# HOSTAFORM® C 9021 XAP® LS colored

Low Emission UV resistant
POM copolymer
Product with reduced emissions especially for automotive interior application. Good properties of the standard-injection molding grades like high rigidity, hardness and toughness; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation are maintained
Burning rate ISO 3795 and FMVSS 302 < 75 mm/min for a thickness more than 1 mm. VDA 275 Emissions < 10 ppm
Ranges of applications: automotive engineering,
FMVSS = Federal Motor Vehicle Safety Standard (USA)

## Rheological properties

| | | | |
|---|---|---|---|
| Melt volume-flow rate | 8 | $cm^3/10min$ | ISO 1133 |
| Temperature | 190 | °C | |
| Load | 2.16 | kg | |
| Moulding shrinkage, parallel | 2.0 | % | ISO 294-4, 2577 |
| Moulding shrinkage, normal | 1.8 | % | ISO 294-4, 2577 |

## Typical mechanical properties

| | | | |
|---|---|---|---|
| Tensile Modulus | 2850 | MPa | ISO 527-1/-2 |
| Yield stress, 50mm/min | 64 | MPa | ISO 527-1/-2 |
| Yield strain, 50mm/min | 9 | % | ISO 527-1/-2 |
| Nominal strain at break | 30 | % | ISO 527-1/-2 |
| Flexural Modulus | 2700 | MPa | ISO 178 |
| Tensile creep modulus, 1h | 2500 | MPa | ISO 899-1 |
| Tensile creep modulus, 1000h | 1300 | MPa | ISO 899-1 |
| Charpy impact strength, 23°C | 200[P] | $kJ/m^2$ | ISO 179/1eU |
| Charpy impact strength, -30°C | 200 | $kJ/m^2$ | 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 |
| Ball indentation hardness, H 358/30 | 144 | MPa | ISO 2039-1 |

[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 |
| Vicat softening temperature, 50°C/h, 50N | 150 | °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 110 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 110 | E-6/K | ISO 11359-1/-2 |
| Thermal conductivity of melt | 0.155 | W/(m K) | Internal |
| Eff. thermal diffusivity | 4.85E-8 | $m^2/s$ | Internal |
| Spec. heat capacity of melt | 2210 | J/(kg K) | Internal |

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## 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 |
| Density | 1410 | kg/m³ | ISO 1183 |
| Density of melt | 1200 | kg/m³ | Internal |

## Injection

| | | | |
|---|---|---|---|
| Drying Temperature | 120 - 140 | °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 | | |
| Ejection temperature | 140 | °C | Internal |

## Characteristics

| | |
|---|---|
| Additives | Release agent |

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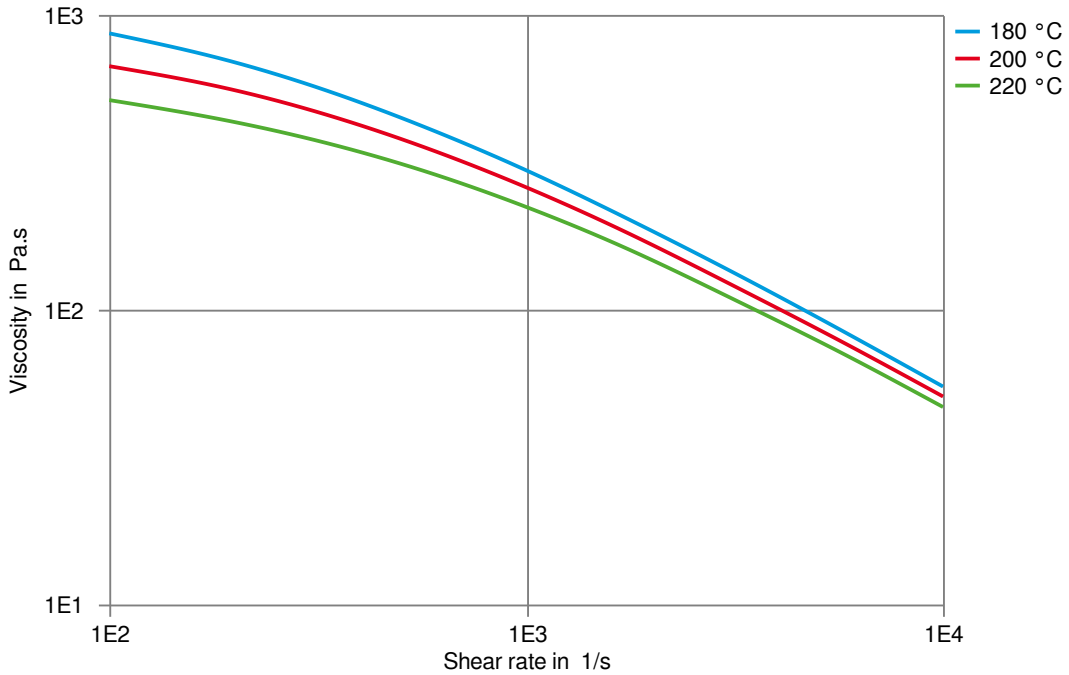
## Viscosity-shear rate



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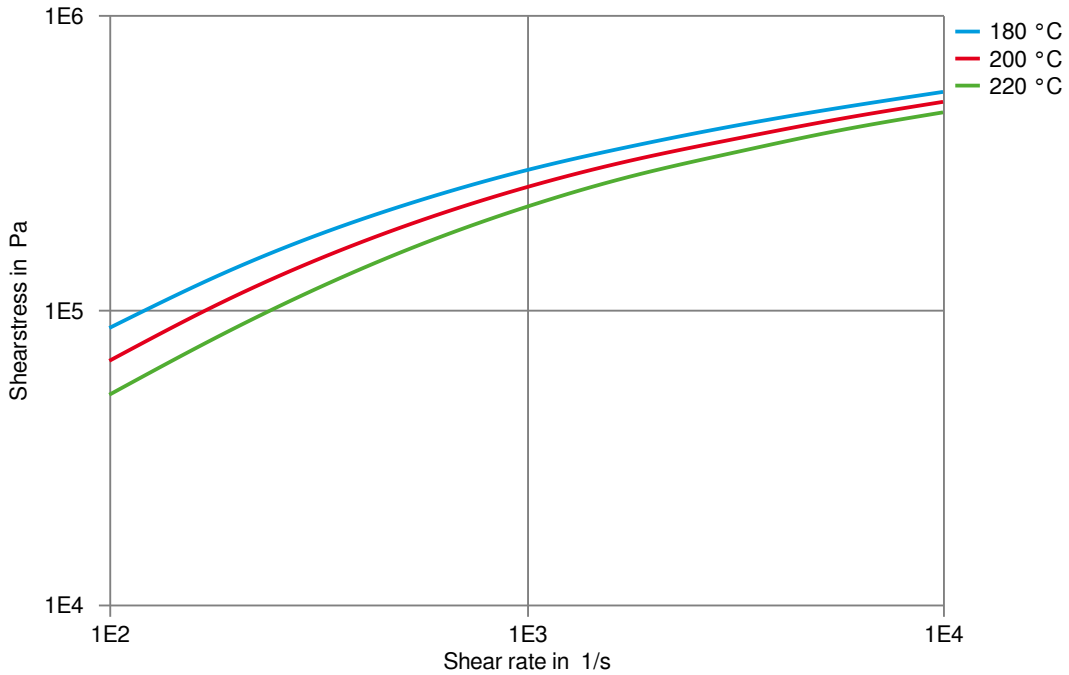
## Shearstress-shear rate



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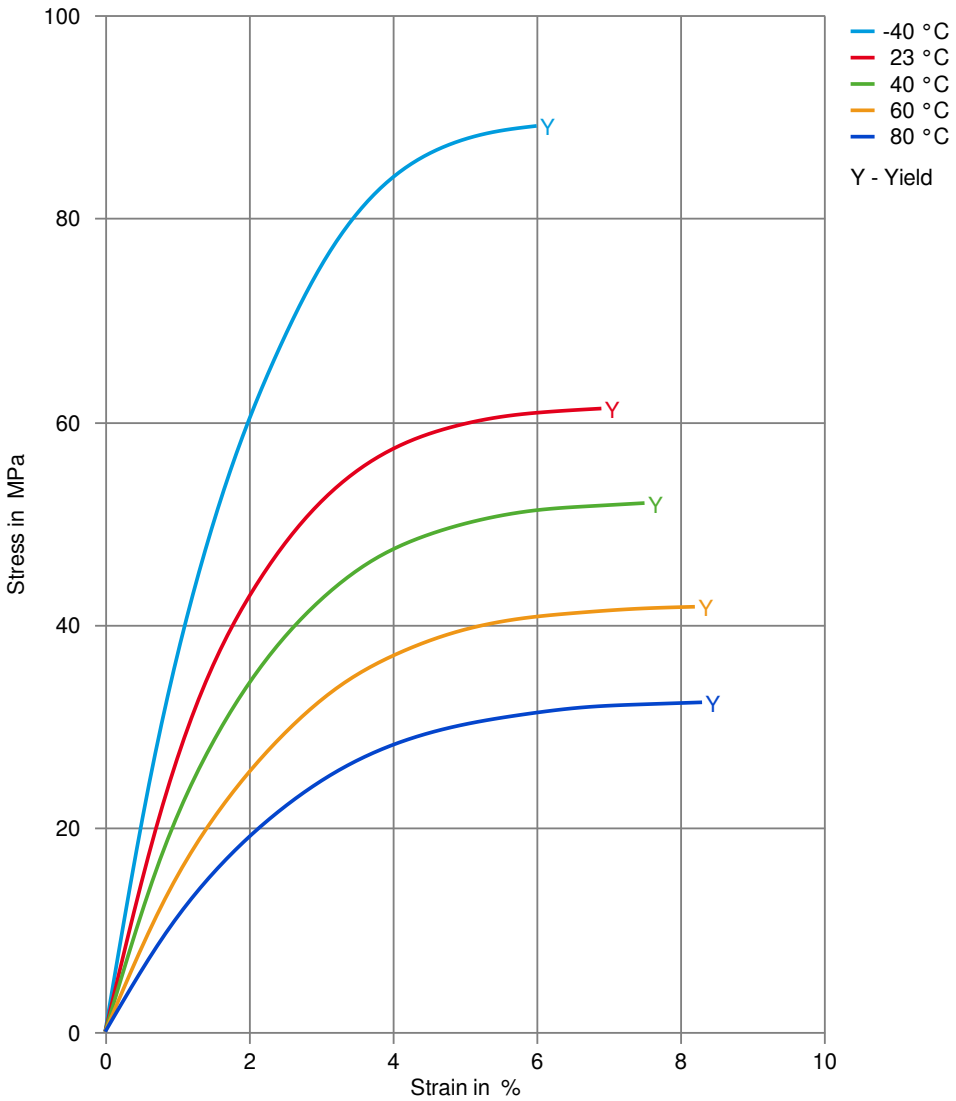
## Stress-strain



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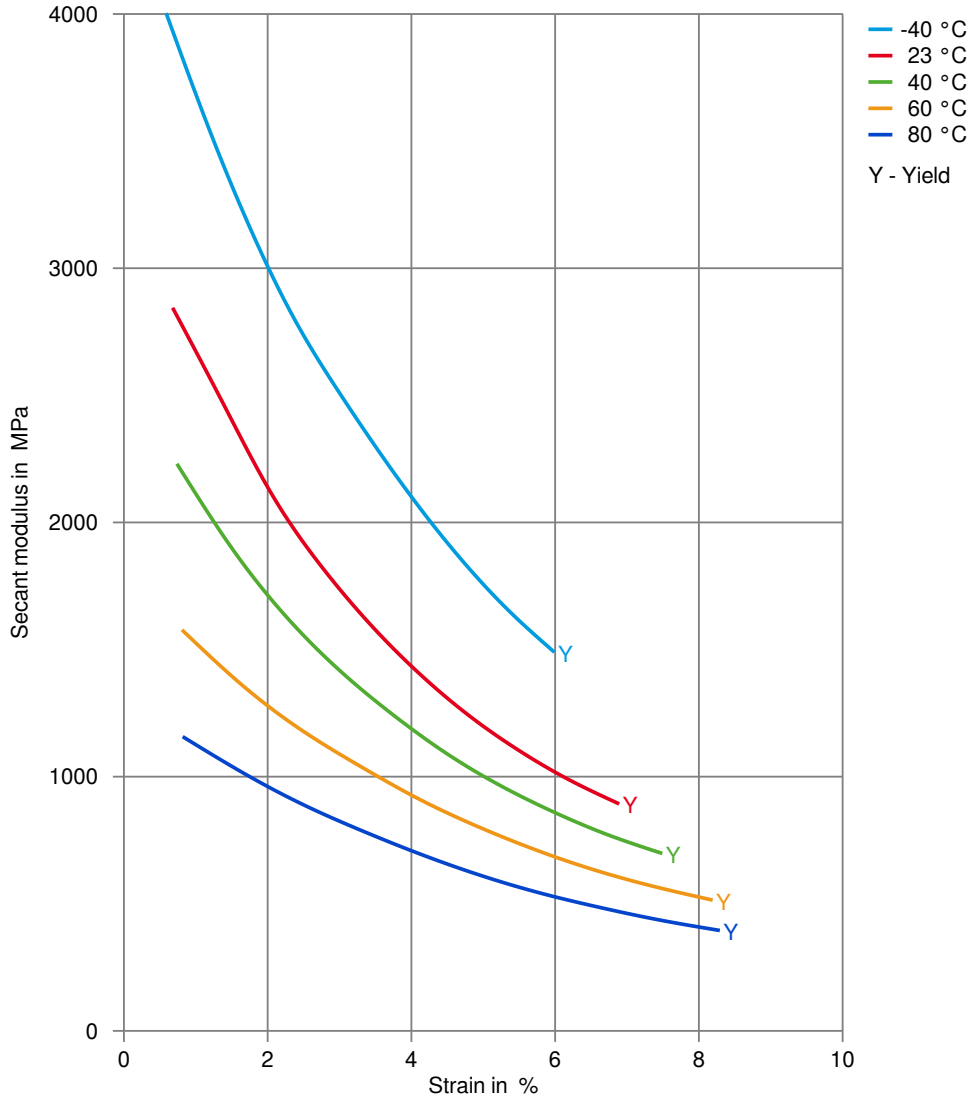
## Secant modulus-strain



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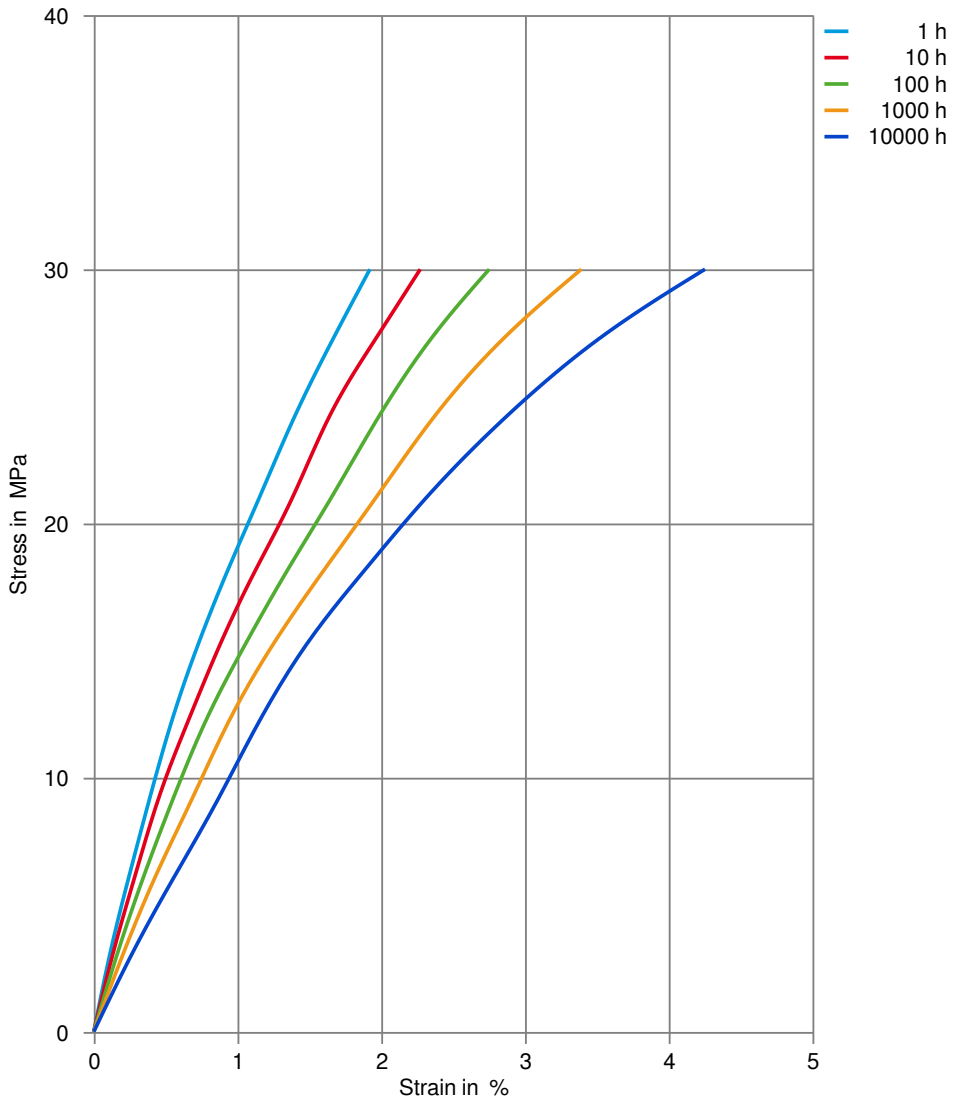
## Stress-strain (isochronous) 23 °C



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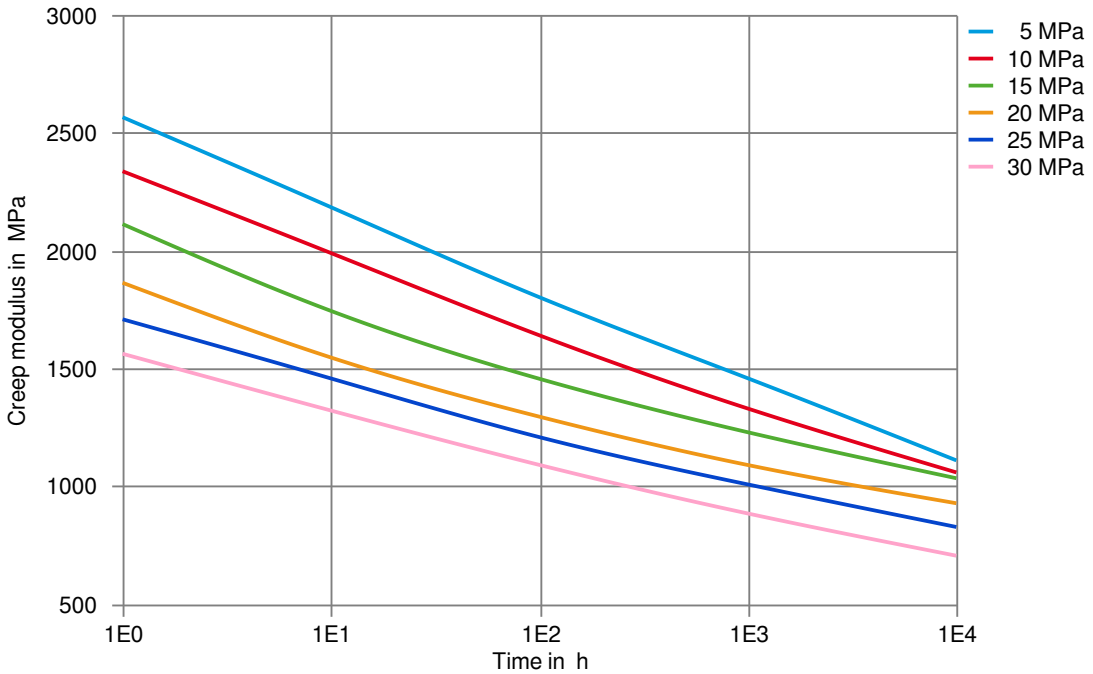
## Creep modulus-time 23 °C



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## Processing Texts

| | |
|---|---|
| Pre-drying | It is normally not necessary to dry HOSTAFORM. However, should there be surface moisture (condensate) on the molding compound as a result of incorrect storage, drying is required. A circulating air drying cabinet can be used for this purpose if the granul |
| Longer pre-drying times/storage | The product can then be stored in standard conditions until processed. |



Revised: 2023-02-23 Source: Celanese Materials Database