Celanese
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HOSTAFORM® C 13031 XF

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Hostaform® acetal copolymer grade C13031 XF is an acetal copolymer modified to resist deterioration from aggressive fuel blends. This material is specially targeted for transportation industry fuel systems. In natural form, Hostaform® C13031 XF has a distinctive yellow color (Color code 50/5339) to denote use for fuel systems. Additionally the product is available in black 10/9022 for laser welding applications.

Product information

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

Rheological properties

Melt volume-flow rate	12	cm^3/10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	2.2	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.9	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	2850	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	62	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	11	%	ISO 527-1/-2
Nominal strain at break	30	%	ISO 527-1/-2
Flexural modulus	2900	MPa	ISO 178
Flexural stress at 3.5%	76	MPa	ISO 178
Charpy impact strength, 23°C	150	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	140	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	7.5	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m^2	ISO 179/1eA
Hardness, Rockwell, M-scale	88		ISO 2039-2
Ball indentation hardness, H 358/30	137	MPa	ISO 2039-1
Poisson's ratio	0.423		

Thermal properties

Melting temperature, 10°C/min	170	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	102	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	159	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	90	E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	90	E-6/K	ISO 11359-1/-2

Flammability

FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	61.7	mm/min	ISO 3795 (FMVSS 302)

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Physical/Other properties

Humidity absorption, 2mm	0.3	%	Sim. to ISO 62
Density	1420	kg/m³	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	200	°C
Min. melt temperature	190	°C
Max. melt temperature	210	°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
Special characteristics	Chemical resistant

Additional information

Injection molding

Preprocessing

General drying is not necessary due to low moisture absorption of the resin.

In case of bad storage conditions (water contact or condensed water) the use of a recirculating air dryer (100 to 120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.

Max. Water content 0,2 %

Processing

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

Postprocessing

Conditioning e.g. moisturizing is not necessary.

Processing Notes

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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.

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Bosch	N28 BN22-O026	Black, Made In Frankfurt
Bosch	N28 BN22-O026	Yellow, Made In Frankfurt
Continental	TST N 055 54.03	
Continental	TST N 055 54.25	
General Motors	GMW18026P-POM	Yellow
Hyundai	MS237-14 Type A	
Mercedes-Benz	Fuel	
Renault	EP10-1c, No Spec, Special Part Approval, See Your CE Account Manager.	
Stellantis	MS.50095 / POM-C.3000F.7I	01994_14_00058, CPN4111 CANOD
Stellantis - Chrysler	MS.50095 / CPN-4111	Canod;01994_14_00058, CPN4111 CANOD
VW Group	TL 526 36C	

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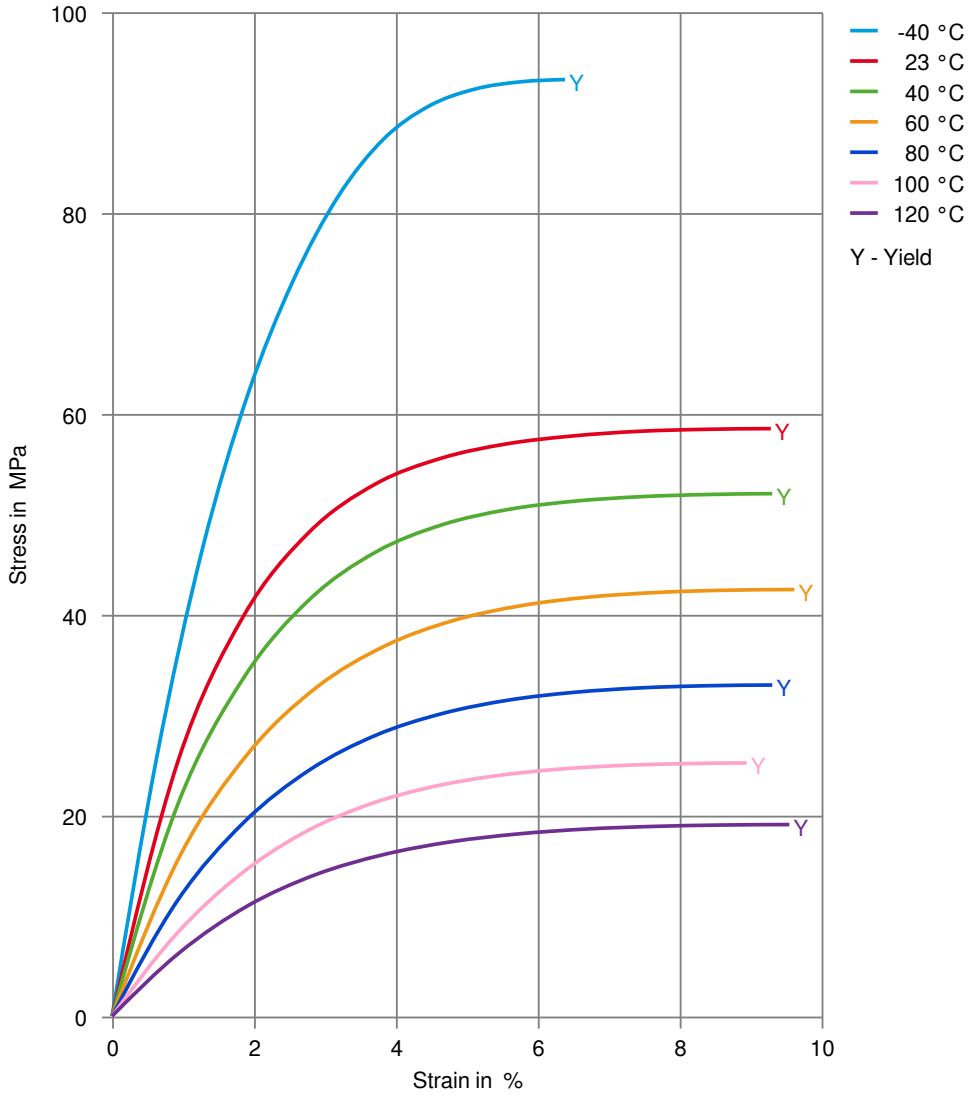
Stress-strain



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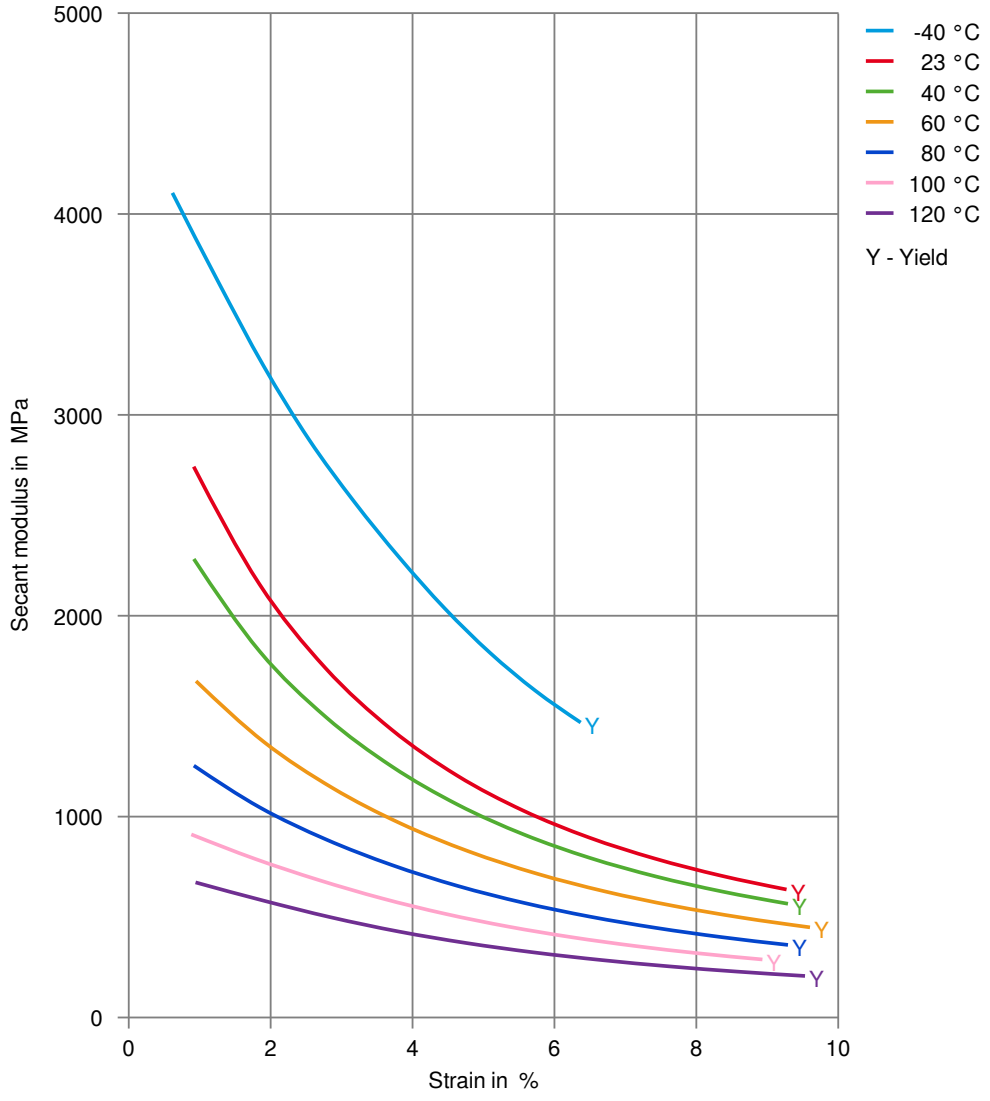
Secant modulus-strain



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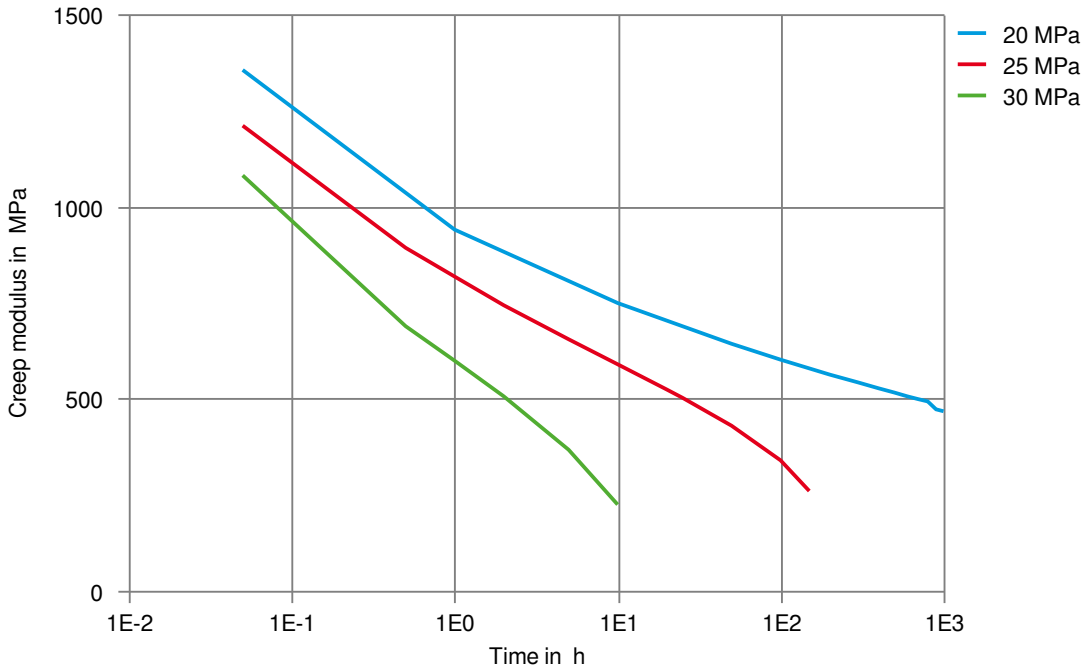
Creep modulus-time 60 °C



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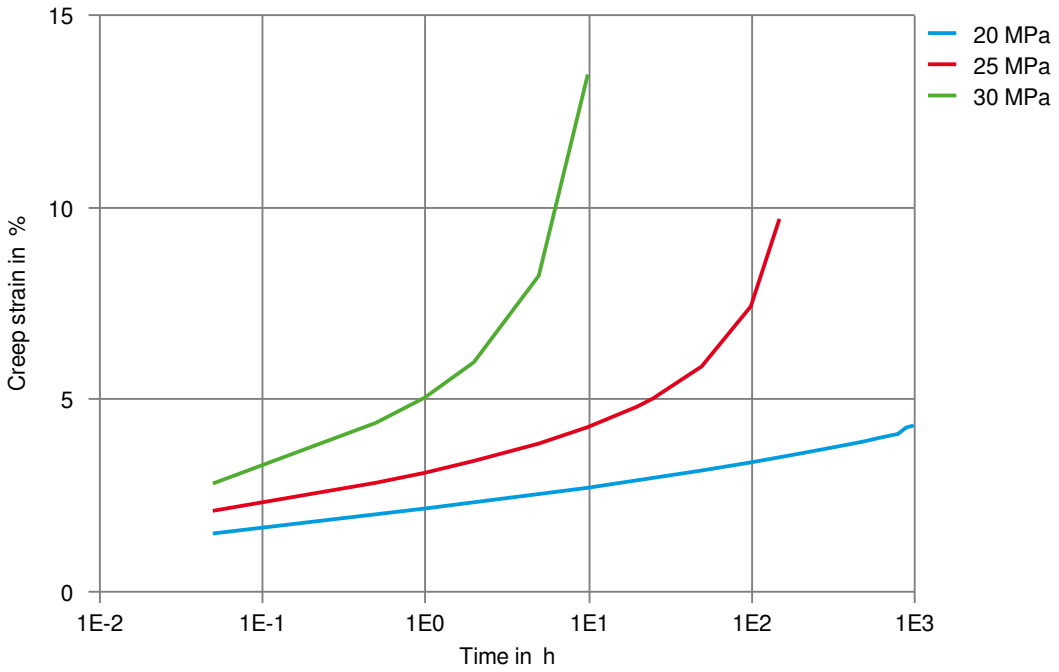
Creep strain-time 60 °C



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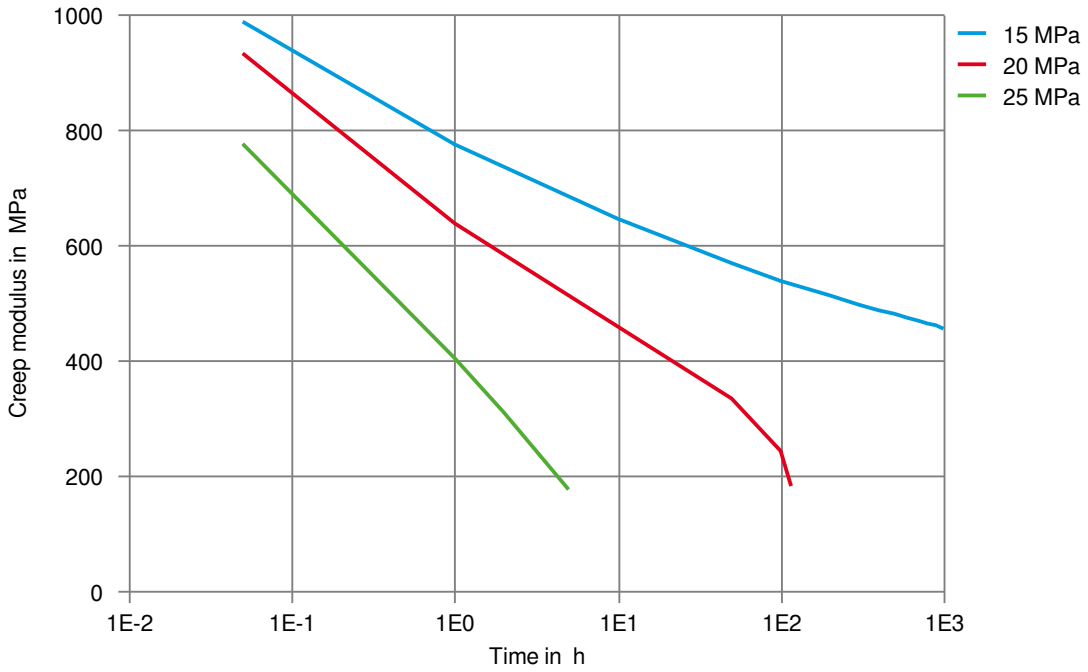
Creep modulus-time 80 °C



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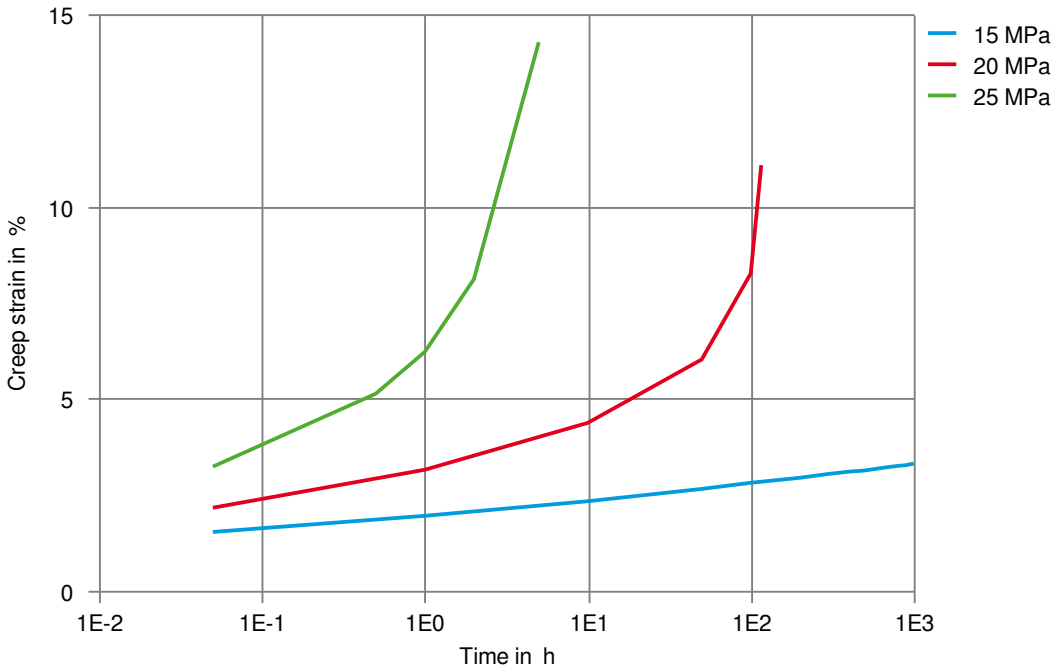
Creep strain-time 80 °C



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Chemical Media Resistance

Standard Fuels

- ✔ ISO 1817 Liquid 1 - E5, 60°C
- ✔ ISO 1817 Liquid 2 - M15E4, 60°C
- ✔ ISO 1817 Liquid 3 - M3E7, 60°C
- ✔ ISO 1817 Liquid 4 - M15, 60°C
- ✔ Standard fuel without alcohol (pref. ISO 1817 Liquid C), 23°C
- ✔ Standard fuel with alcohol (pref. ISO 1817 Liquid 4), 23°C

Symbols used:

✔ possibly resistant
Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).

✘ not recommended - see explanation
Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).

Revised: 2025-04-23 Source: Celanese Materials Database