

HOSTAFORM® C 13021 10/1570

POM copolymer

Easy flowing Injection molding type for precision molded parts and thin-walled molded parts with 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. With a high amount of carbon black . Ranges of applications: automotive engineering, especially out door applications

Rheological properties

| | | |
|------------------------------|---------------------------|-----------------|
| Melt volume-flow rate | 12 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 | 2900 MPa | ISO 527-1/-2 |
| Yield stress, 50mm/min | 65 MPa | ISO 527-1/-2 |
| Yield strain, 50mm/min | 9 % | ISO 527-1/-2 |
| Nominal strain at break | 25 % | ISO 527-1/-2 |
| Flexural Modulus | 2800 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 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 | 143 MPa | ISO 2039-1 |

Thermal properties

| | | |
|---|---------------|----------------|
| Melting temperature, 10°C/min | 166 °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa | 106 °C | ISO 75-1/-2 |
| Vicat softening temperature, 50°C/h, 50N | 151 °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 110 E-6/K | ISO 11359-1/-2 |
| Thermal conductivity of melt | 0.155 W/(m K) | Internal |
| Spec. heat capacity of melt | 2210 J/(kg K) | Internal |

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 |

HOSTAFORM® C 13021 10/1570

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

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

4 MPa

Injection speed

slow-medium

Ejection temperature

140 °C

Internal

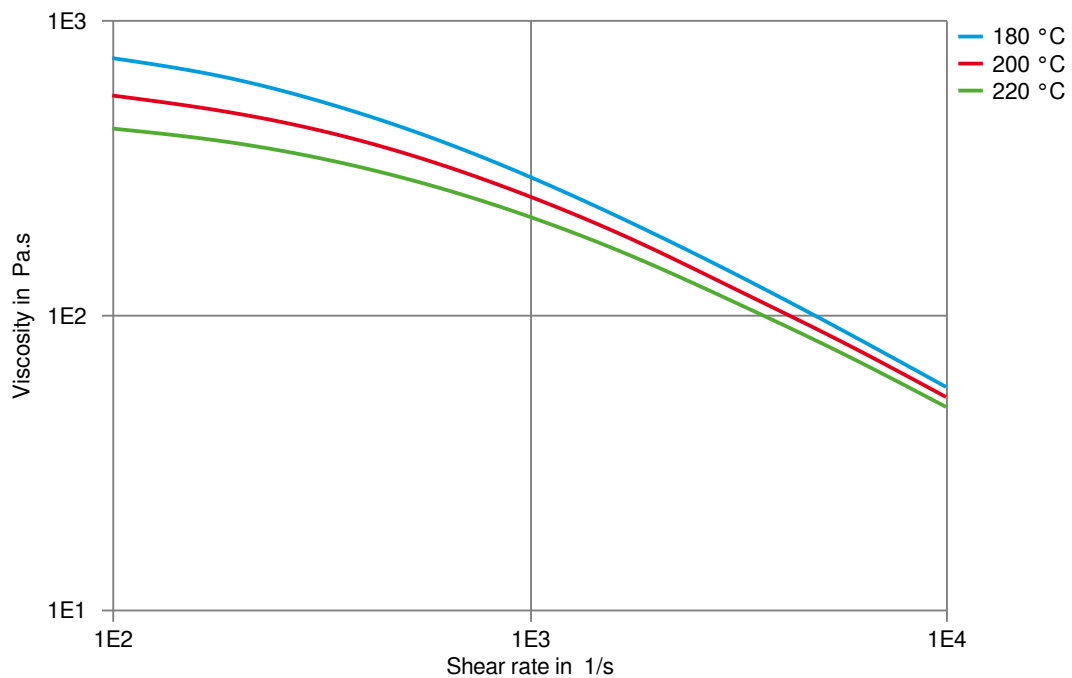
Characteristics

Additives

Release agent

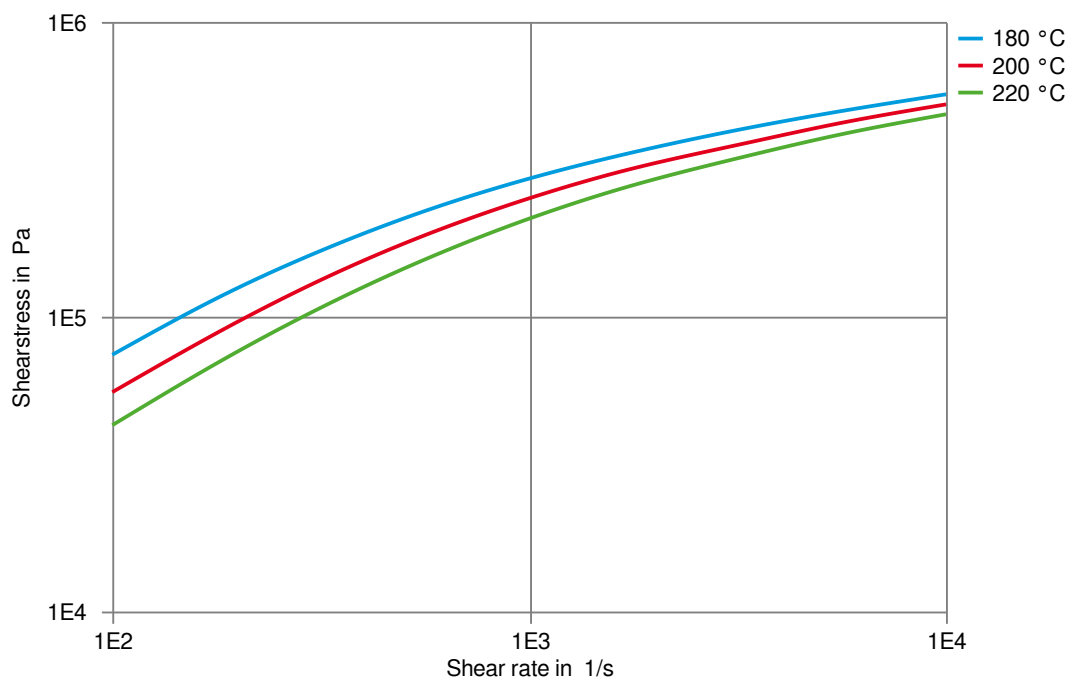
HOSTAFORM® C 13021 10/1570

Viscosity-shear rate



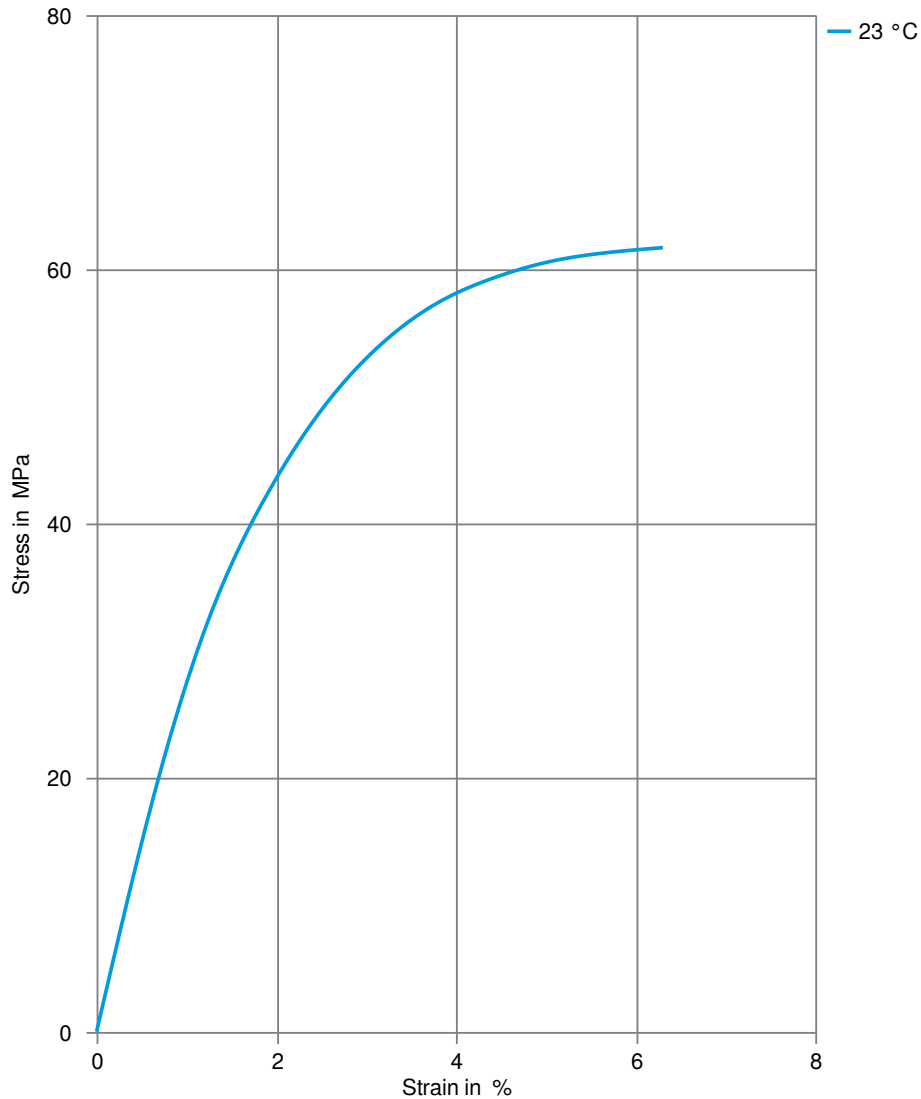
HOSTAFORM® C 13021 10/1570

Shearstress-shear rate



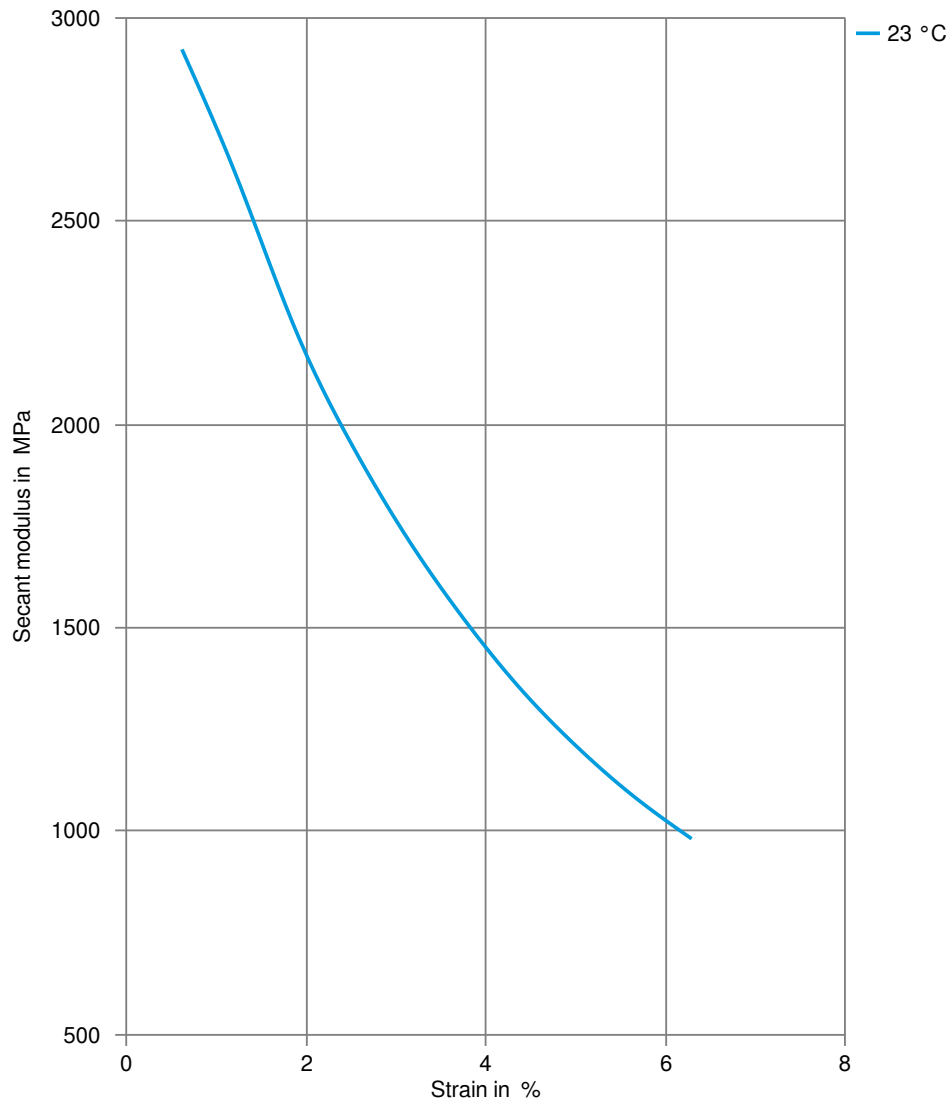
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Stress-strain



HOSTAFORM® C 13021 10/1570

Secant modulus-strain



HOSTAFORM® C 13021 10/1570

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.

Other Approvals

Other Approvals

| OEM | Specification |
|-------|---------------|
| Bosch | N28 BN22-O027 |