

# HOSTAFORM® C 9021 XAP®2 ECO-B

## HOSTAFORM®

POM copolymer injection molding grade with reduced emissions especially for automotive interior application. Burning rate according to FMVSS 302 < 100 mm/min (1 mm thickness) Emission according to VDA 275 < 2 mg/kg (natural grades) Emission according to VDA 275 < 5 mg/kg (colored grades)

ECO-B: Hostaform ECO-B is a POM-Copolymer with the same properties and performance as standard grades but produced with sustainability in mind. Using a mass-balance approach, biogenic feedstocks are used to offset the use of fossil-based raw materials and decrease greenhouse gas emissions. The process is audited and certified according to the ISCC Plus mass balance approach.

### Product information

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

### Rheological properties

Melt volume-flow rate	8 cm <sup>3</sup> /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage, parallel	2.0 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.9 %	ISO 294-4, 2577

### Typical mechanical properties

Tensile modulus	2700 MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	64 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	10 %	ISO 527-1/-2
Nominal strain at break	35 %	ISO 527-1/-2
Flexural modulus	2600 MPa	ISO 178
Tensile creep modulus, 1h	2400 MPa	ISO 899-1
Tensile creep modulus, 1000h	1200 MPa	ISO 899-1
Charpy impact strength, 23 °C	220 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30 °C	220 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23 °C	6.5 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30 °C	6 kJ/m <sup>2</sup>	ISO 179/1eA
Poisson's ratio	0.38 <sup>[C]</sup>	

[C]: Calculated

### Thermal properties

Melting temperature, 10 °C/min	166 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	104 °C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	157 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	120 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	120 E-6/K	ISO 11359-1/-2

### Electrical properties

Relative permittivity, 100Hz	4	IEC 62631-2-1
Relative permittivity, 1MHz	4	IEC 62631-2-1
Dissipation factor, 100Hz	20 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	50 E-4	IEC 62631-2-1

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Volume resistivity	1E12 Ohm.m	IEC 62631-3-1
Surface resistivity	1E14 Ohm	IEC 62631-3-2
Electric strength	35 kV/mm	IEC 60243-1
Comparative tracking index	600	IEC 60112

## Physical/Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.65 %	Sim. to ISO 62
Density	1410 kg/m <sup>3</sup>	ISO 1183

## Injection

Drying Recommended	no
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	190 °C
Min. melt temperature	180 °C
Max. melt temperature	200 °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
Back pressure	4 MPa

## Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Additives	Release agent
Special characteristics	Low emissions
Sustainability	Bio-Content

## Additional information

Injection molding

### Preprocessing

To achieve low emission values pre drying using a recirculating air dryer (100 to 120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.

Max. Water content 0,1 %

### Processing

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

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Melt temperature 180-190 °C  
Mould temperature 60-120 °C

## Postprocessing

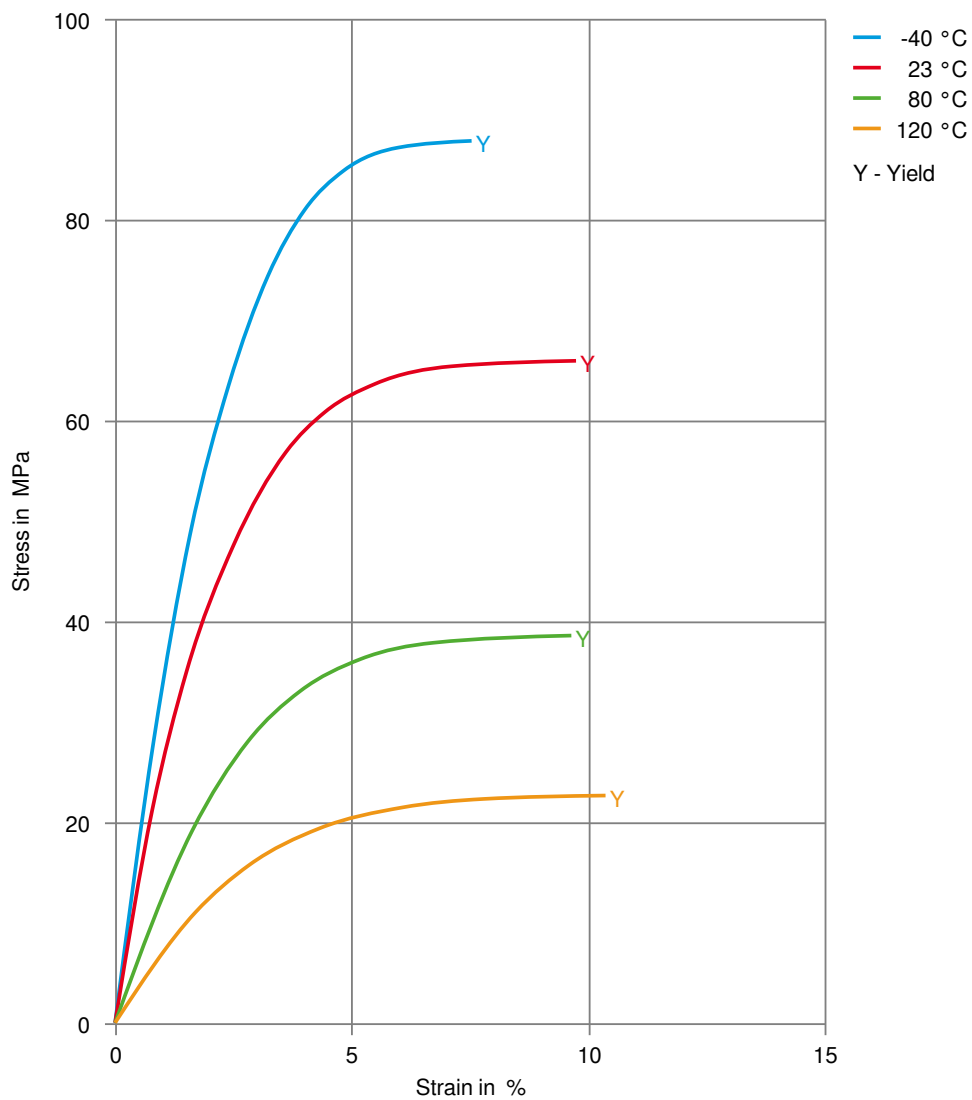
Conditioning e.g. moisturizing is not necessary.

## Processing Notes

## Pre-Drying

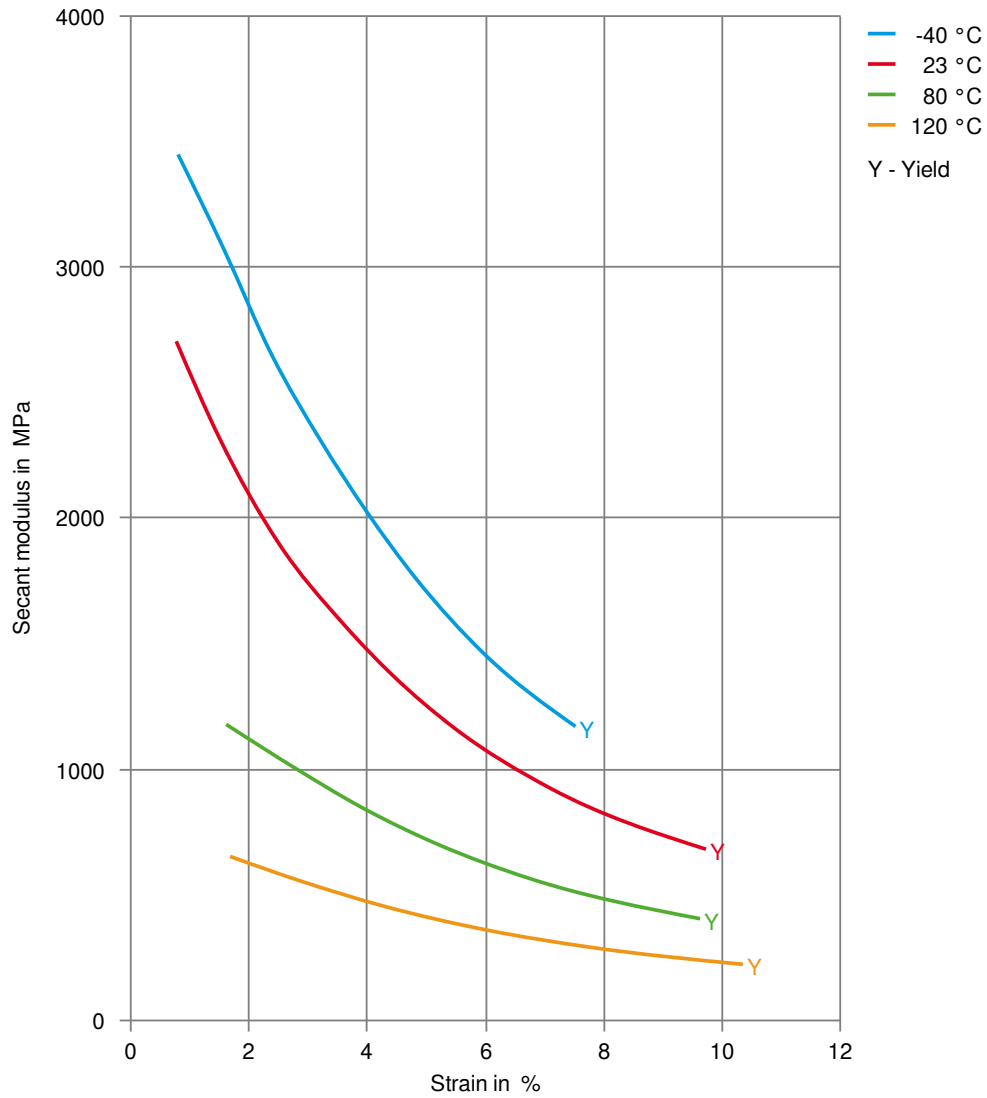
recommended

## Stress-strain



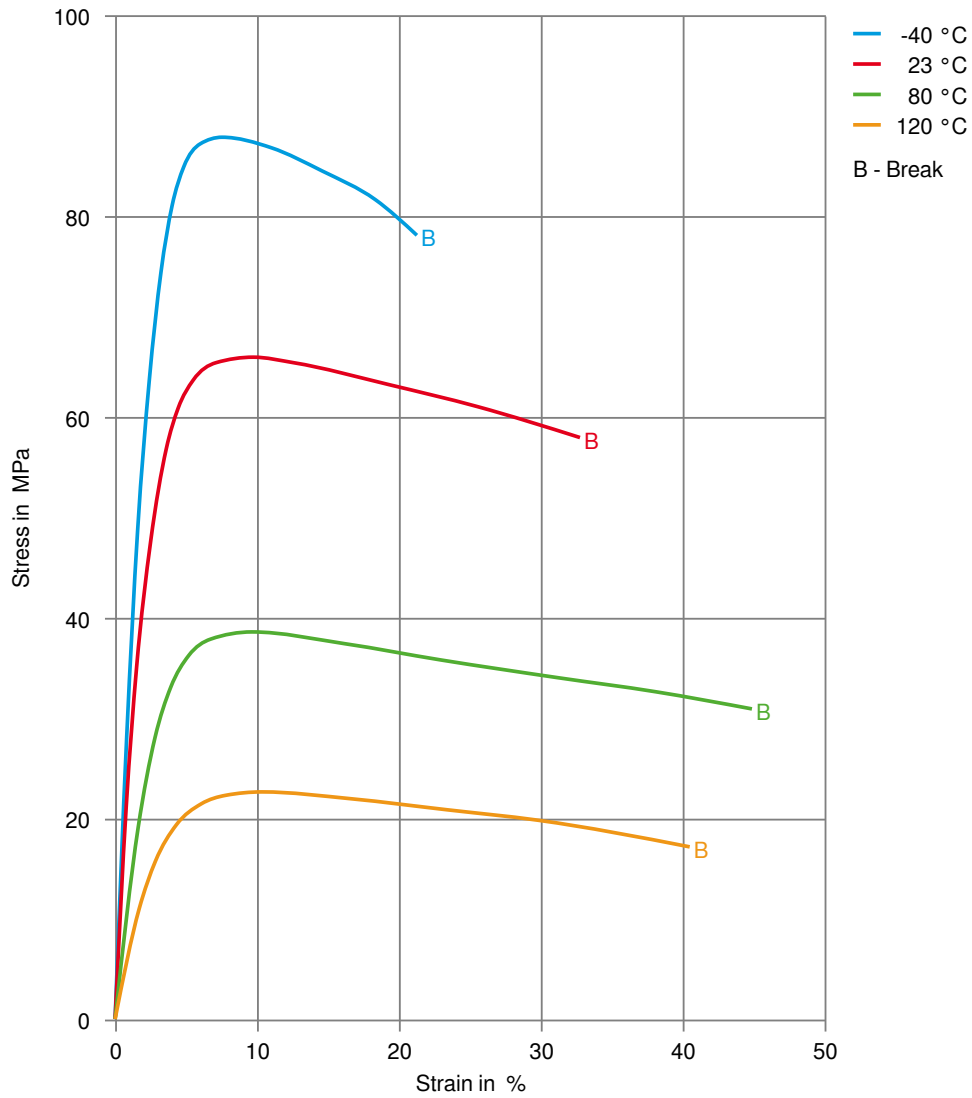
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## Secant modulus-strain



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## Stress-strain, 50mm/min



# HOSTAFORM® C 9021 XAP®2 ECO-B HOSTAFORM®

## Secant modulus-strain, 50mm/min

