

HOSTAFORM® C 9021 AS

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POM copolymer Antistatistical modified; medium viscosity injection molding grade; the antistatistical effect improves, when the molding part absorbs enough humidity; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. Hostaform C 9021 AS is suggested for dissipation of minor buildup of static electricity that might occur with standard type grades. However, it is not intended for use in fuel system components where static dissipation is critical to part performance. Please refer to Celanese's ESD (electrostatic dissipative) grades for those applications.

Preliminary Datasheet

Product information

Resin Identification	POM	ISO 1043
Part Marking Code	>POM<	ISO 11469

Rheological properties

Melt volume-flow rate	8.5 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	2750 MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	63 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	10 %	ISO 527-1/-2
Nominal strain at break	30 %	ISO 527-1/-2
Charpy impact strength, 23°C	180 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	180 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	5.5 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.37 ^[C]	

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Coefficient of linear thermal expansion (CLTE), parallel	110 E-6/K	ISO 11359-1/-2

Electrical properties

Surface resistivity	1E12 Ohm	IEC 62631-3-2
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Physical/Other properties

Density	1410 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 %

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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	100 °C
Min. mould temperature	80 °C
Max. mould temperature	120 °C
Hold pressure range	60 - 120 MPa

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Additives	Release agent
Special characteristics	Static dissipative

Additional information

Injection molding

Preprocessing

General drying is not necessary due to low moisture absorption of the resin.

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.

Max. Water content 0,2 %

Processing

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

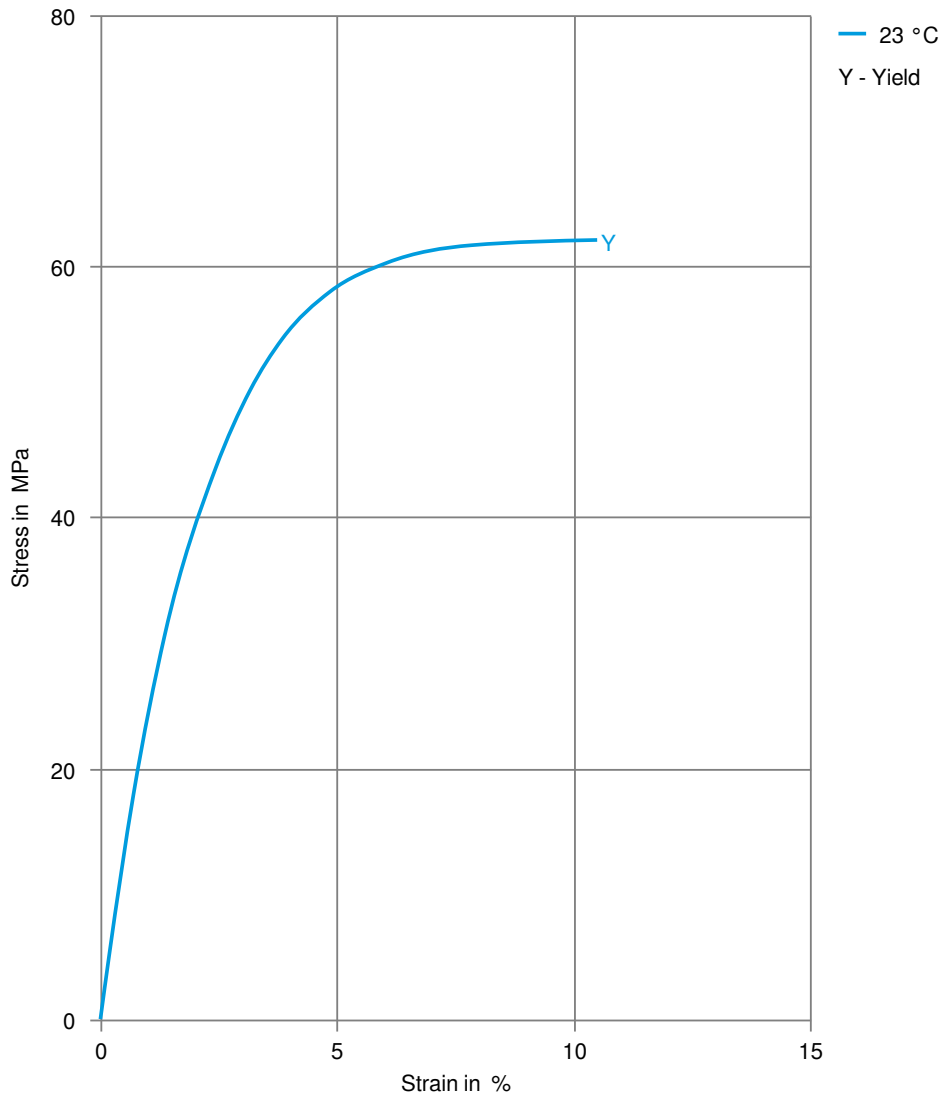
Postprocessing

Conditioning e.g. moisturizing is not necessary.

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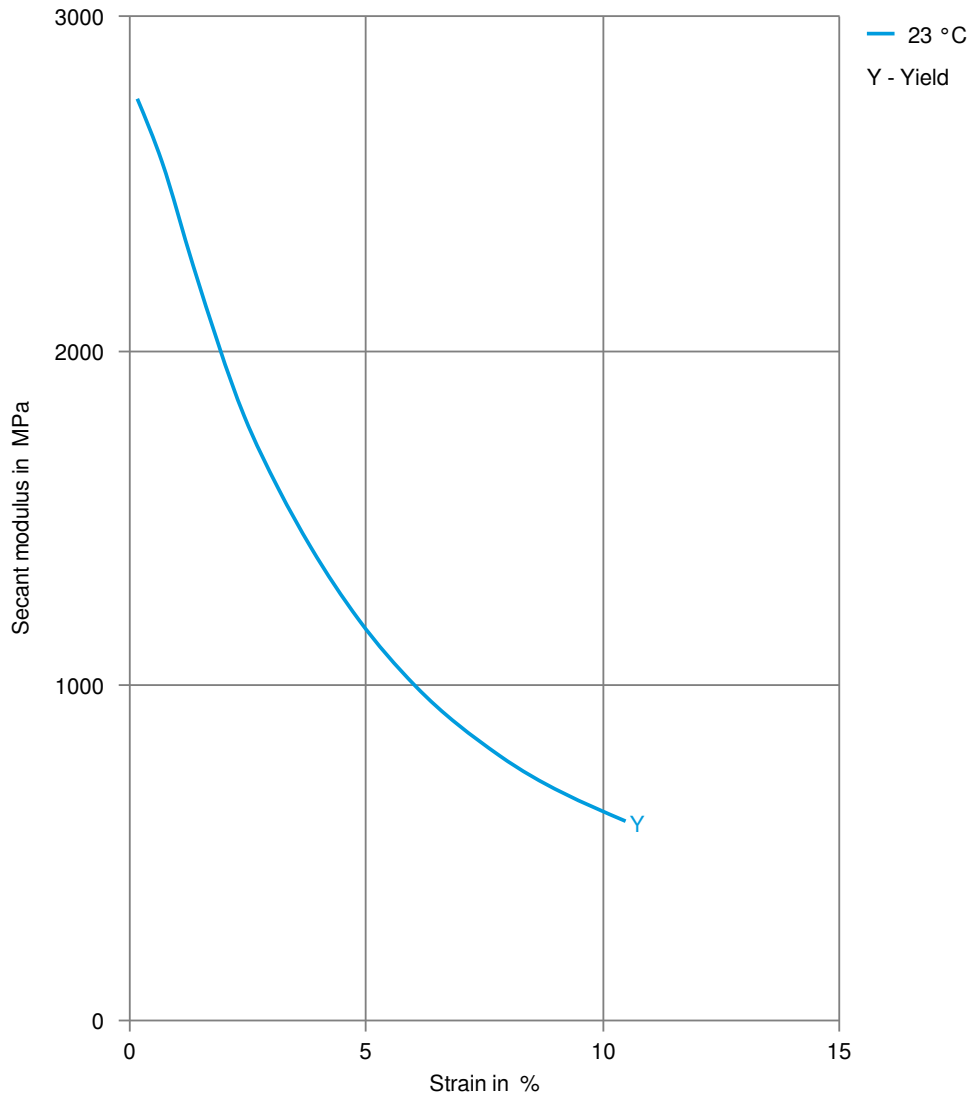
Stress-strain



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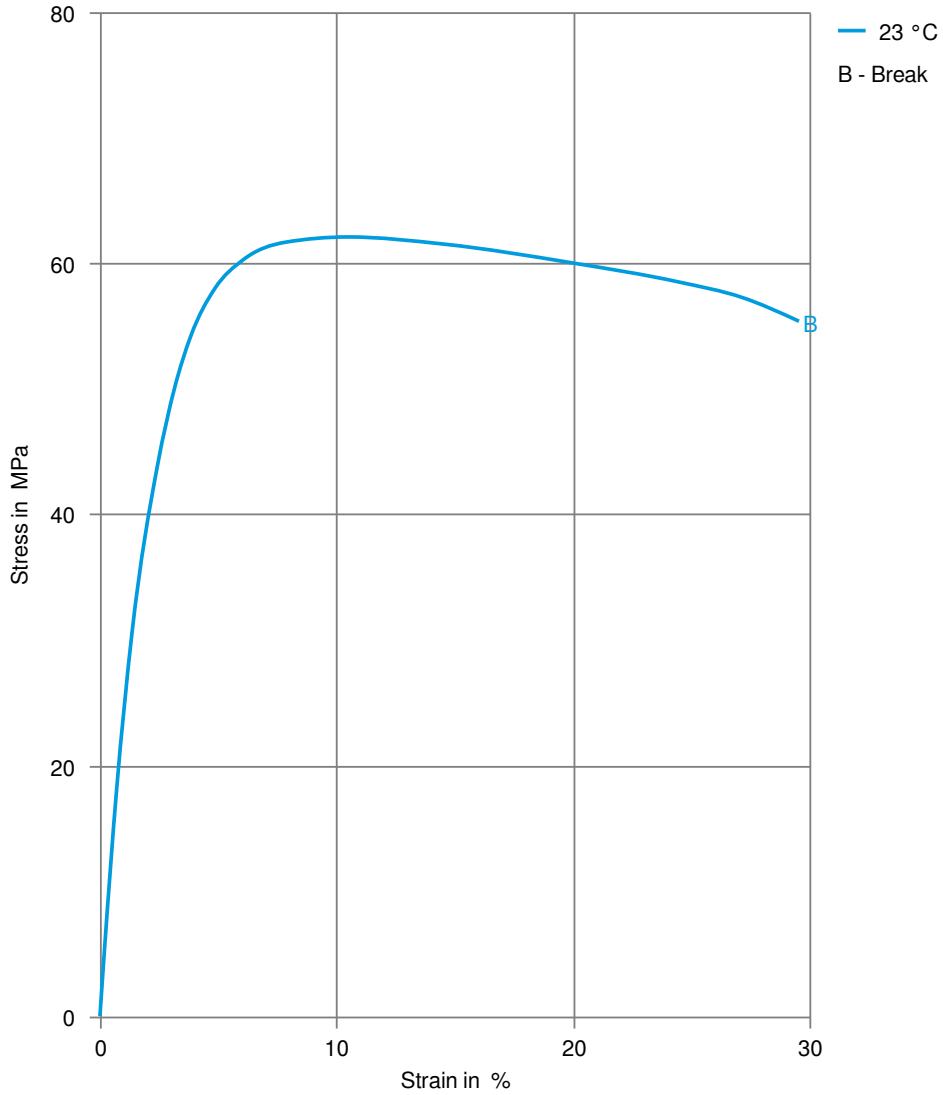
Secant modulus-strain



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Stress-strain, 50mm/min



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Secant modulus-strain, 50mm/min

