Celanese
The chemistry inside innovation™

HOSTAFORM® S 27064

Easy flowing; elastomer-containing injection molding grade; high toughness
Chemical abbreviation according to ISO 1043-1: POM-HI Molding compound ISO 29988- POM-K, M-GNPR, 05-001 POM copolymer, modified Easy flowing, elastomer-containing injection molding type based on HOSTAFORM® C 27021 with high toughness, and slightly lower hardness, rigidity and chemical resistance than the basic type; high resistance to thermal and oxidative degradation. UL-registration in natural and a thickness more than 1.57 mm as UL 94 HB. Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm thickness. Ranges of applications: For thin-walled molded parts with high energy-absorbing capacity. UL = Underwriters Laboratories (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

Product information

Part Marking Code	POM-HI		ISO 11469

Rheological properties

Melt volume-flow rate	18	$cm^3/10min$	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	1.8	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.7	%	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	1700	MPa	ISO 527-1/-2
Yield stress, 50mm/min	44	MPa	ISO 527-1/-2
Yield strain, 50mm/min	10	%	ISO 527-1/-2
Nominal strain at break	35	%	ISO 527-1/-2
Flexural Modulus	1700	MPa	ISO 178
Shear Modulus	624	MPa	ISO 6721
Tensile creep modulus, 1h	1400	MPa	ISO 899-1
Tensile creep modulus, 1000h	800	MPa	ISO 899-1
Charpy impact strength, 23°C	150[P]	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	110	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	11	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m^2	ISO 179/1eA
Ball indentation hardness, H 358/30	90	MPa	ISO 2039-1

[P]: Partial Break

Thermal properties

Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	77	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	125	°C	ISO 306
Coeff. of linear therm. expansion, parallel	130	E-6/K	ISO 11359-1/-2

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Flammability

Burning Behav. at 1.5mm nom. thickn.	HB	class	UL 94
Thickness tested	1.6	mm	UL 94
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	3.17	mm	UL 94
UL recognition	yes		UL 94

Electrical properties

Relative permittivity, 100Hz	4.4		IEC 62631-2-1
Relative permittivity, 1MHz	4.4		IEC 62631-2-1
Dissipation factor, 100Hz	100	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	200	E-4	IEC 62631-2-1
Volume resistivity	1E11	Ohm.m	IEC 62631-3-1
Surface resistivity	1E13	Ohm	IEC 62631-3-2
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	PLC 0	PLC	UL 746A

Other properties

Humidity absorption, 2mm	0.25	%	Sim. to ISO 62
Water absorption, 2mm	0.65	%	Sim. to ISO 62
Density	1370	kg/m³	ISO 1183

Injection

Drying Temperature	100 - 120	°C	
Drying Time, Dehumidified Dryer	3 - 4	h	
Processing Moisture Content	0.15	%	
Melt Temperature Optimum	200	°C	Internal
Screw tangential speed	0.2 - 0.21	m/s	
Max. mould temperature	60 - 70	°C	
Back pressure	2	MPa	
Injection speed	slow-medium		

Characteristics

Additives	Release agent

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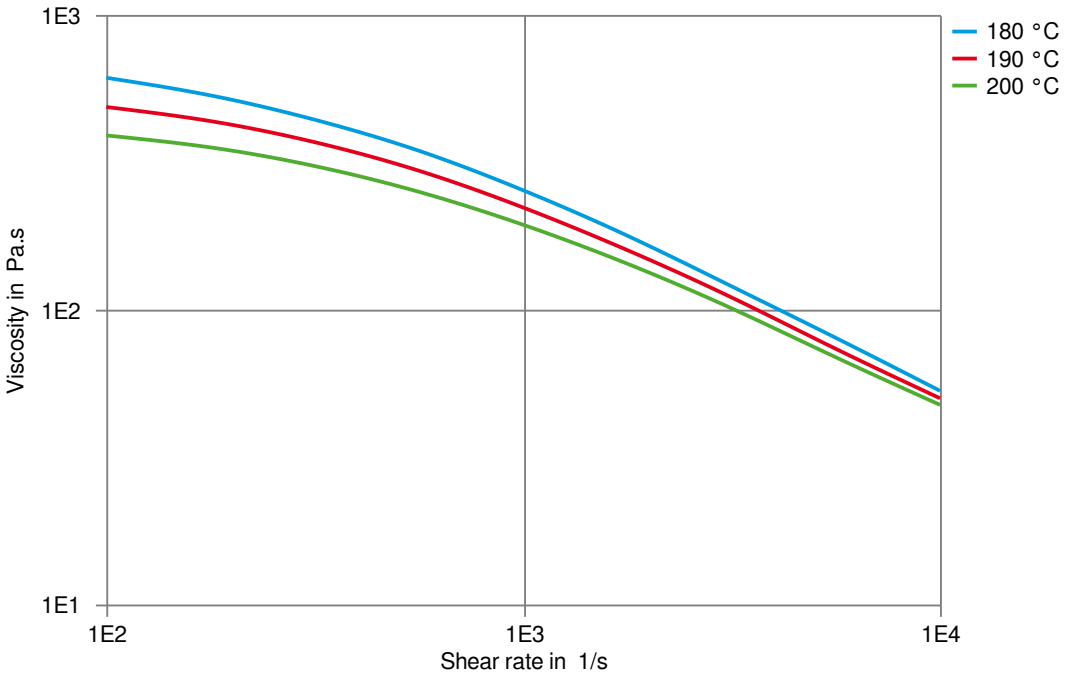
Viscosity-shear rate



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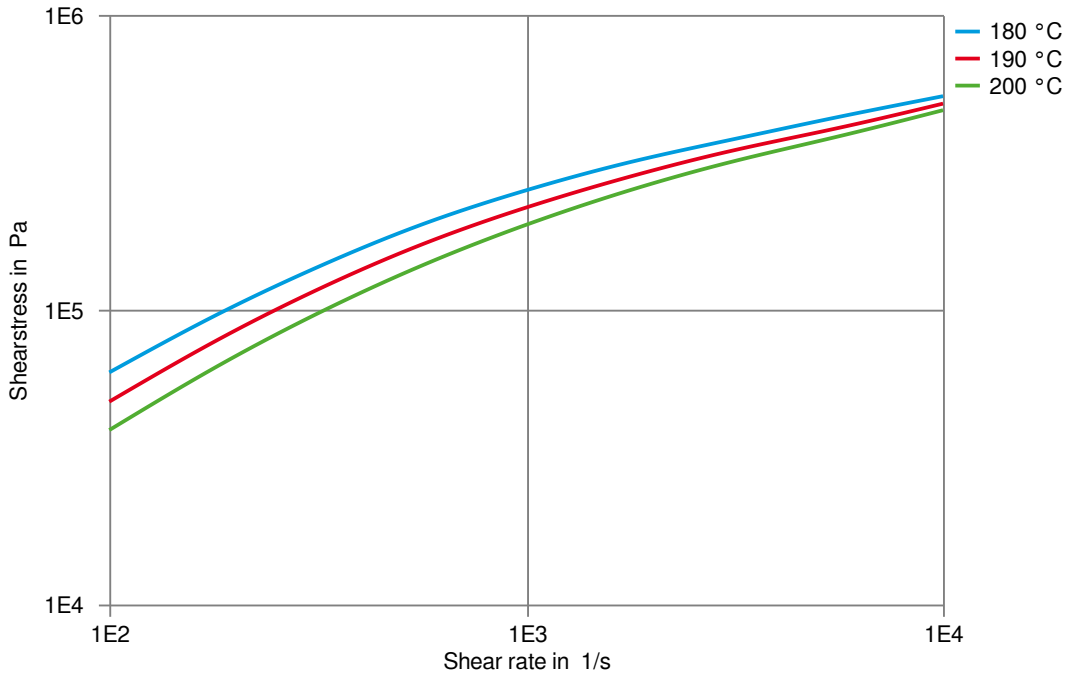
Shearstress-shear rate



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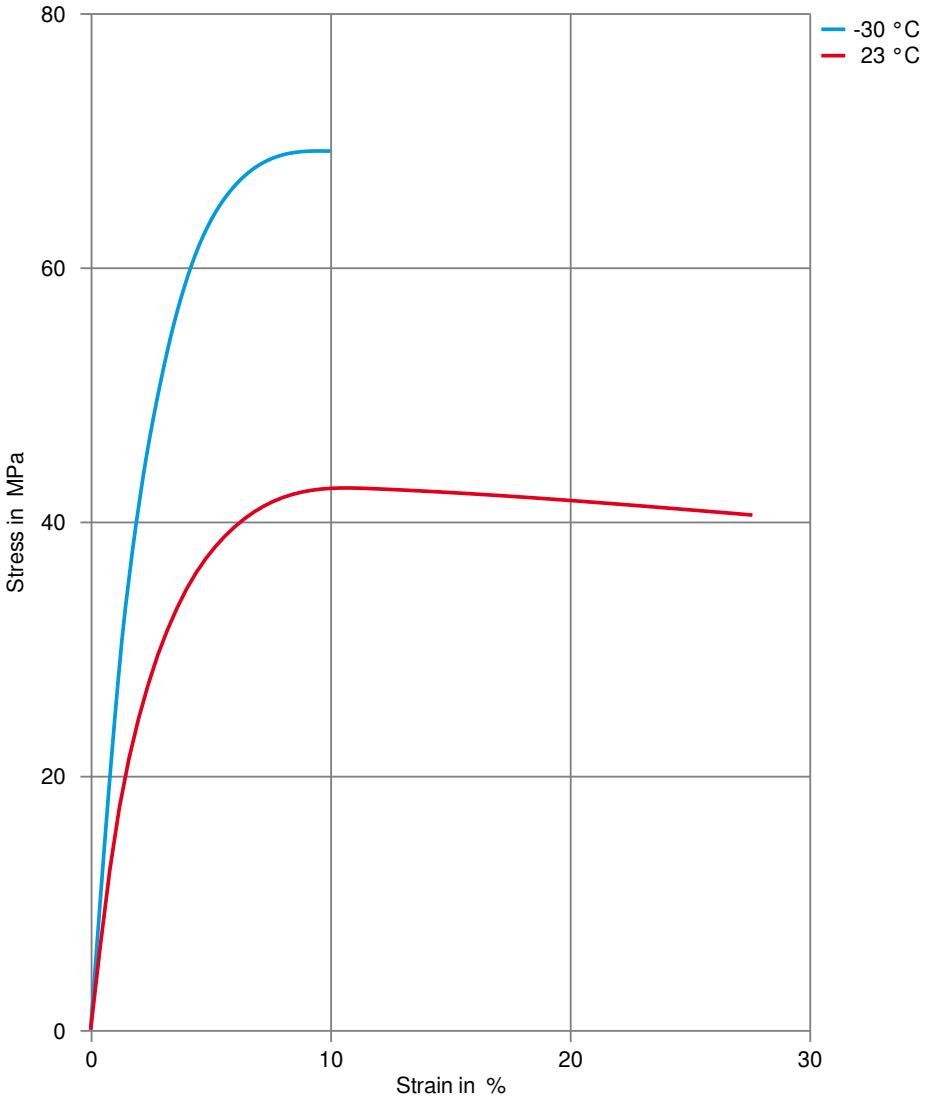
Stress-strain



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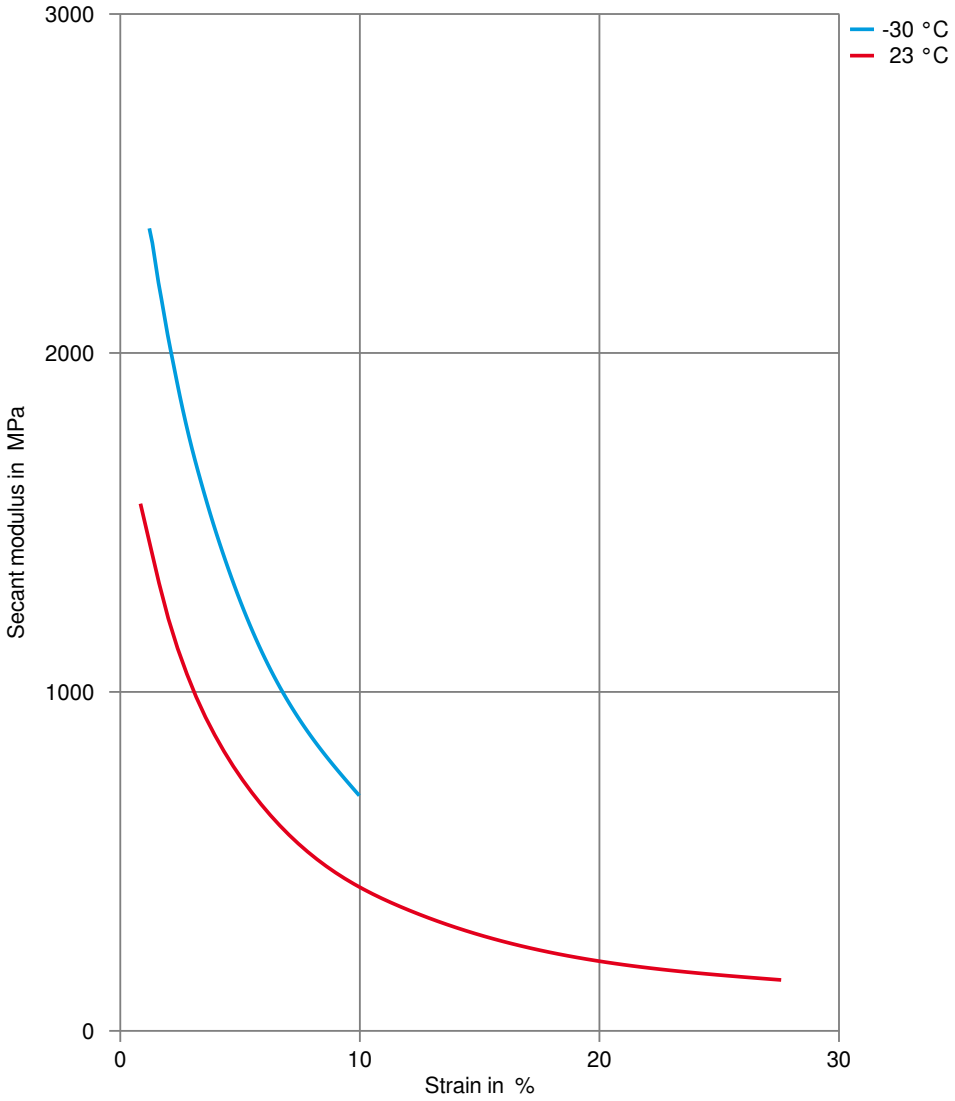
Secant modulus-strain



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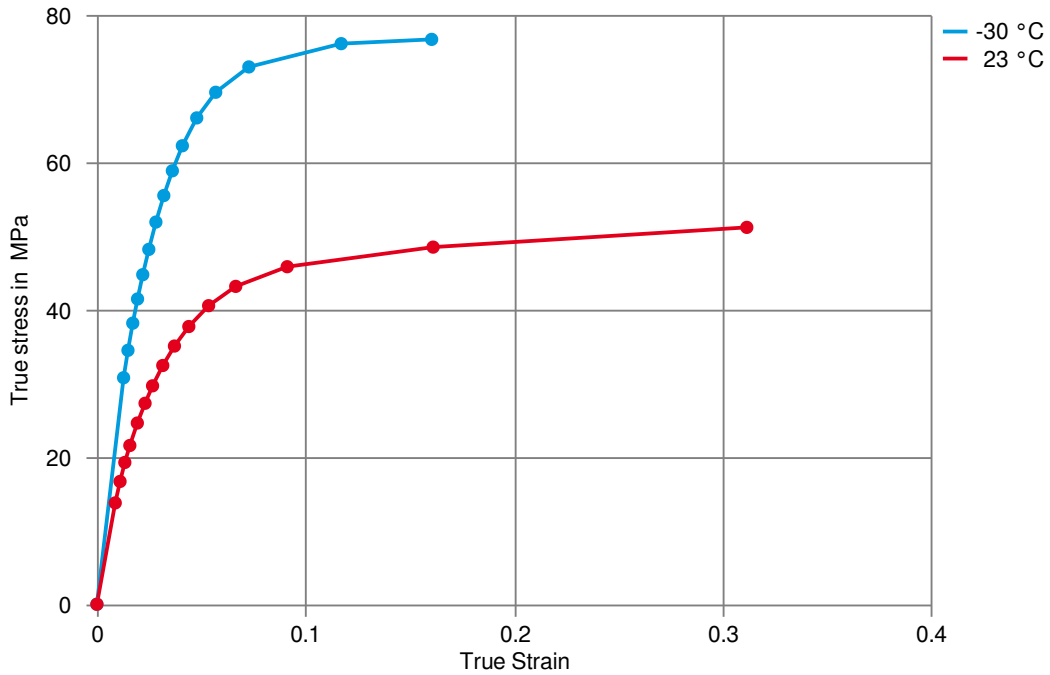
True stress-strain



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Processing Texts

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.
Longer pre-drying times/storage	The product can then be stored in standard conditions until processed.

Other Approvals

Other Approvals

OEM	Specification	Additional Information
BMW	GS 93016	
Ford	WSK-M4D618-A2	Natural & Black 12