

HOSTAFORM® C 9021 XAP®2 ECO-C 872

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-C: Hostaform® POM C 9021 XAP®2 ECO-C 872 incorporates circular content derived from captured carbon dioxide emissions in the finished product through mass balance allocation. The product is a drop-in replacement to the standard grade with the same performance and processing properties and contributes to the displacement of virgin fossil fuel resources. The feedstock utilizing captured carbon dioxide emissions are ISCC CFC certified as low carbon intensity methanol.

Product information

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

Rheological properties

Melt volume-flow rate	8 cm ³ /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage, parallel	2.0 ^[1] %	ISO 294-4, 2577
Moulding shrinkage, normal	1.9 ^[1] %	ISO 294-4, 2577

[1]: @ 195 °C

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 ^[P] kJ/m ²	ISO 179/1eU
Charpy impact strength, -30 °C	220 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23 °C	6.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30 °C	6 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.38 ^[C]	

[P]: Partial Break

[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

HOSTAFORM® C 9021 XAP®2 ECO-C 872

HOSTAFORM®

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
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 ³	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	Carbon Capture

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 %

HOSTAFORM® C 9021 XAP®2 ECO-C 872

HOSTAFORM®

Processing

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

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

Postprocessing

Conditioning e.g. moisturizing is not necessary.

Processing Notes

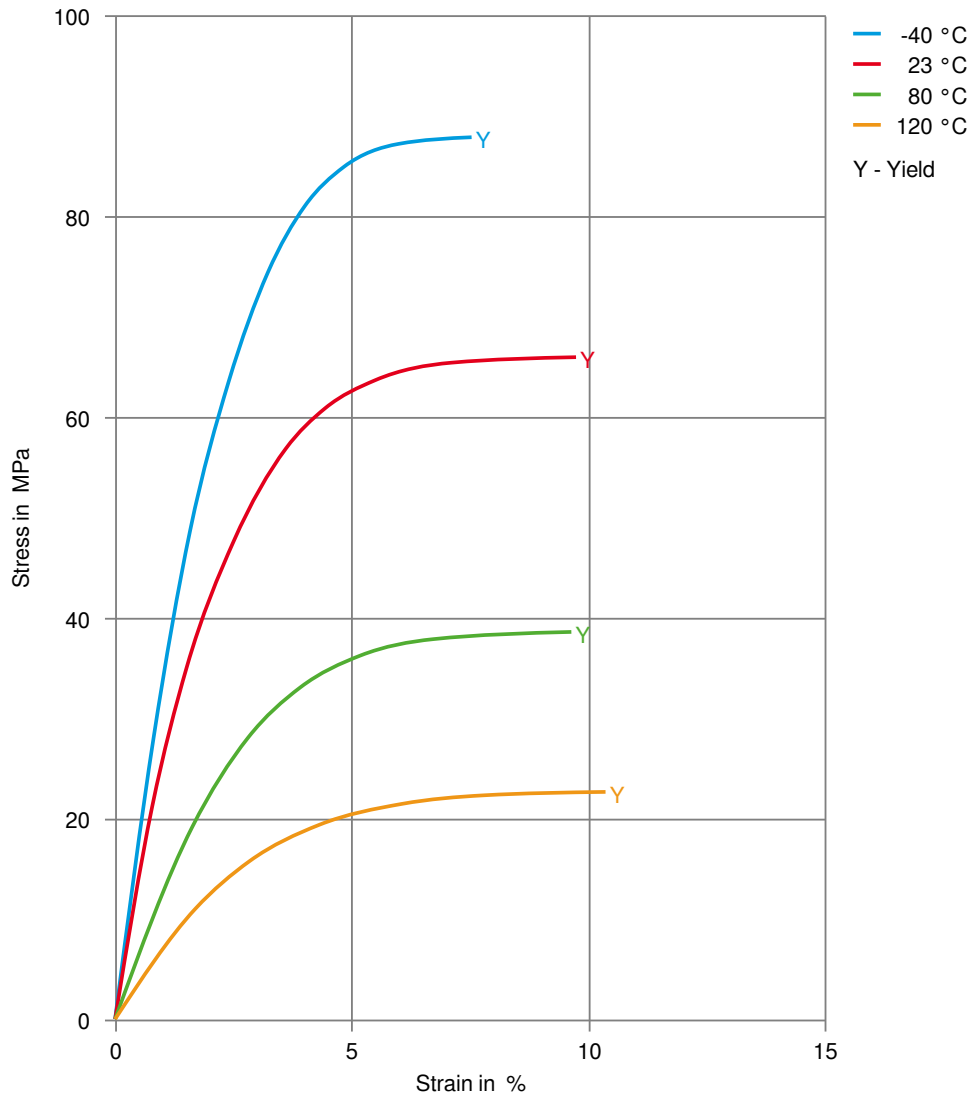
Pre-Drying

recommended

HOSTAFORM® C 9021 XAP®2 ECO-C 872

HOSTAFORM®

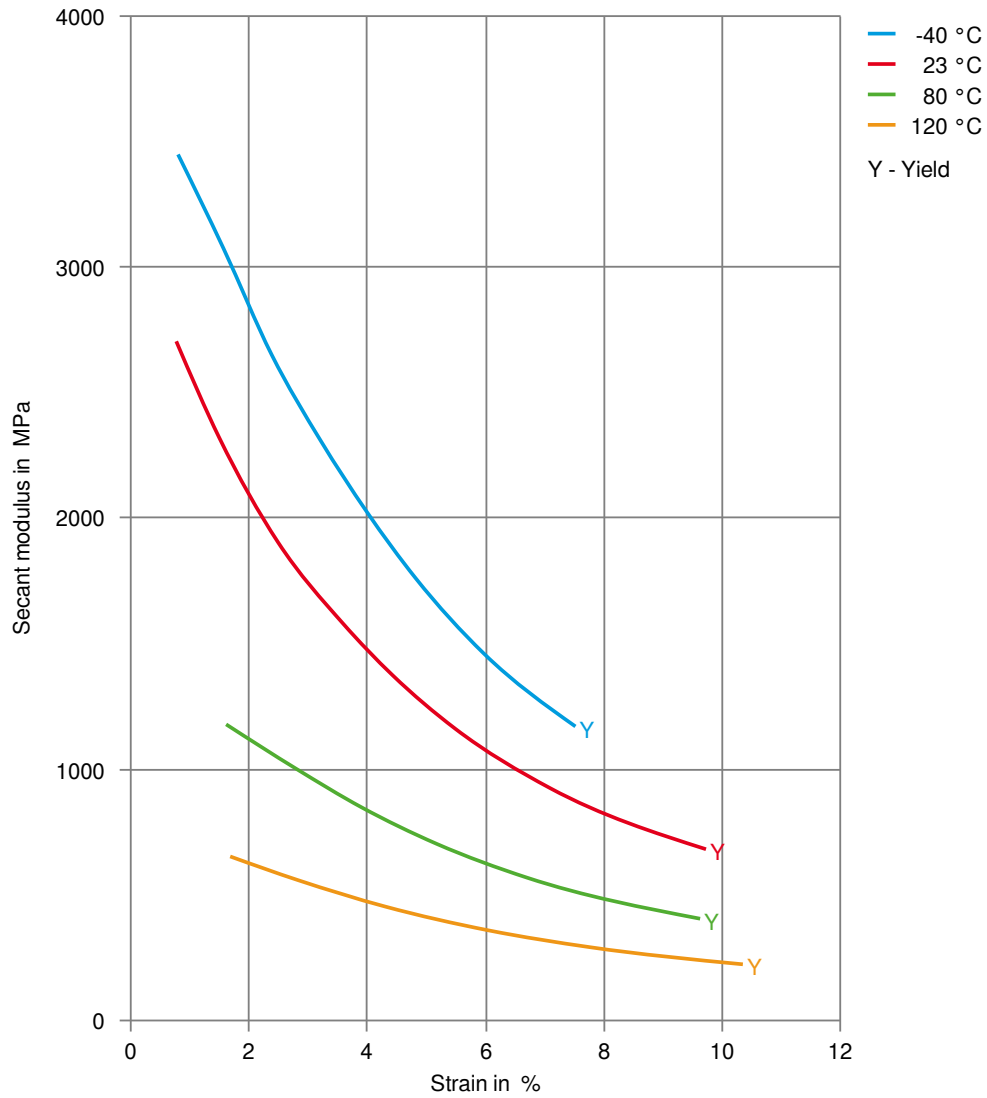
Stress-strain



HOSTAFORM® C 9021 XAP®2 ECO-C 872

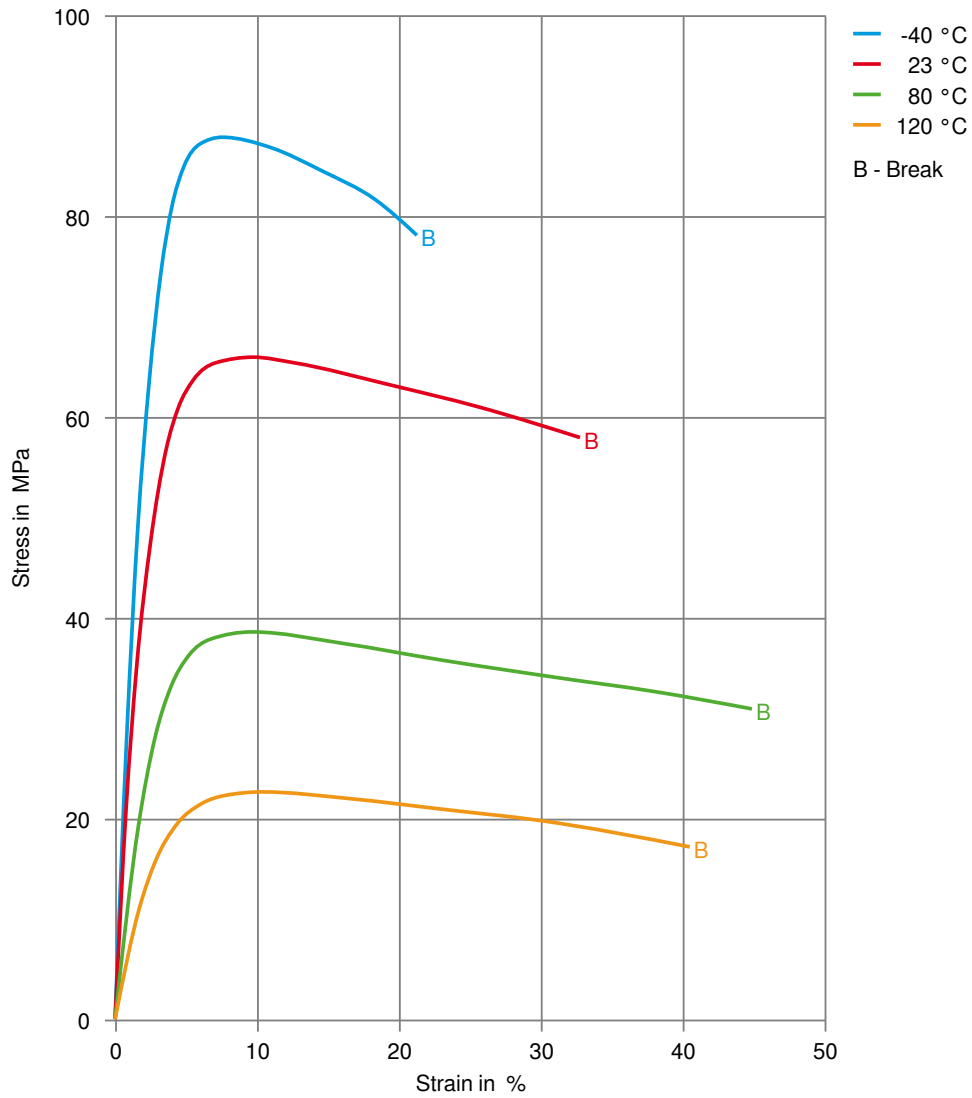
HOSTAFORM®

Secant modulus-strain



HOSTAFORM® C 9021 XAP®2 ECO-C 872
HOSTAFORM®

Stress-strain, 50mm/min



HOSTAFORM® C 9021 XAP®2 ECO-C 872

HOSTAFORM®

Secant modulus-strain, 50mm/min

