

ISO 1183

HOSTAFORM® C 27021 XAP®2

Low Emission

Polyacetalcopolymer Easy flow 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).

Rheological properties

Melt volume-flow rate Temperature Load	24 190 2.16		ISO 1133
Typical mechanical properties			
Tensile Modulus	2750	MPa	ISO 527-1/-2
Yield stress, 50mm/min	64	MPa	ISO 527-1/-2
Yield strain, 50mm/min	7.5	%	ISO 527-1/-2
Nominal strain at break	17	%	ISO 527-1/-2
Flexural Modulus	2600	MPa	ISO 178
Tensile creep modulus, 1h	2400	MPa	ISO 899-1
Tensile creep modulus, 1000h	1200		ISO 899-1
Charpy impact strength, 23°C		kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C		kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C		kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	5.5	kJ/m²	ISO 179/1eA
Thermal properties			
Melting temperature, 10 ° C/min	164	°C	ISO 11357-1/-3
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
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
			100

Printed: 2023-08-07 Page: 1 of 5

1410 kg/m³

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Density



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

Additional information

Injection molding

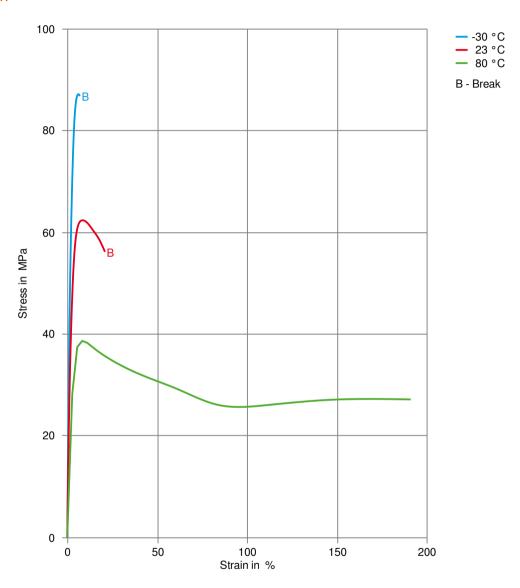
Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

Printed: 2023-08-07 Page: 2 of 5

Revised: 2023-07-10 Source: Celanese Materials Database



Stress-strain

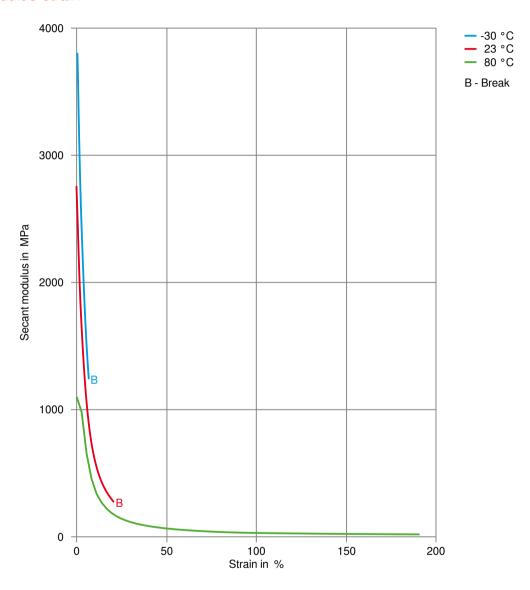


Printed: 2023-08-07 Page: 3 of 5

Revised: 2023-07-10 Source: Celanese Materials Database



Secant modulus-strain



Printed: 2023-08-07 Page: 4 of 5

Revised: 2023-07-10 Source: Celanese Materials Database



Processing Texts

Pre-drying recommended

Injection molding Standard injection moulding machines with three phase (15 to 25 D)

plasticating screws will fit.

Injection molding Preprocessing

To achive 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 %

Injection molding Postprocessing Conditioning e.g. moisturizing is not necessary.

Other Approvals

Other Approvals

OEM	Specification	Additional Information
Mercedes-Benz Group (Daimler)	DBL 5404	BQF
Mercedes-Benz Group (Daimler)	DBL 5410	
Ford	WSK-M4D635-A3	
Li Auto	Q/LiA5310020	2021 (V2)
Renault	EP10-1c	
VW Group	TL 524 76	

Printed: 2023-08-07 Page: 5 of 5

Revised: 2023-07-10 Source: Celanese Materials Database

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