

HOSTAFORM® C 9021 XAP®2 ECO-B

POM copolymer Standard 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.

Rheological properties

Melt volume-flow rate	8 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	1.9 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	2700 MPa	ISO 527-1/-2
Yield stress, 50mm/min	64 MPa	ISO 527-1/-2
Yield strain, 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

[P]: Partial Break

Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	104 °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	150 °C	ISO 306
Coeff. of linear therm. expansion, parallel	120 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, 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
Volume resistivity	1E12 Ohm.m	IEC 62631-3-1

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Surface resistivity	1E14 Ohm	IEC 62631-3-2
Electric strength	35 kV/mm	IEC 60243-1
Comparative tracking index	PLC 0 PLC	UL 746A

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 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	4 MPa
Injection speed	slow-medium

Characteristics

Additives	Release agent, Biobased
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Additional information

Injection molding	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

Processing Texts

Pre-drying	recommended
Injection molding	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
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 %

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Injection molding Postprocessing

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Conditioning e.g. moisturizing is not necessary.
