

HOSTAFORM® C 9021 AW XAP® 2 LS

Low noise, low wear and low emissions

POM copolymer Injection molding type like Hostaform® C 9021, with special additive modified; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation; good wear properties and low coefficient of friction. Reduced emission grade. Emissions according to VDA 275 < 5 mg/kg Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm. Ranges of applications: sliding parts for window lifter. FMVSS = Federal Motor Vehicle Safety Standard (USA) Preliminary Data Sheet

Rheological properties

Melt volume-flow rate	8 cm ³ /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage range, parallel	1.8 %	ISO 294-4, 2577
Moulding shrinkage range, normal	1.6 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	2450 MPa	ISO 527-1/-2
Yield stress, 50mm/min	57 MPa	ISO 527-1/-2
Yield strain, 50mm/min	8 %	ISO 527-1/-2
Nominal strain at break	20 %	ISO 527-1/-2
Flexural Modulus	2300 MPa	ISO 178
Flexural Strength	78 MPa	ISO 178
Flexural Stress at 3.5%	61 MPa	ISO 178
Charpy impact strength, 23°C	130 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	110 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	5.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5 kJ/m ²	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	88 °C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	151 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	145 °C	ISO 306
Coeff. of linear therm. expansion, parallel	110 E-6/K	ISO 11359-1/-2

Electrical properties

Relative permittivity, 100Hz	3.8	IEC 62631-2-1
Relative permittivity, 1MHz	3.8	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

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Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.65 %	Sim. to ISO 62
Density	1380 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	2 MPa
Injection speed	slow

Characteristics

Additives	Release agent
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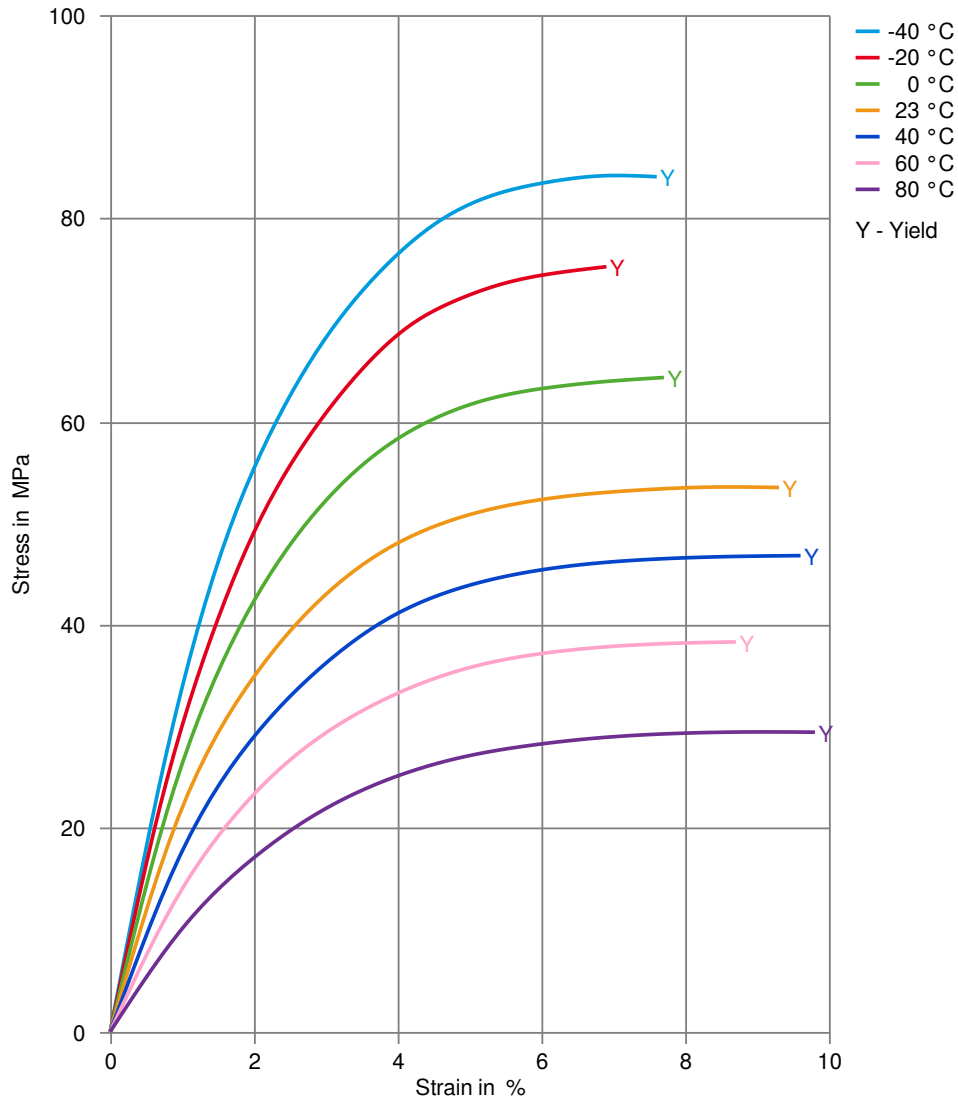
Additional information

Injection molding	Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.
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Stress-strain

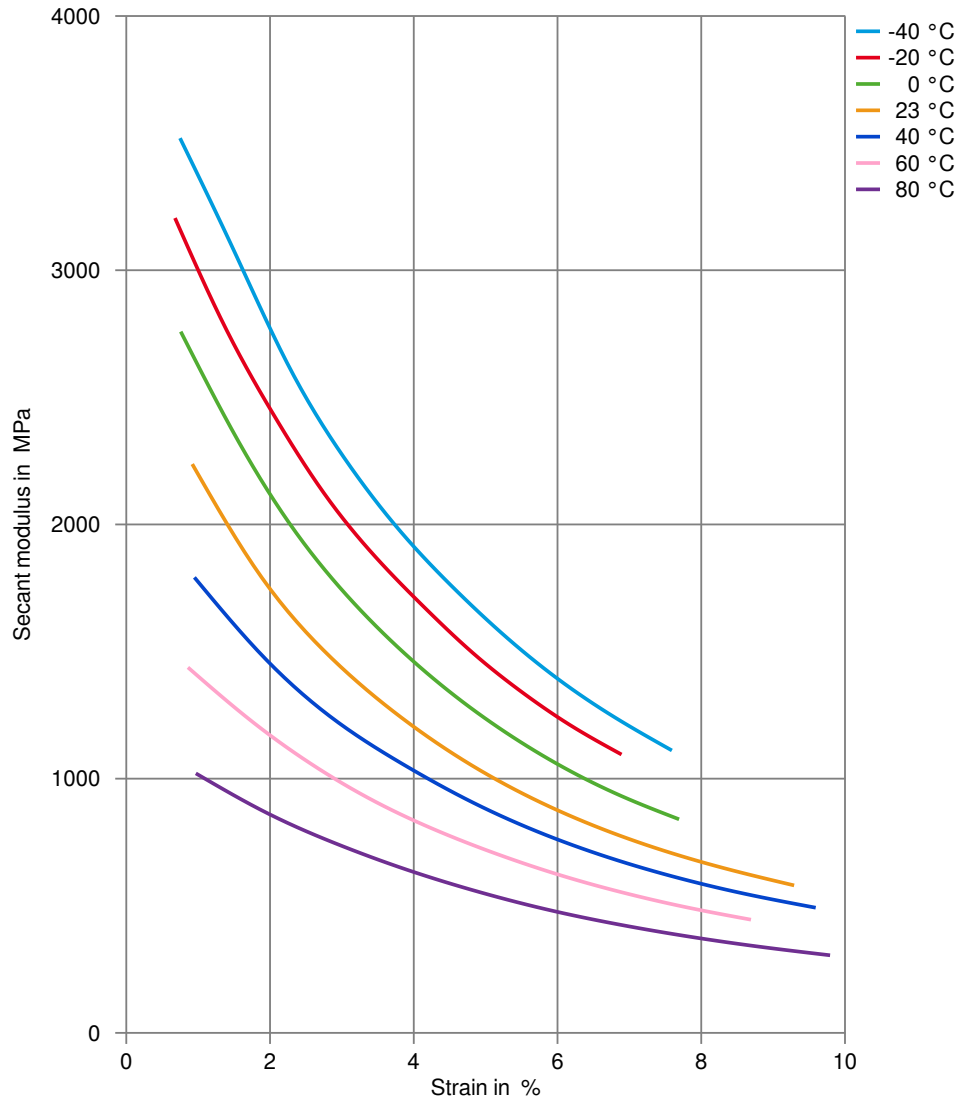


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Secant modulus-strain

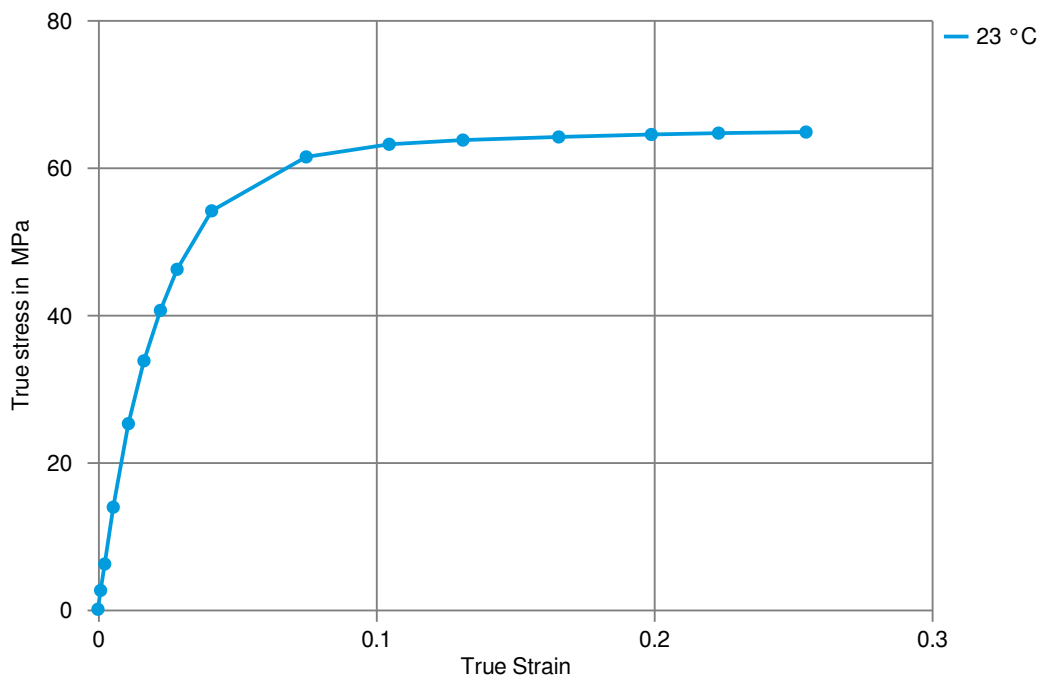


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True stress-strain



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Processing Texts

Pre-drying	Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems.
Longer pre-drying times/storage	The product can then be stored in standard conditions until processed.
Injection molding	Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.
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 %
Injection molding Postprocessing	Conditioning e.g. moisturizing is not necessary.

Other Approvals

Other Approvals	OEM	Specification	Additional Information
	Continental	TST N 055 54.37	(TST N 055 54.37-001)
	Mercedes-Benz Group (Daimler)	DBL 5404	BQF

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