Celanese
The chemistry inside innovation™

HOSTAFORM® S 27063

Easy flowing elastomer-containing injection molding grade; moderate 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 higher impact strength 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 higher 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	21	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	1950	MPa	ISO 527-1/-2
Yield stress, 50mm/min	51	MPa	ISO 527-1/-2
Yield strain, 50mm/min	9	%	ISO 527-1/-2
Nominal strain at break	30	%	ISO 527-1/-2
Flexural Modulus	2100	MPa	ISO 178
Tensile creep modulus, 1h	1850	MPa	ISO 899-1
Tensile creep modulus, 1000h	1050	MPa	ISO 899-1
Charpy impact strength, 23°C	140	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	90	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	9	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	115	MPa	ISO 2039-1

Thermal properties

Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	84	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	140	°C	ISO 306
Coeff. of linear therm. expansion, parallel	120	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	4.2		IEC 62631-2-1
Relative permittivity, 1MHz	4.2		IEC 62631-2-1
Dissipation factor, 100Hz	50	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	150	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	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.65	%	Sim. to ISO 62
Density	1390	kg/m³	ISO 1183

Injection

Drying Temperature	100 - 120	°C
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	0.15	%
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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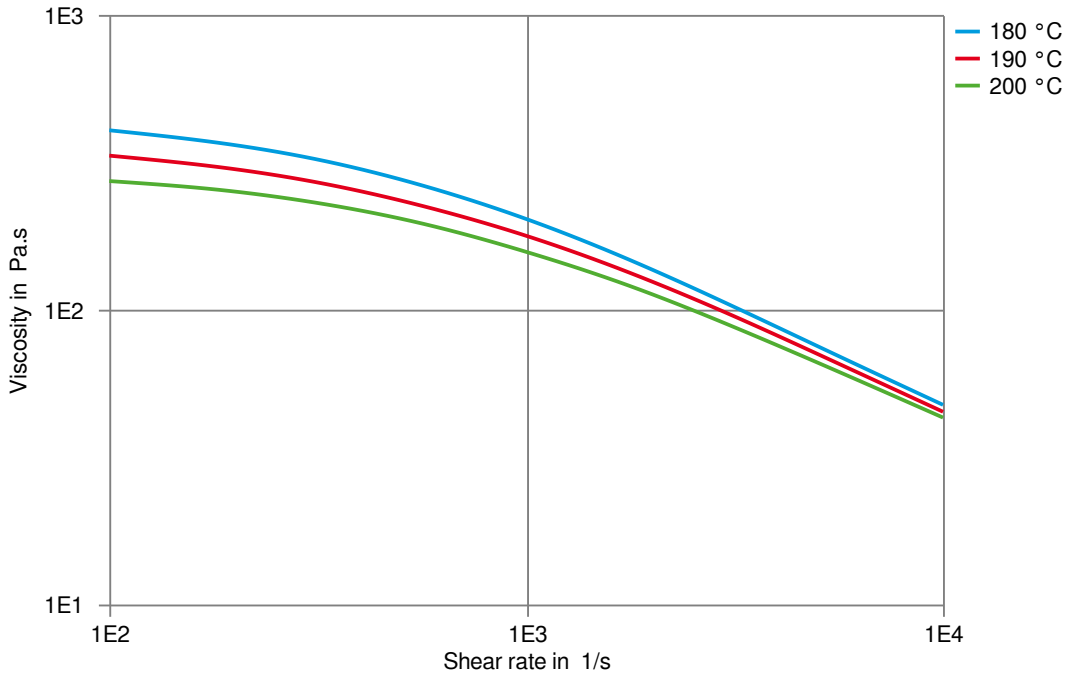
Viscosity-shear rate



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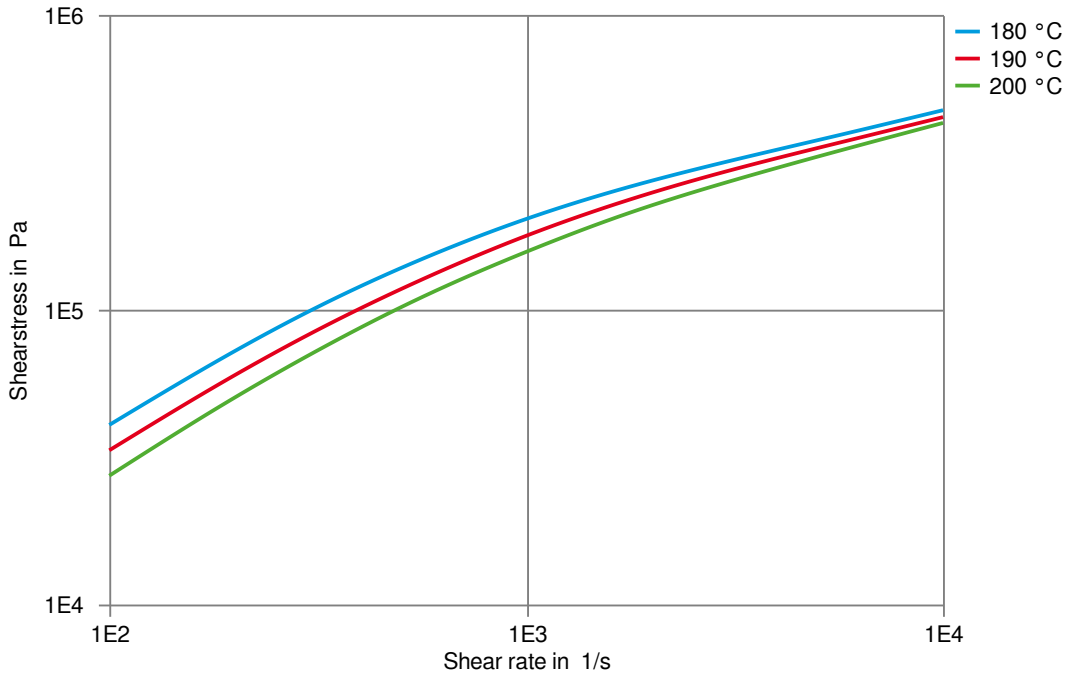
Shearstress-shear rate



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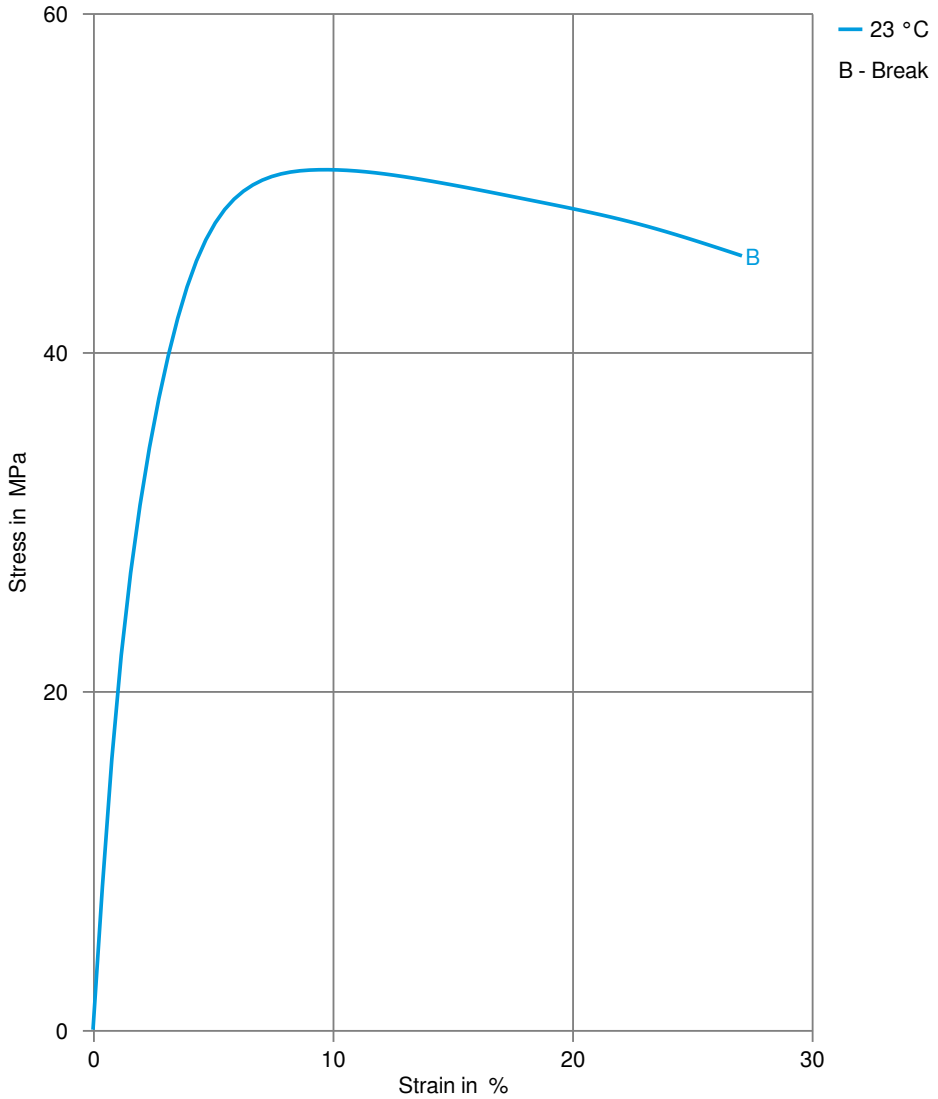
Stress-strain



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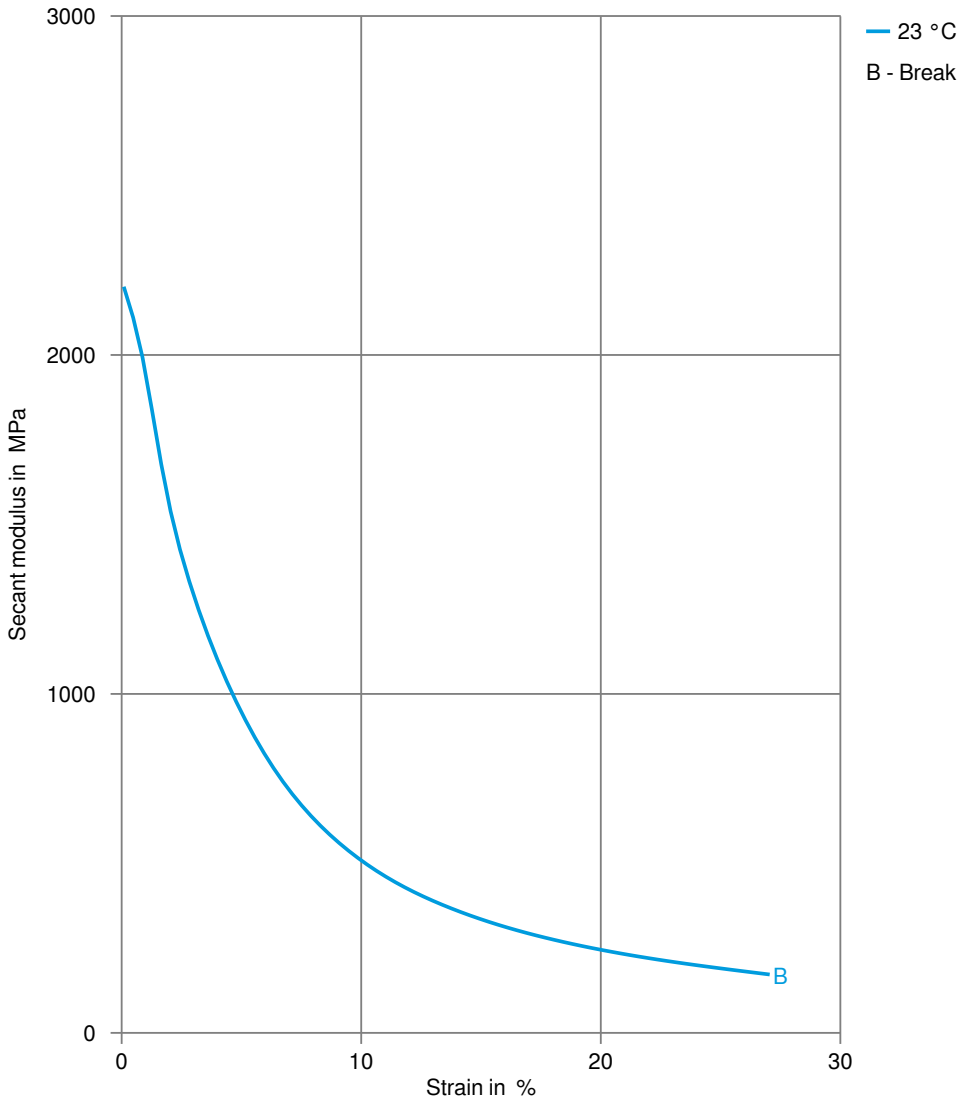
Secant modulus-strain



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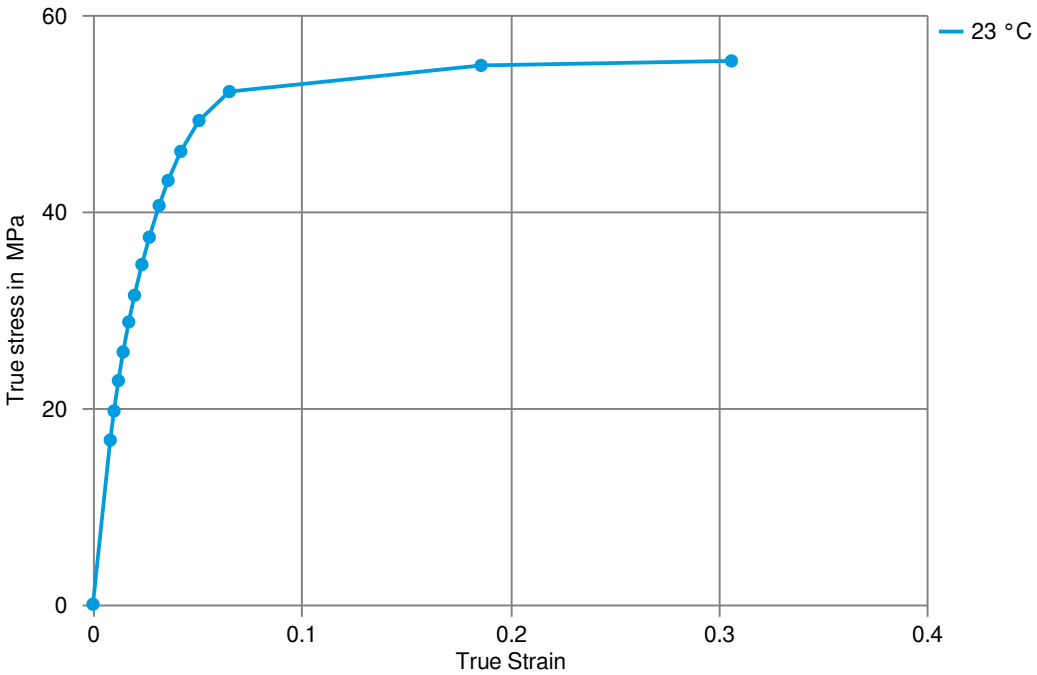
True stress-strain



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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
BMW	GS 93016

Revised: 2023-05-26 Source: Celanese Materials Database