

HOSTAFORM® SlideX® C0313 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. Material is also food contact compliant in certain countries and for certain conditions of use (contact Celanese for further information).

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988-1: POM-K | M-GNRS2 | 4-2 | - | POM copolymer

Rheological properties

| | | |
|------------------------------------|---------------------------|-----------------|
| Melt volume-flow rate | 13 cm ³ /10min | ISO 1133 |
| Temperature | 190 °C | |
| Load | 2.16 kg | |
| Moulding shrinkage range, parallel | 2.0 % | ISO 294-4, 2577 |
| Moulding shrinkage range, normal | 1.6 % | ISO 294-4, 2577 |

Typical mechanical properties

| | | |
|---------------------------------------|-----------------------|--------------|
| Tensile Modulus | 2700 MPa | ISO 527-1/-2 |
| Yield stress, 50mm/min | 60 MPa | ISO 527-1/-2 |
| Yield strain, 50mm/min | 13 % | ISO 527-1/-2 |
| Nominal strain at break | 40 % | ISO 527-1/-2 |
| Flexural Modulus | 2550 MPa | ISO 178 |
| Compressive stress at 1% strain | 25 MPa | ISO 604 |
| Charpy impact strength, 23°C | 150 kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C | 140 kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 6 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 | 140 MPa | ISO 2039-1 |

Thermal properties

| | | |
|---|-----------|----------------|
| Melting temperature, 10°C/min | 170 °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa | 93 °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 157 °C | ISO 75-1/-2 |
| Vicat softening temperature, 50°C/h, 50N | 151 °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 130 E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 130 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

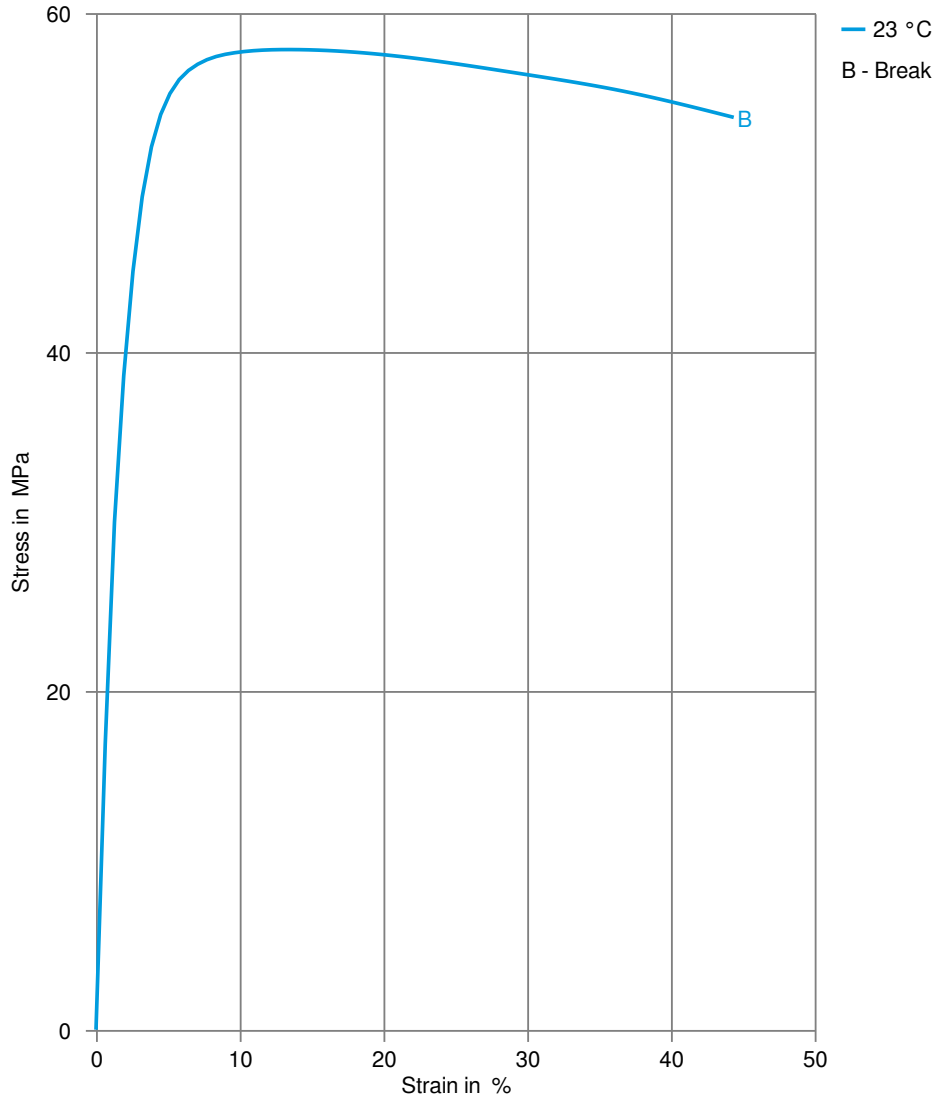
| | | |
|---------------------------------|----------------|----------|
| Drying Temperature | 100 - 120 °C | |
| Drying Time, Dehumidified Dryer | 3 - 4 h | |
| Processing Moisture Content | 0.15 % | |
| Melt Temperature Optimum | 200 °C | Internal |
| Screw tangential speed | 0.2 - 0.21 m/s | |
| Max. 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

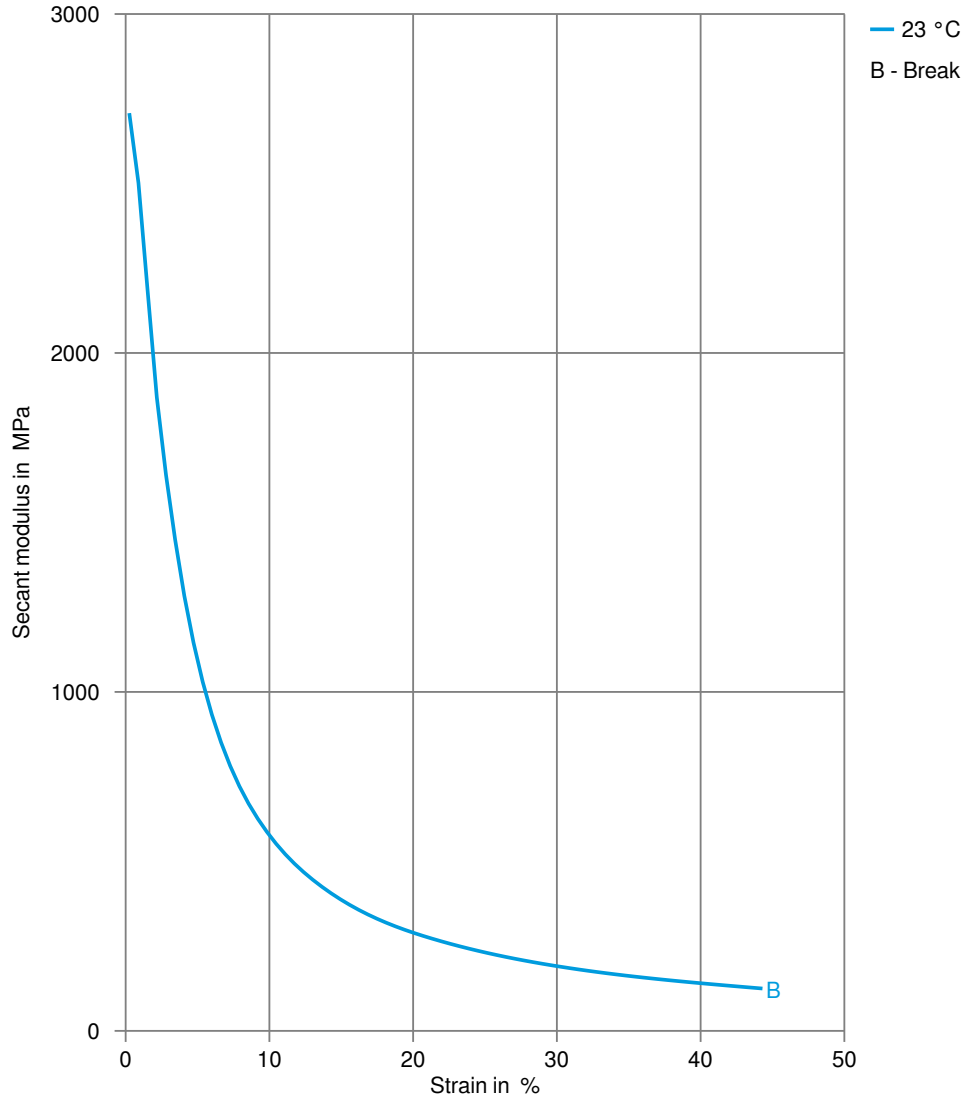
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Stress-strain



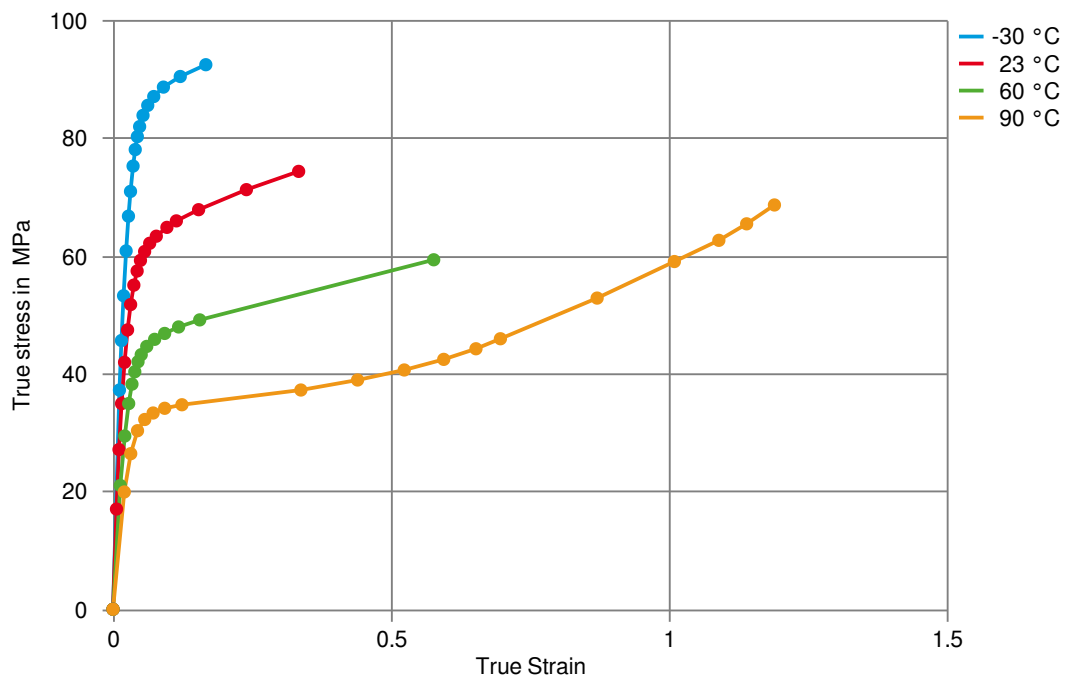
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Secant modulus-strain



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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 |
| Honda | | Interior |
| Hyundai | MS237-12, Type A | |
| VW Group | TL52476 | Black Only -Porsche-Grammer-Ros- Center Console / Arm Rest-SlideX |