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# HOSTAFORM® C 9021 XAP® LS colored
## HOSTAFORM®

POM copolymer injection molding grade with medium flow, UV stabilization and reduced emissions especially for automotive interior application. Available in colors. Good properties as 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)

## Product information

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

## 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 |
| Tensile stress at yield, 50mm/min | 64 | MPa | ISO 527-1/-2 |
| Tensile strain at yield, 50mm/min | 9 | % | ISO 527-1/-2 |
| Nominal strain at break | 30 | % | ISO 527-1/-2 |
| Flexural modulus | 2700 | MPa | ISO 178 |
| Flexural strength | 89 | 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 |
| Poisson's ratio | 0.37[C] | | |

[P]: Partial Break

[C]: Calculated

## Thermal properties

| | | | |
|---|---|---|---|
| Melting temperature, 10 °C/min | 166 | °C | ISO 11357-1/-3 |
| Temperature of deflection under load, 1.8 MPa | 104 | °C | ISO 75-1/-2 |
| Coefficient of linear thermal expansion (CLTE), parallel | 110 | E-6/K | ISO 11359-1/-2 |
| Coefficient of linear thermal expansion (CLTE), normal | 110 | E-6/K | ISO 11359-1/-2 |
| Thermal conductivity of melt | 0.155 | W/(m K) | ISO 22007-2 |
| Effective thermal diffusivity, flow | 4.85E-8 | $m^2/s$ | ISO 22007-4 |
| Specific heat capacity of melt | 2210 | J/(kg K) | ISO 22007-4 |

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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 | 600 | | IEC 60112 |

## Physical/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 |

## 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 |
| Ejection temperature | 140 | °C |

## Characteristics

| | |
|---|---|
| Processing | Injection Moulding |
| Delivery form | Pellets |
| Additives | Release agent |
| Special characteristics | U.V. stabilised or stable to weather, Low emissions |

## Additional information

Processing Notes

### 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

### Storage

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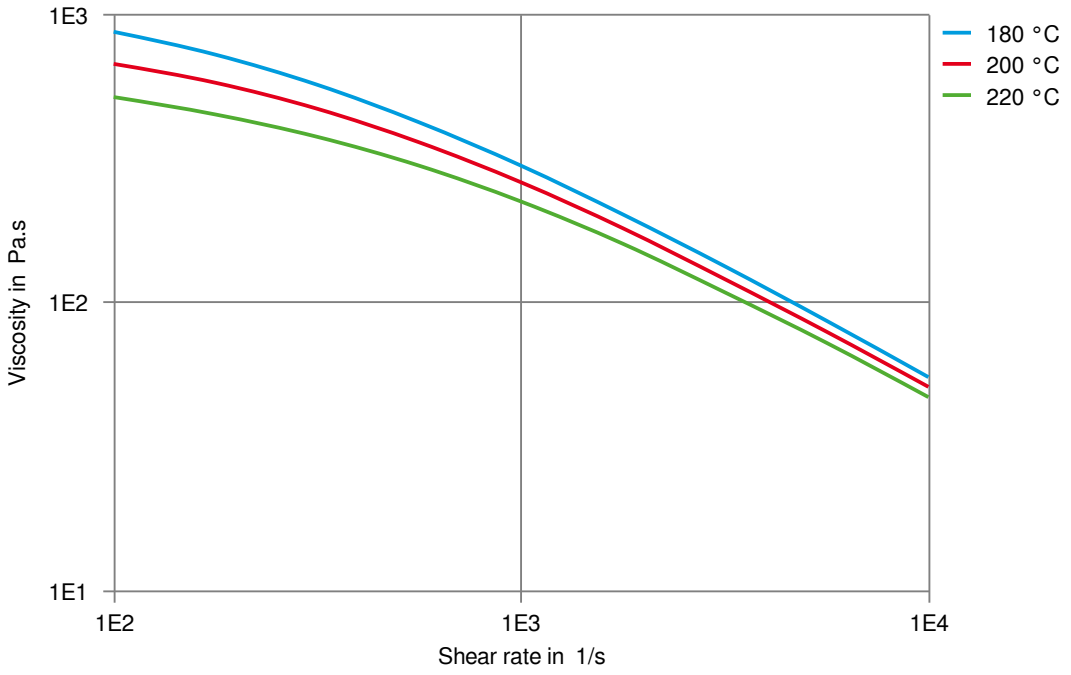
The product can then be stored in standard conditions until processed.

## Viscosity-shear rate



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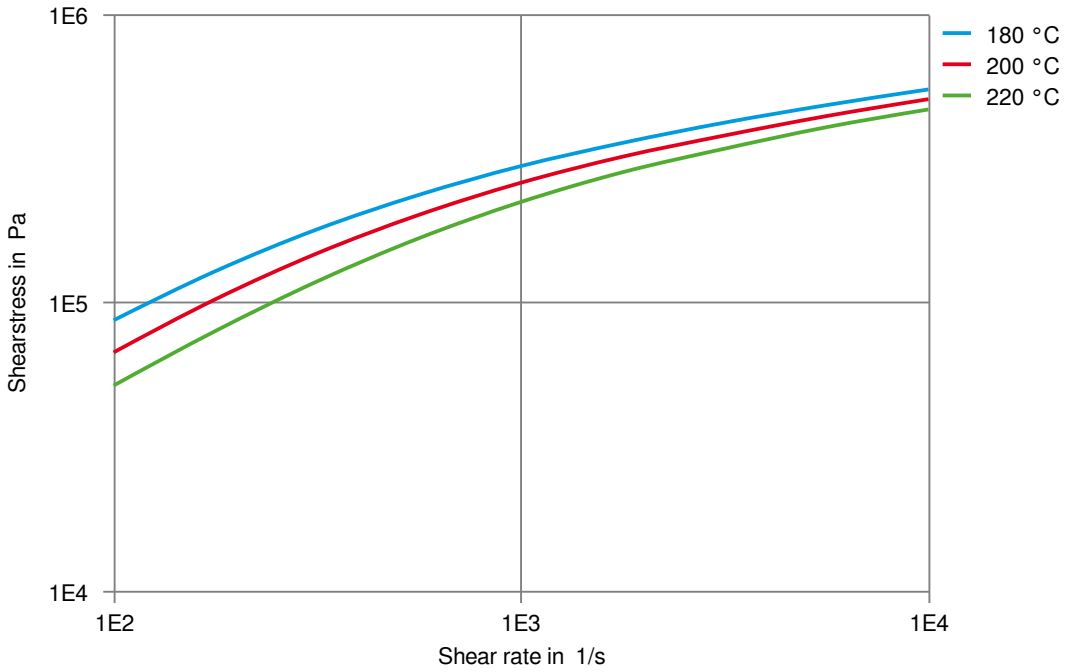
## Shearstress-shear rate



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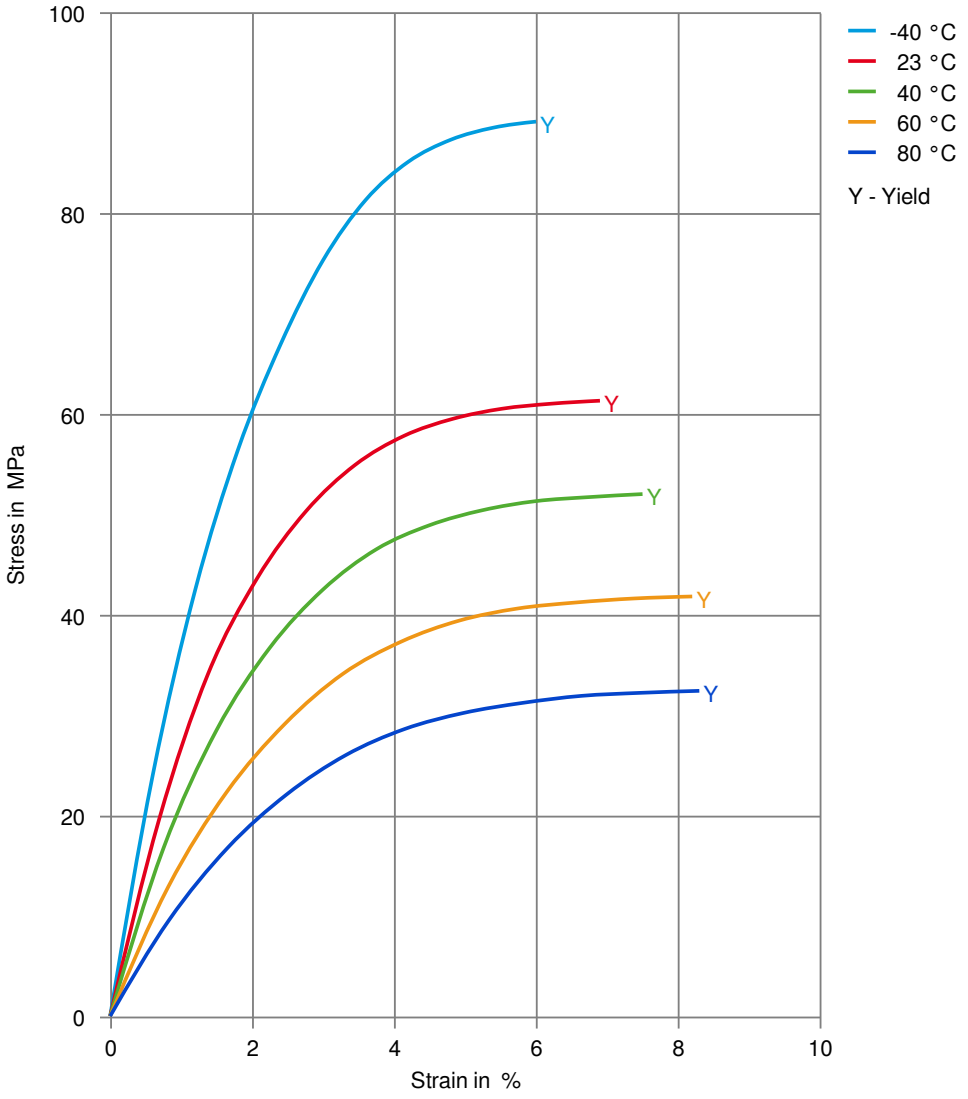
## Stress-strain



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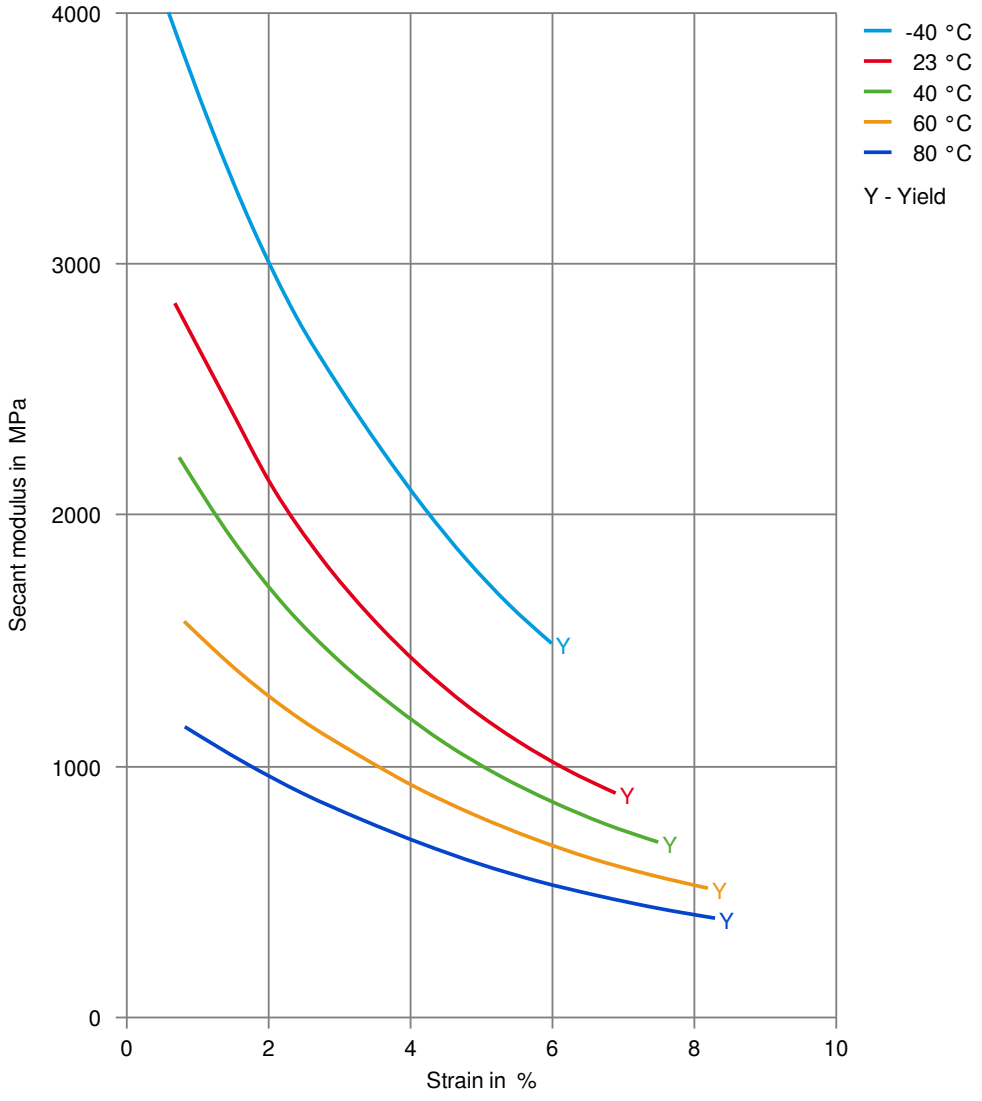
## Secant modulus-strain



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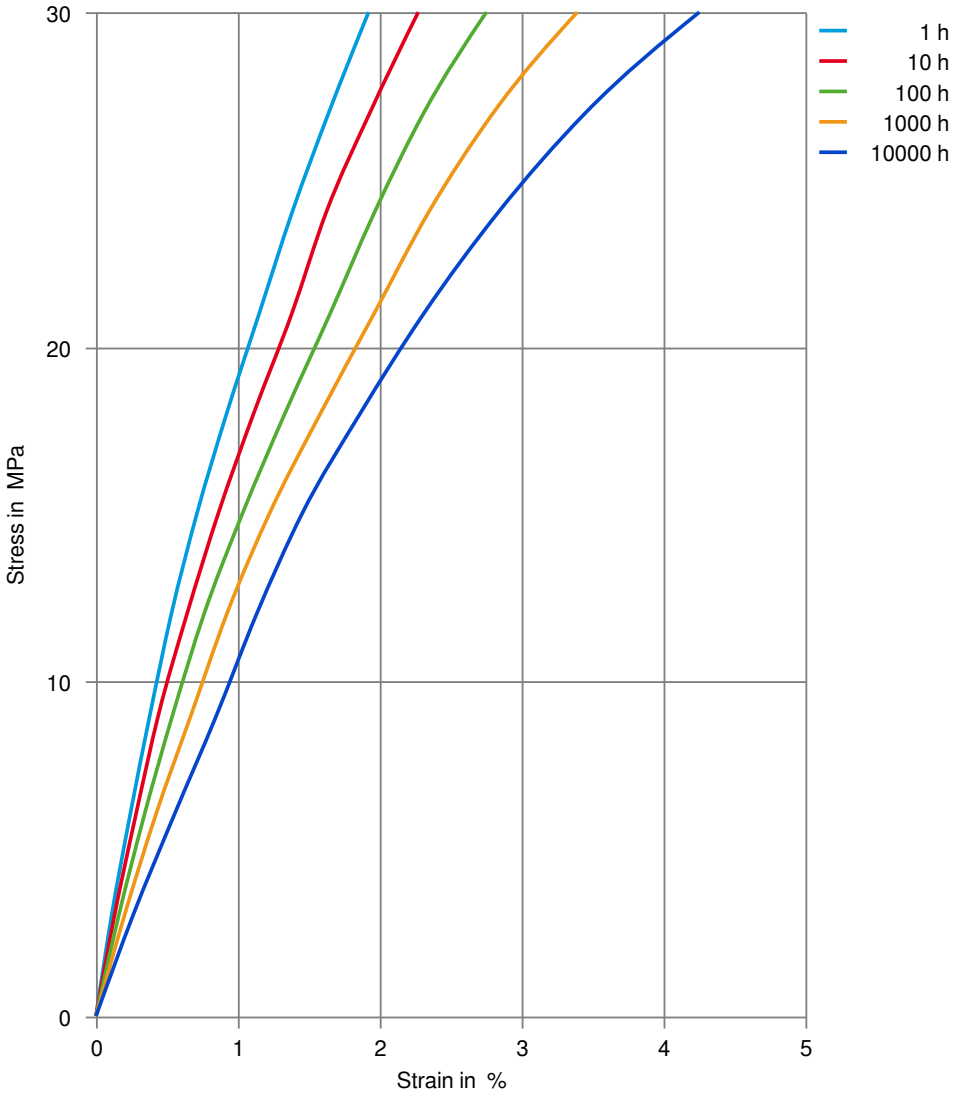
## Stress-strain (isochronous) 23 °C



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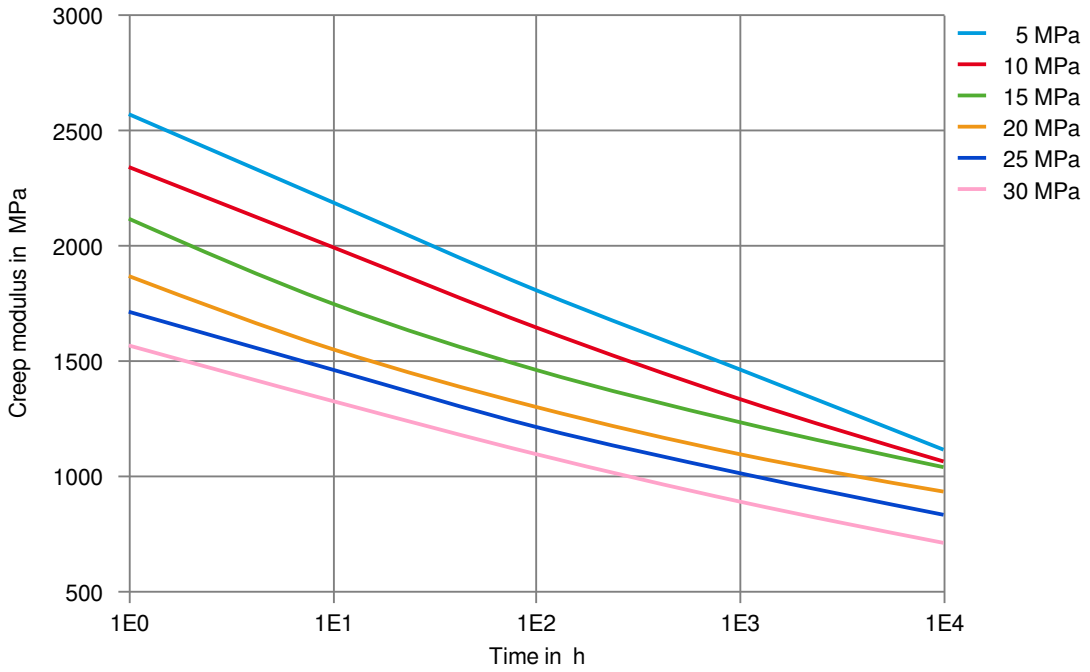
### Creep modulus-time 23 °C



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