

HOSTAFORM® C 9021 GV1/20 XGM

low wear; 20% fiberglass reinforced; PTFE containing grade

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GS2, 02-003, GF20 POM copolymer Injection molding type, reinforced with ca 20 % glass fibers; includes PTFE for improved wear performance; high resistance to thermal and oxidative degradation; reduced thermal expansion and shrinkage. Ranges of applications: For molded parts requiring improved low wear performance while exhibiting very high strength and rigidity as well as higher hardness. FMVSS = Federal Motor Vehicle Safety Standard (USA)

Product information

Part Marking Code	POM	ISO 11469
-------------------	-----	-----------

Rheological properties

Melt volume-flow rate	4 cm ³ /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage range, parallel	0.7 %	ISO 294-4, 2577
Moulding shrinkage range, normal	1.1 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	7700 MPa	ISO 527-1/-2
Stress at break, 5mm/min	100 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.5 %	ISO 527-1/-2
Flexural Modulus	7400 MPa	ISO 178
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
Hardness, Rockwell, M-scale	86	ISO 2039-2

Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	158 °C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	30 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90 E-6/K	ISO 11359-1/-2

Other properties

Density	1570 kg/m ³	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	80 - 120 °C
Back pressure	2 MPa
Injection speed	slow

HOSTAFORM® C 9021 GV1/20 XGM

Characteristics

Additives

Release agent

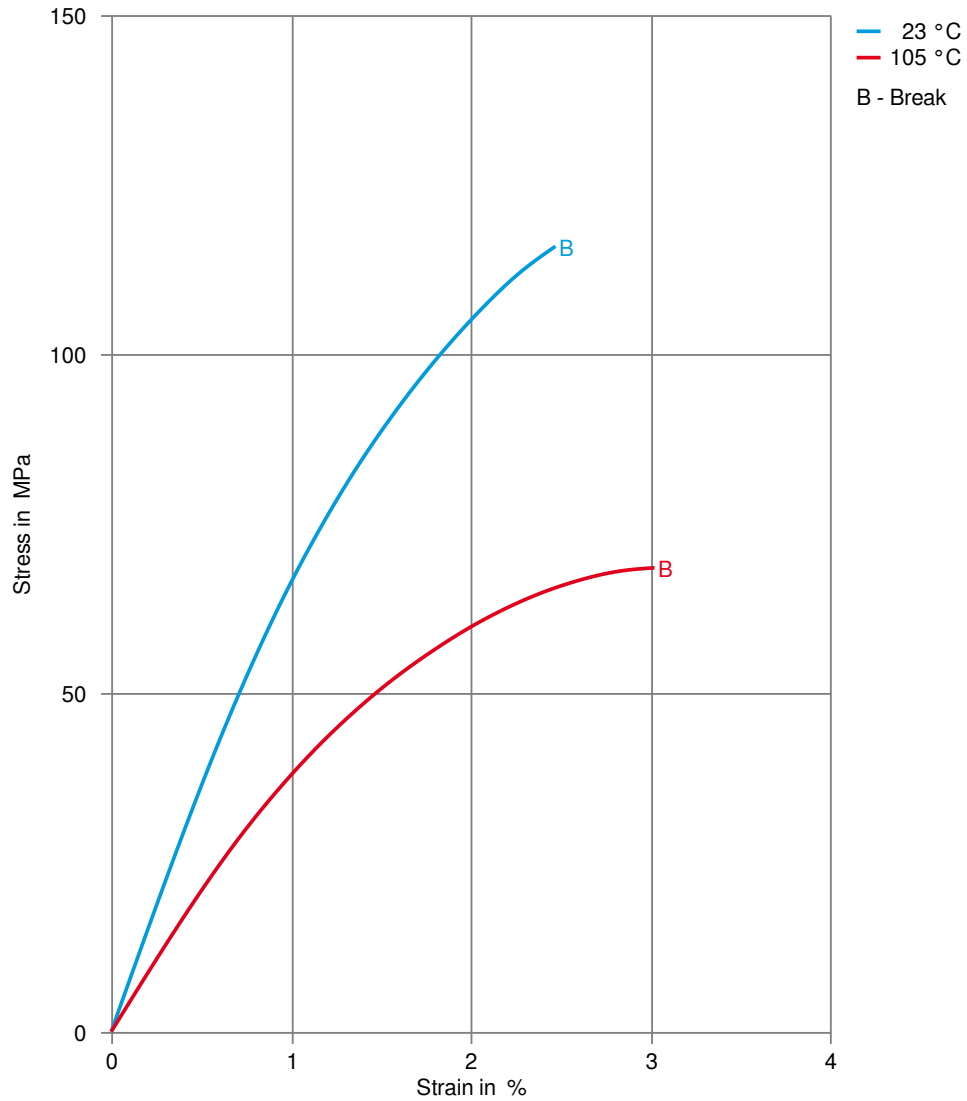
Additional information

Injection molding

Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

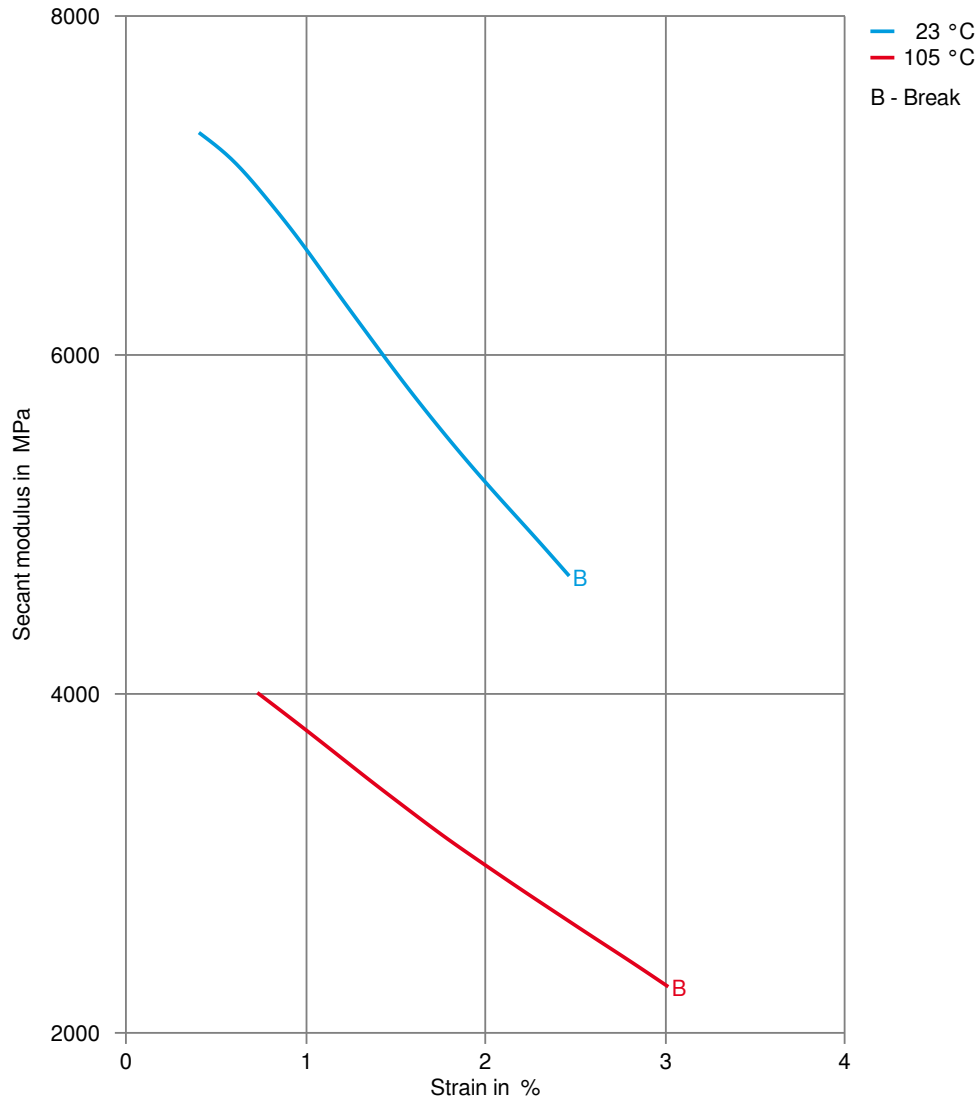
HOSTAFORM® C 9021 GV1/20 XGM

Stress-strain



HOSTAFORM® C 9021 GV1/20 XGM

Secant modulus-strain



HOSTAFORM® C 9021 GV1/20 XGM

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	Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.
Injection molding Preprocessing	<p>General drying is not necessary due to low moisture absorption of the resin.</p> <p>In case of bad storage conditions (water contact or condensed water) the use of a recirculating air dryer (100 to 120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.</p> <p>Max. Water content 0,2 %</p>
Injection molding Postprocessing	Conditioning e.g. moisturizing is not necessary.
