# HOSTAFORM® XGC10 XAP®

High strength glass coupled
Hostaform® XGC10 XAP® is an acetal copolymer reinforced with approximately 10% glass fibers. Compared to the Hostaform® C 9021 GV 1/10, Hostaform® XGC10 XAP® has a higher strength and lower emissions.
Emissions according to VDA 275 < 10 ppm [mg/kg].

## Rheological properties

| | | | |
|---|---|---|---|
| Melt volume-flow rate | 3 | $cm^3$/10min | ISO 1133 |
| Temperature | 190 | °C | |
| Load | 2.16 | kg | |
| Moulding shrinkage, parallel | 1.2 | % | ISO 294-4, 2577 |
| Moulding shrinkage, normal | 1.1 | % | ISO 294-4, 2577 |

## Typical mechanical properties

| | | | |
|---|---|---|---|
| Tensile Modulus | 4800 | MPa | ISO 527-1/-2 |
| Stress at break, 5mm/min | 110 | MPa | ISO 527-1/-2 |
| Strain at break, 5mm/min | 4.9 | % | ISO 527-1/-2 |
| Flexural Modulus | 4200 | MPa | ISO 178 |
| Shear Modulus | 1550 | MPa | ISO 6721 |
| Charpy impact strength, 23°C | 60 | $kJ/m^2$ | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 8.5 | $kJ/m^2$ | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 7 | $kJ/m^2$ | ISO 179/1eA |

## Thermal properties

| | | | |
|---|---|---|---|
| Melting temperature, 10°C/min | 166 | °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa | 154 | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | 60 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 80 | E-6/K | ISO 11359-1/-2 |

## Other properties

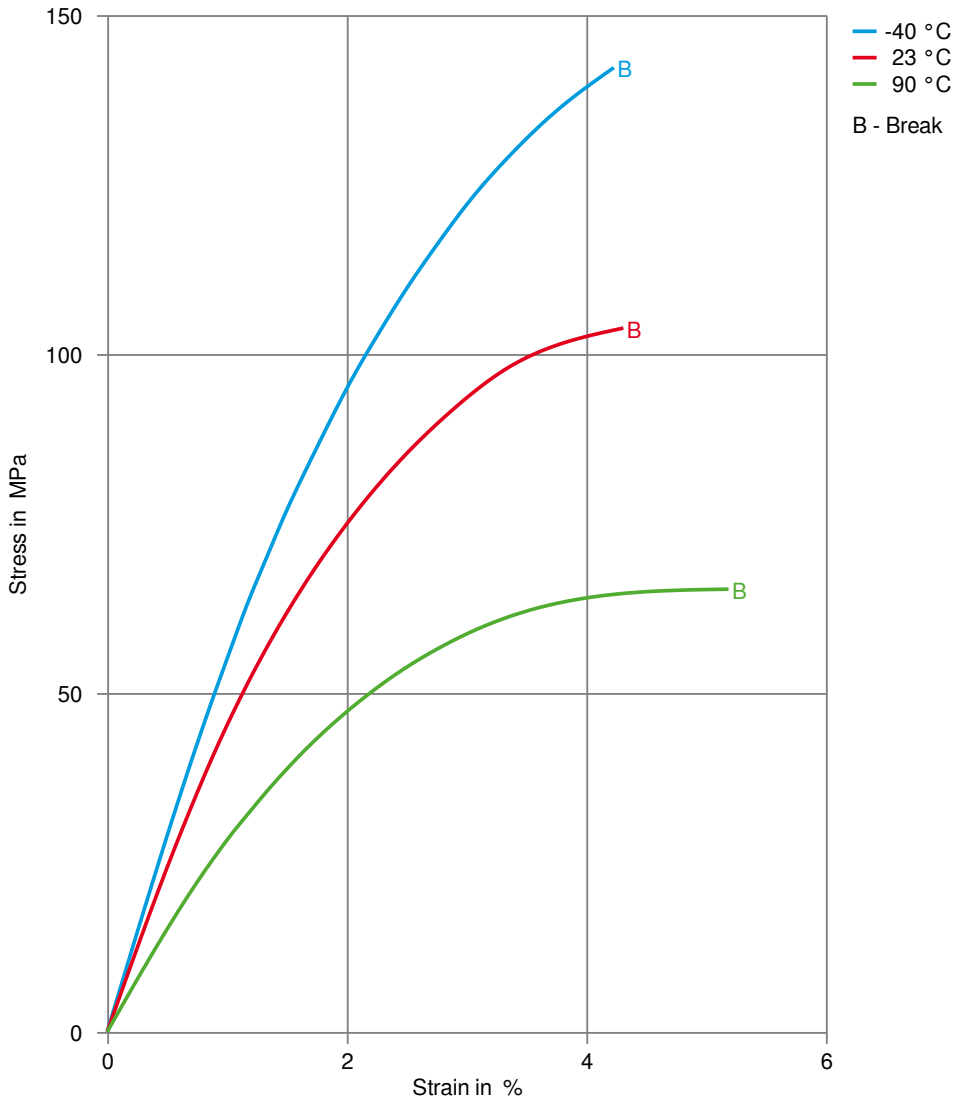
| | | | |
|---|---|---|---|
| Density | 1480 | $kg/m^3$ | ISO 1183 |

## Injection

| | | | |
|---|---|---|---|
| Drying Temperature | 100 - 120 | °C | |
| Drying Time, Dehumidified Dryer | 3 - 4 | h | |
| Processing Moisture Content | 0.15 | % | |
| Melt Temperature Optimum | 210 | °C | Internal |
| Screw tangential speed | 0.2 - 0.21 | m/s | |
| Max. mould temperature | 80 - 120 | °C | |
| Back pressure | 2 | MPa | |
| Injection speed | slow | | |

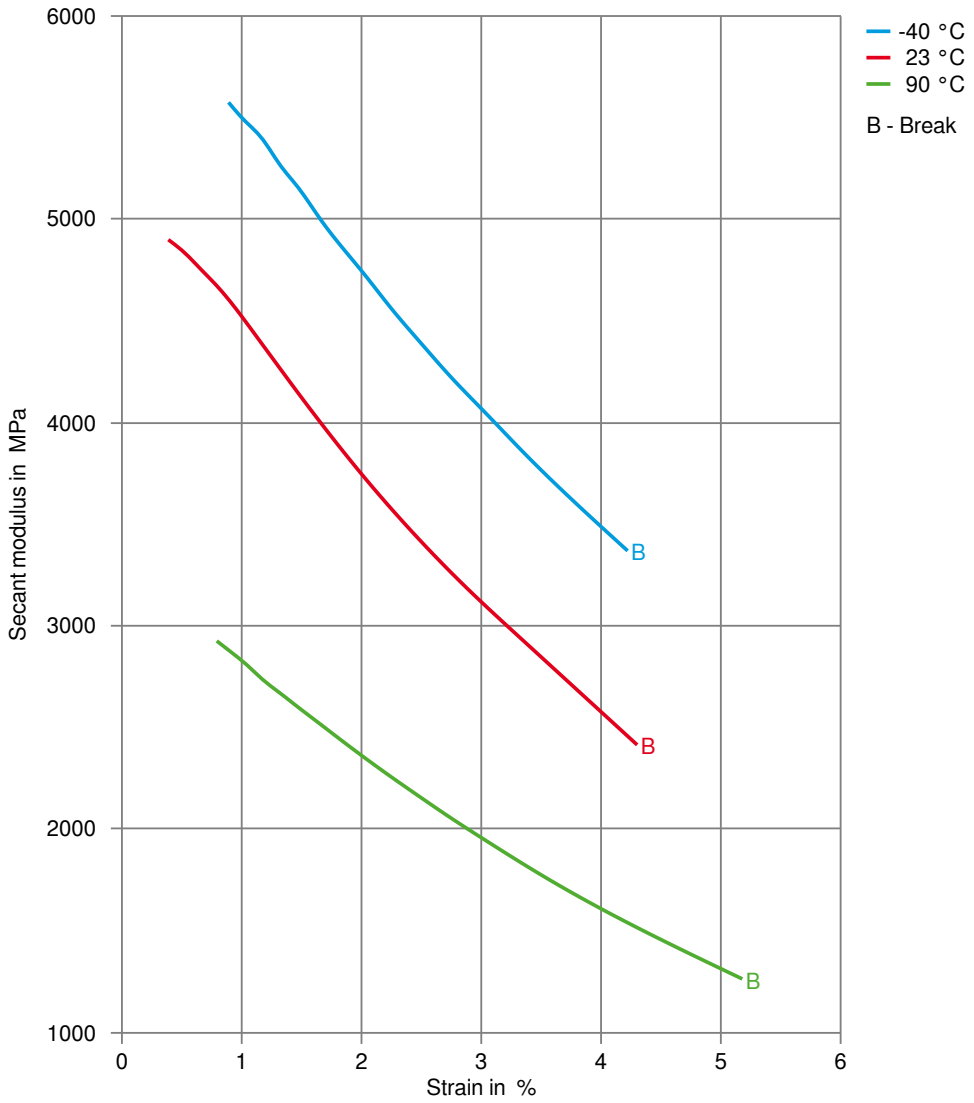
# HOSTAFORM® XGC10 XAP®

## Stress-strain



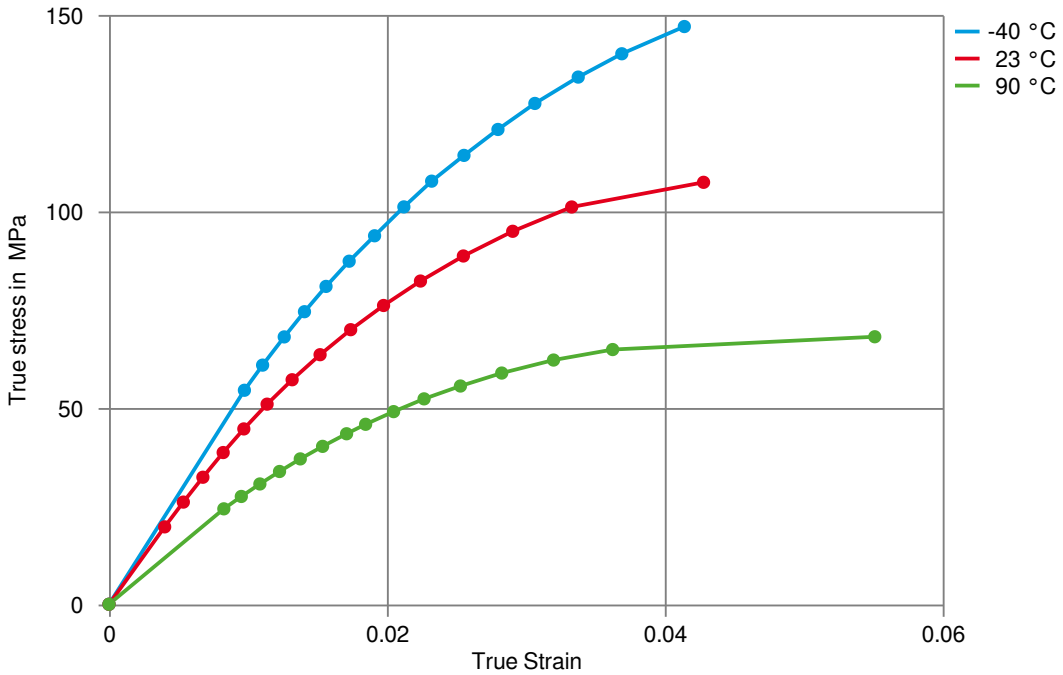
# HOSTAFORM® XGC10 XAP®

## Secant modulus-strain



# HOSTAFORM® XGC10 XAP®

## True stress-strain



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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. |



Revised: 2023-02-27 Source: Celanese Materials Database