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## HOSTAFORM® C 13031 XAP®

#### high stiffness

Polyacetal copolymer, reduced emission Easy flowing Injection molding type like C 13021 XAP®, but with higher strength, rigidity and hardness over the entire permissible temperature range for HOSTAFORM®; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. Emissions according to VDA 275 < 10 ppm (natural and colored grades) Monomers and additives are listed in EU-Regulation (EU) 10/2011 FDA compliant according to 21 CFR 177.2470 Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm. Ranges of applications: For molded parts with higher requirements to strength, rigidity und hardness, ranges of applications with fuel contact.

### Rheological properties

Melt volume-flow rate Temperature Load Moulding shrinkage, parallel Moulding shrinkage, normal	12 190 2.16 2.0 1.8	kg %	ISO 1133 ISO 294-4, 2577 ISO 294-4, 2577
Typical mechanical properties			
Tensile Modulus Yield stress, 50mm/min Yield strain, 50mm/min Nominal strain at break Flexural Modulus Tensile creep modulus, 1h Tensile creep modulus, 1000h Charpy impact strength, 23°C Charpy impact strength, -30°C Charpy notched impact strength, -30°C Charpy notched impact strength, -30°C Ball indentation hardness, H 358/30	8 28 3000 2750 1450 200 200 6.7 6	MPa %	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 899-1 ISO 899-1 ISO 179/1eU ISO 179/1eU ISO 179/1eA ISO 179/1eA
Thermal properties			
Melting temperature, 10°C/min Temp. of deflection under load, 1.8 MPa Vicat softening temperature, 50°C/h, 50N Coeff. of linear therm. expansion, parallel Thermal conductivity of melt		°C	ISO 11357-1/-3 ISO 75-1/-2 ISO 306 ISO 11359-1/-2 Internal
Electrical properties  Relative permittivity, 100Hz Relative permittivity, 1MHz Dissipation factor, 100Hz Dissipation factor, 1MHz Volume resistivity Surface resistivity	50	E-4 E-4 Ohm.m Ohm	IEC 62631-2-1 IEC 62631-2-1 IEC 62631-2-1 IEC 62631-2-1 IEC 62631-3-1 IEC 62631-3-2

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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 <sup>3</sup>	ISO 1183

### Injection

Drying Temperature	100 - 120	$^{\circ} C$
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

### Additional information

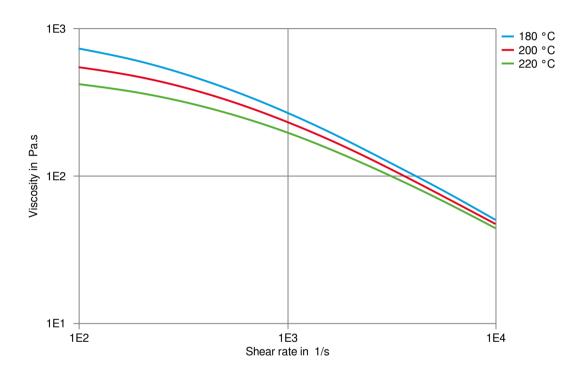
Injection molding Standard injection moulding machines with three phase (15 to 25 D)

plasticating screws will fit.

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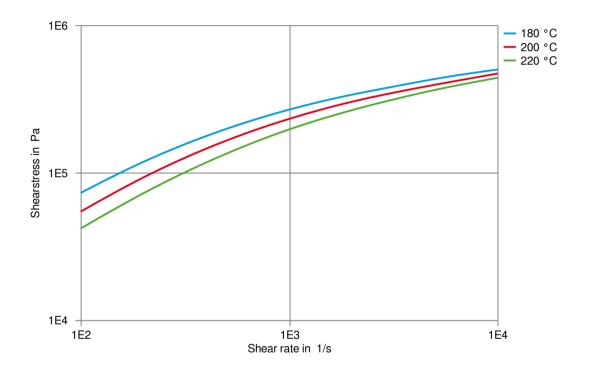
### Viscosity-shear rate



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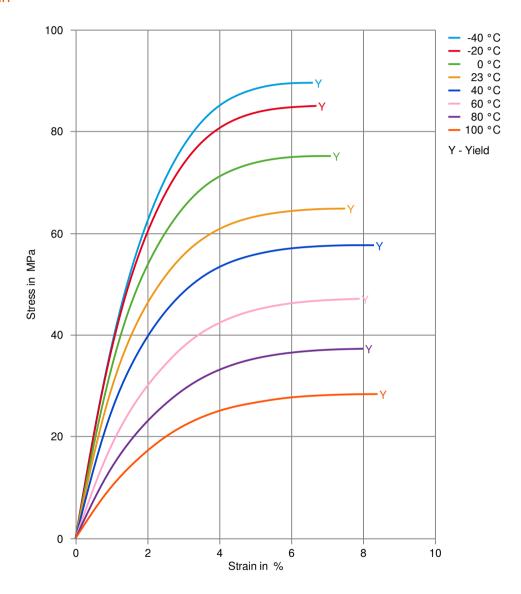
#### Shearstress-shear rate



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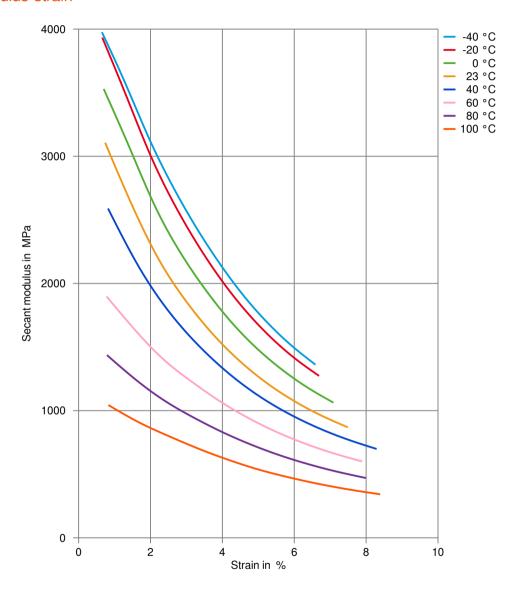
#### Stress-strain



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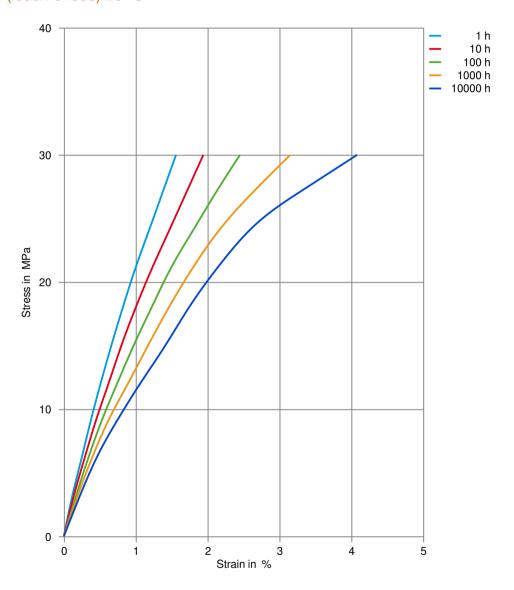
#### Secant modulus-strain



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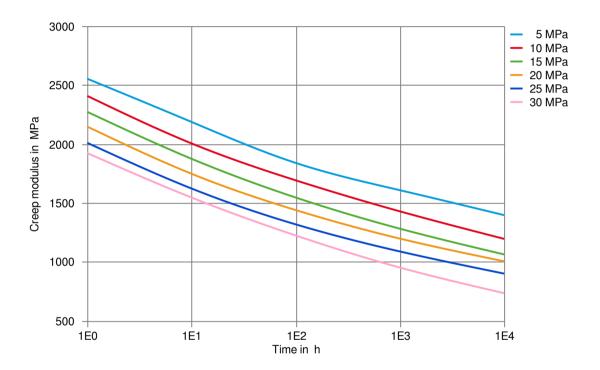
### Stress-strain (isochronous) 23°C



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## Creep modulus-time 23°C



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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 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.

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