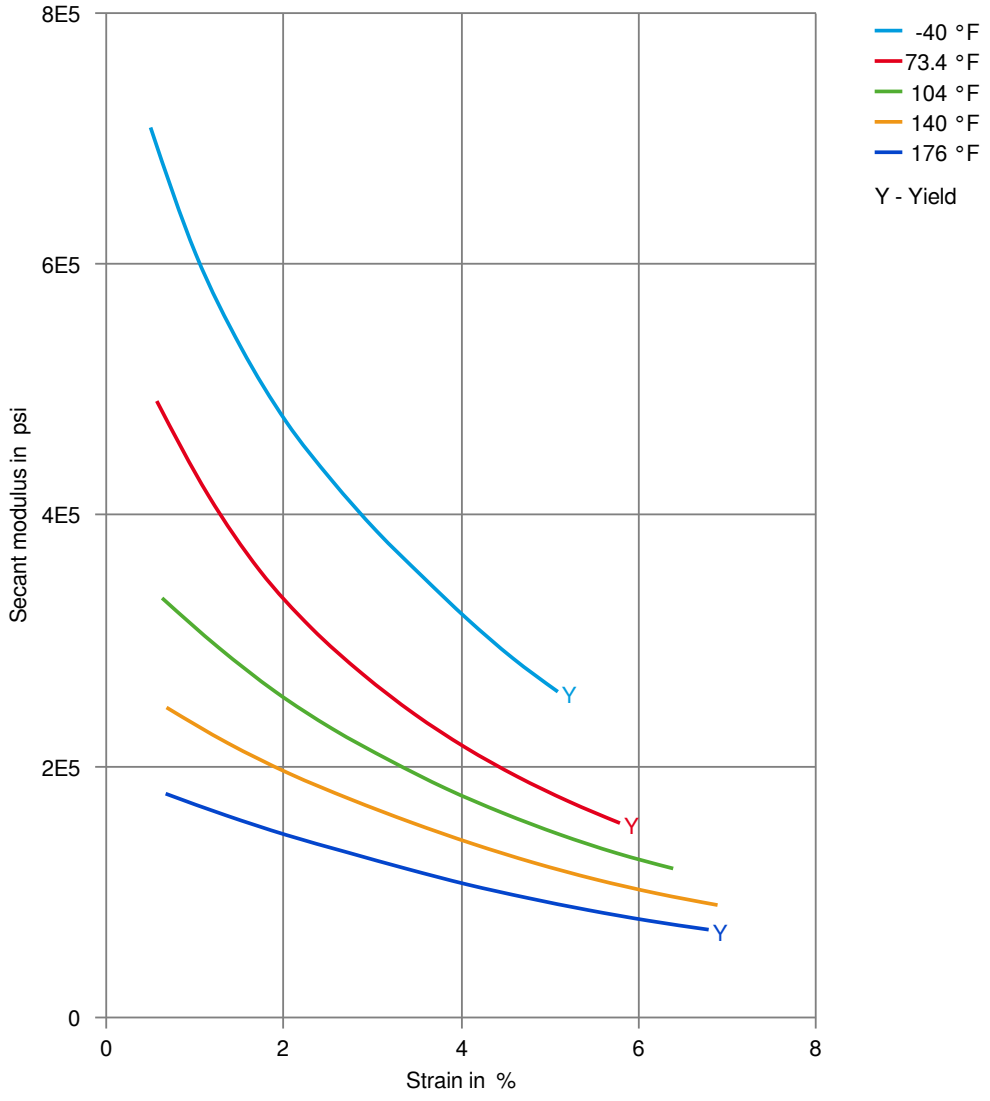


Revised: 2025-07-10 Source: Celanese Materials Database

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Secant modulus-strain



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