HOSTAFORM® SlideX® C0304 XAP®2

POM, Tribology
POM copolymer Injection molding grade with tribological modification for demanding applications that require prevention of audible noise caused by stick-slip phenomenon. Excellent tribological performance with low friction and low wear under various conditions of sliding against plastics and metals. Reduced emission grade. Emissions according to VDA 275 < 5 mg/kg.

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988-1: POM-K | M-GNRS2 | 5-2 | - | POM copolymer

Rheological properties

Melt volume-flow rate	26	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	2600	MPa	ISO 527-1/-2
Yield stress, 50mm/min	56	MPa	ISO 527-1/-2
Yield strain, 50mm/min	8	%	ISO 527-1/-2
Nominal strain at break	45	%	ISO 527-1/-2
Flexural Modulus	2350	MPa	ISO 178
Flexural Strength	77	MPa	ISO 178
Shear Modulus	923	MPa	ISO 6721
Charpy impact strength, 23°C	150	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	145	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	5.5	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	5.5	kJ/m^2	ISO 179/1eA
Ball indentation hardness, H 358/30	132	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	90	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	145	°C	ISO 306
Coeff. of linear therm. expansion, parallel	140	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	140	E-6/K	ISO 11359-1/-2

Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.65	%	Sim. to ISO 62
Density	1400	kg/m^3	ISO 1183

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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	80 - 120	°C	
Back pressure	4	MPa	
Injection speed	slow-very slow		

Additional information

Injection molding	See Processing Guide and Involve Celanese FTS support to obtain best quality parts

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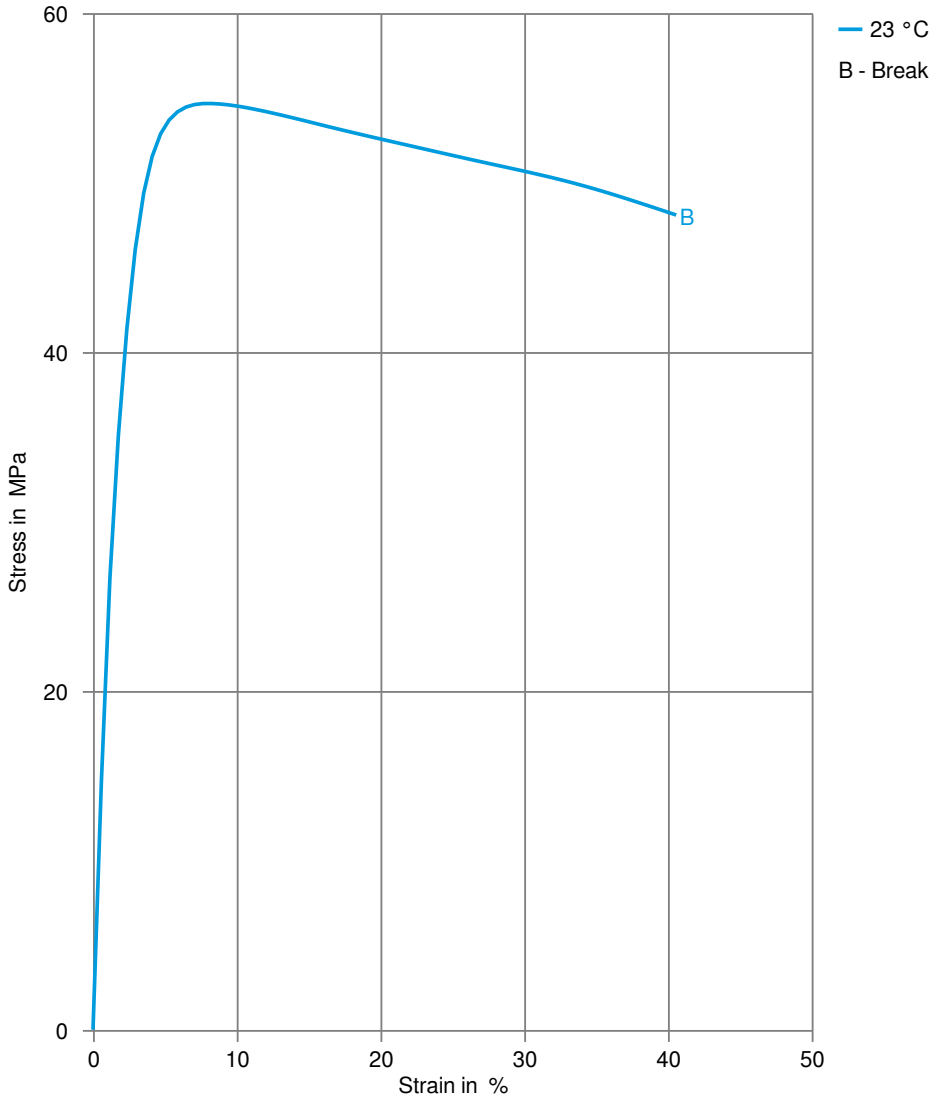
Stress-strain



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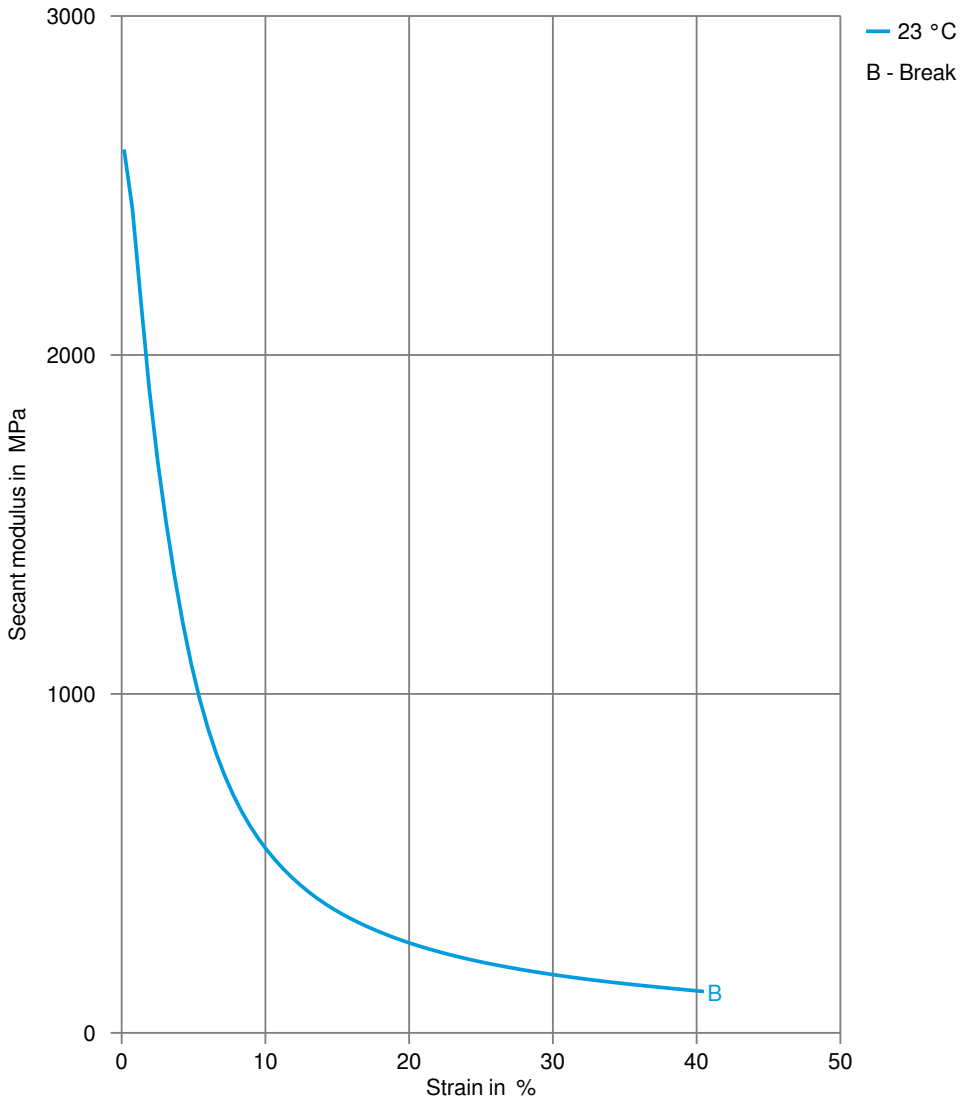
Secant modulus-strain



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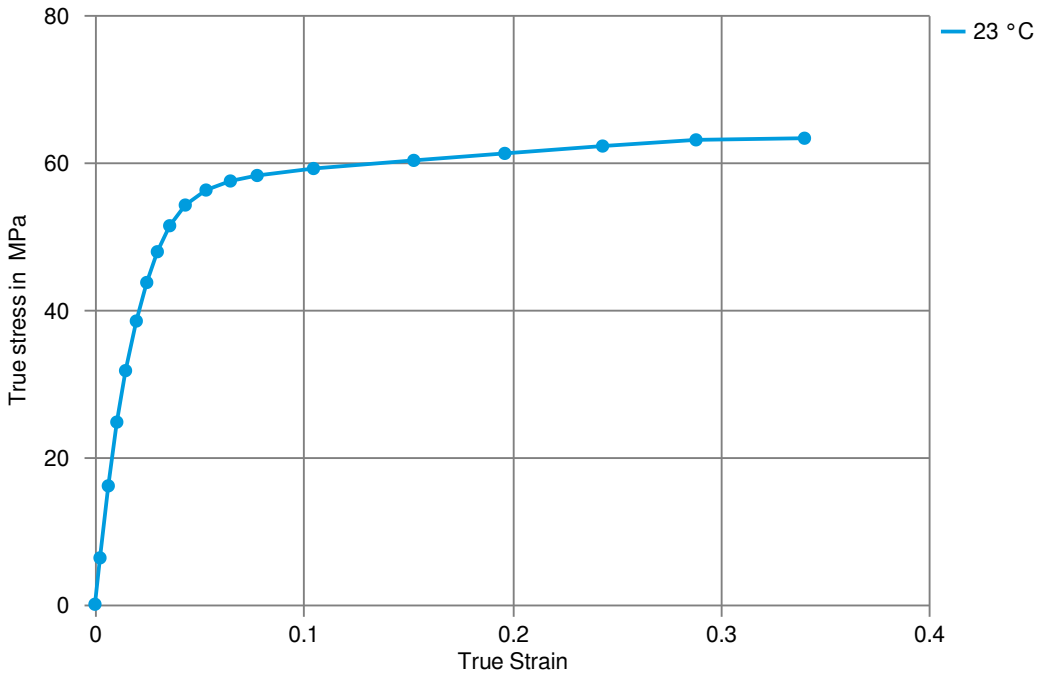
True stress-strain



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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.
Injection molding	See Processing Guide and Involve Celanese FTS support to obtain best quality parts

Other Approvals

Other Approvals

OEM	Specification	Additional Information
Mercedes-Benz Group (Daimler)	DBL 5404	BQF

Revised: 2023-05-21 Source: Celanese Materials Database