Celanese
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HOSTAFORM® S 27072 WS 10/1570

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Chemical abbreviation according to ISO 1043-1: POM-HI Molding compound ISO 29988- POM-K, M-GCLP, 05-001 Modified POM copolymer Easy flowing, elastomer-containing injection molding type in black color with high carbon content; especially weathering resistant; lower chemical resistance than unmodified acetal copolymer; high resistance to thermal and oxidative degradation. Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm. Ranges of applications: for molded parts with matt surface. FMVSS = Federal Motor Vehicle Safety Standard (USA)

Product information

Resin Identification	POM-HI	ISO 1043
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	1.8[1]	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.9[1]	%	ISO 294-4, 2577

[1]: @ 195°C

Typical mechanical properties

Tensile modulus	2000	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	46	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	8	%	ISO 527-1/-2
Nominal strain at break	35	%	ISO 527-1/-2
Flexural modulus	2100	MPa	ISO 178
Tensile creep modulus, 1h	1800	MPa	ISO 899-1
Tensile creep modulus, 1000h	1000	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	8	kJ/m^2	ISO 179/1eA
Puncture energy, 23°C	10	J	ISO 6603-2
Ball indentation hardness, H 358/30	115	MPa	ISO 2039-1
Poisson's ratio	0.4[C]		

[P]: Partial Break

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	84	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	120	E-6/K	ISO 11359-1/-2

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.7	%	Sim. to ISO 62
Density	1390	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	65	°C
Min. mould temperature	60	°C
Max. mould temperature	70	°C
Hold pressure range	60 - 120	MPa
Back pressure	2	MPa

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Additives	Release agent
Special characteristics	High impact or impact modified, Light stabilised or stable to light, U.V. stabilised or stable to weather, High Flow

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Continental	TST N 055 54.17	
Li Auto	Q/LiA5310020	2021 (V2)

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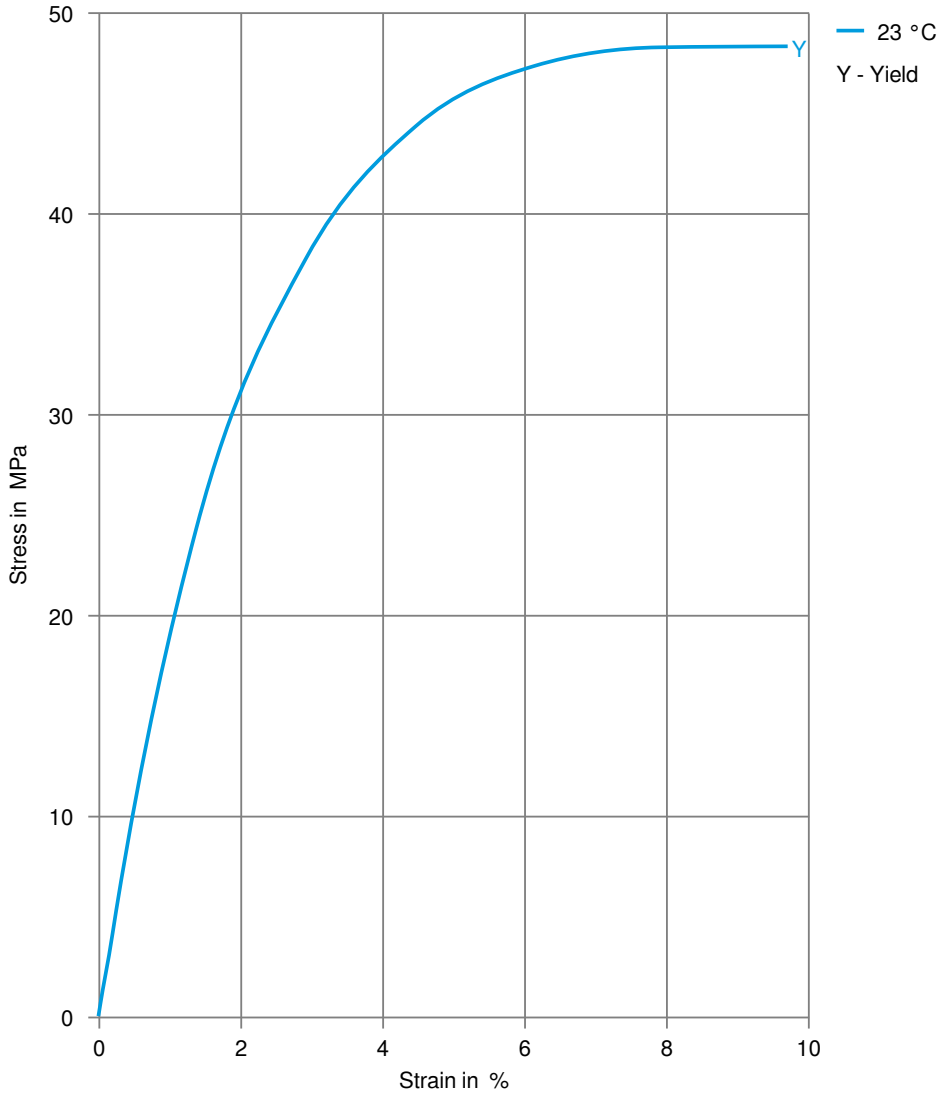
Stress-strain



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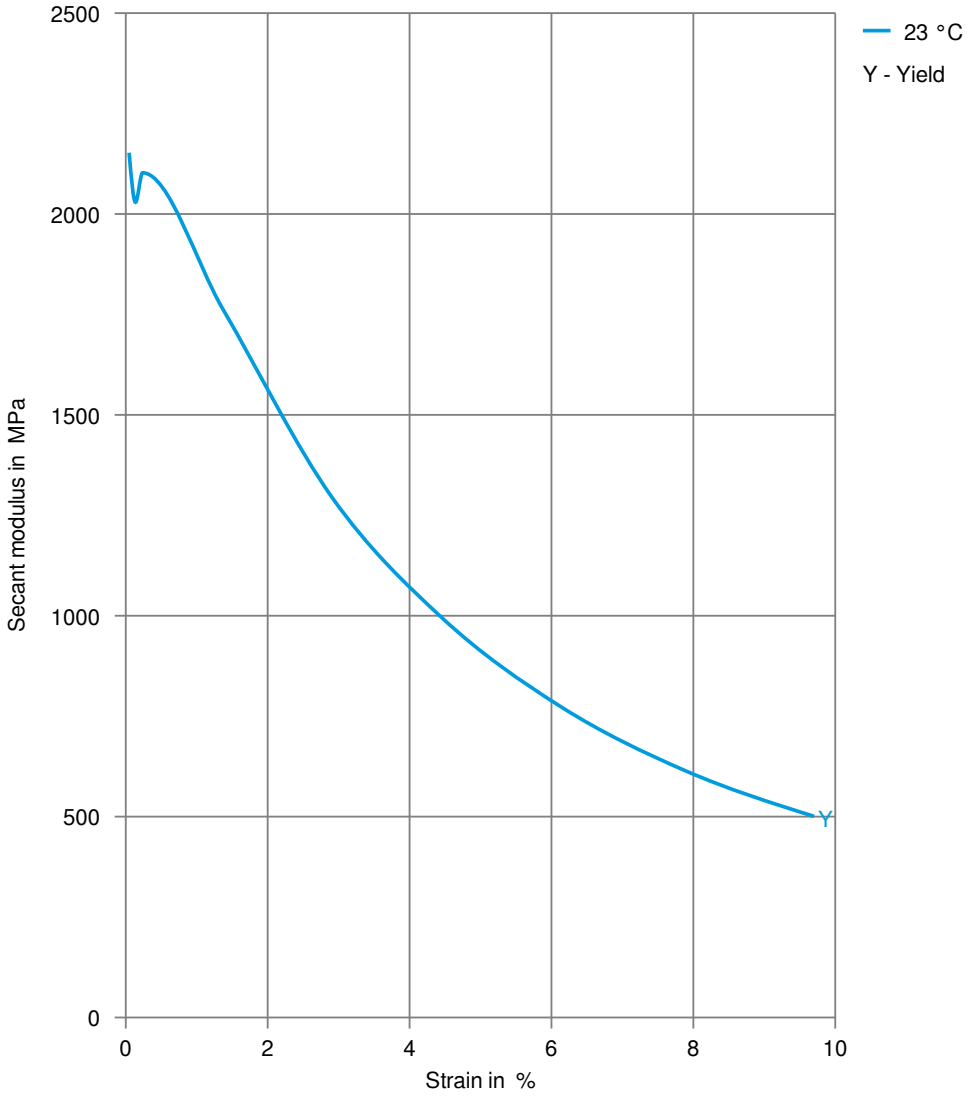
Secant modulus-strain



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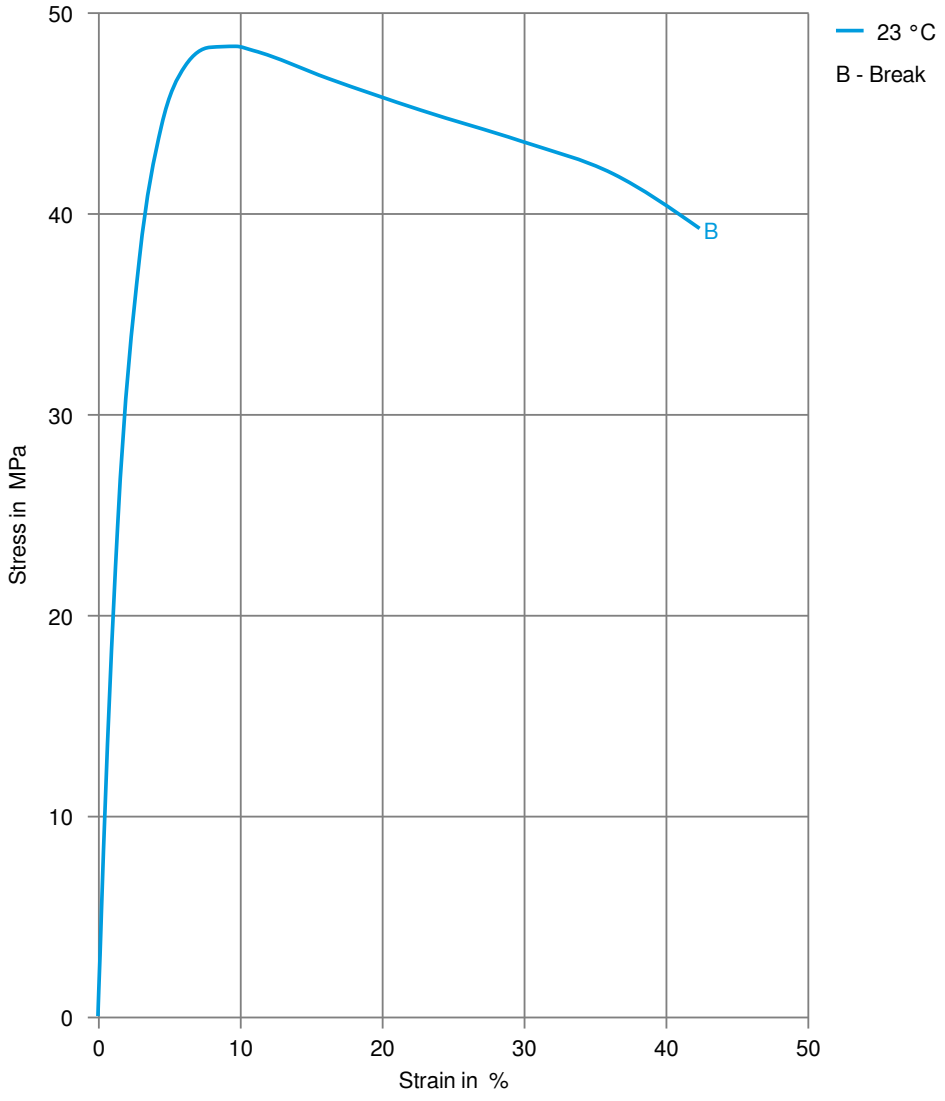
Stress-strain, 50mm/min



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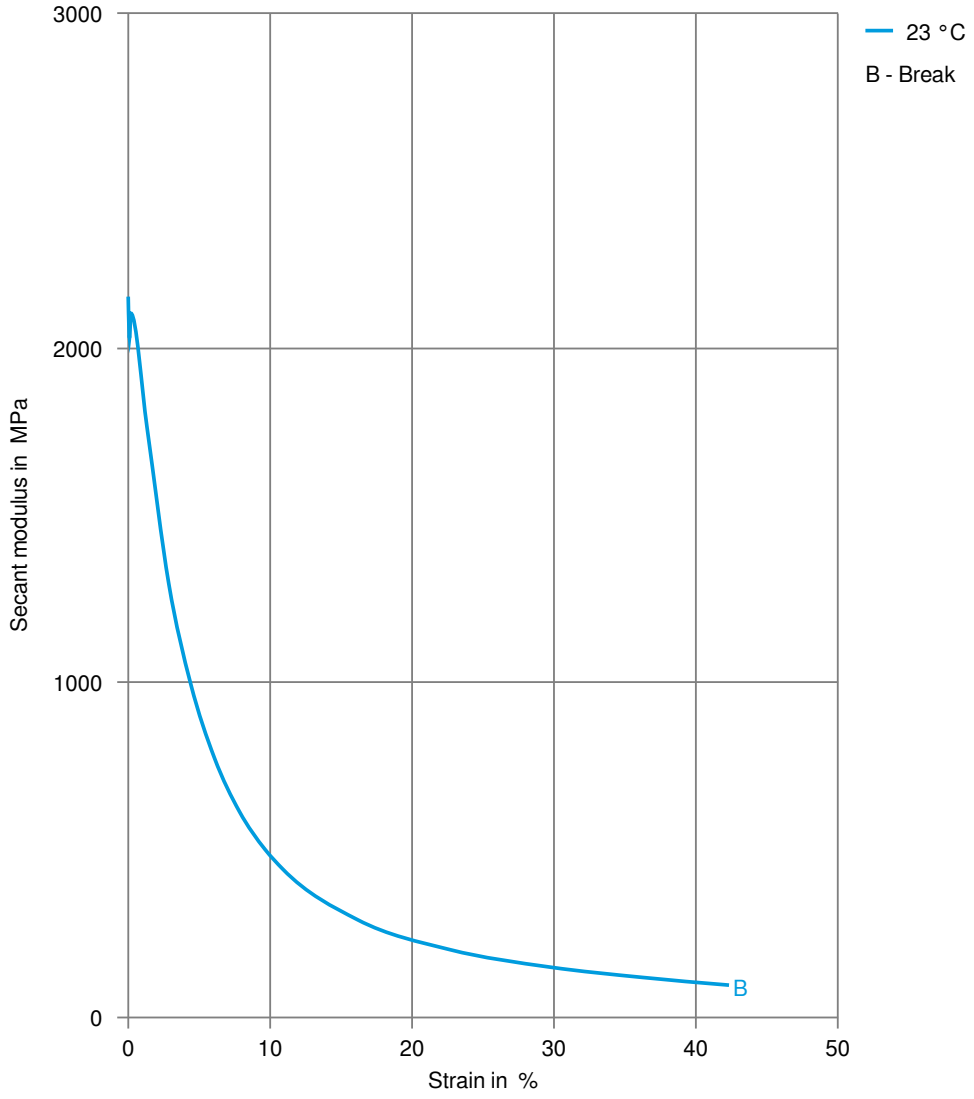
Secant modulus-strain, 50mm/min



Revised: 2024-12-03 Source: Celanese Materials Database