

HOSTAFORM® XT 20

Highly Impact Modified

Hostaform® acetal copolymer grade XT 20 is a highly impact modified grade for demanding applications. Hostaform® XT 20 provides exceptional impact strength and flexibility over standard impact modified acetal copolymer grades. Chemical abbreviation according to ISO 1043-1: POM-HI

Rheological properties

| | | |
|------------------------------|--------------------------|-----------------|
| Melt volume-flow rate | 1 cm ³ /10min | ISO 1133 |
| Temperature | 190 °C | |
| Load | 2.16 kg | |
| Moulding shrinkage, parallel | 1.4 % | ISO 294-4, 2577 |
| Moulding shrinkage, normal | 1.2 % | ISO 294-4, 2577 |

Typical mechanical properties

| | | |
|---------------------------------------|-----------------------|--------------|
| Tensile Modulus | 1200 MPa | ISO 527-1/-2 |
| Yield stress, 50mm/min | 35 MPa | ISO 527-1/-2 |
| Yield strain, 50mm/min | 25 % | ISO 527-1/-2 |
| Flexural Modulus | 1100 MPa | ISO 178 |
| Flexural Stress at 3.5% | 31 MPa | ISO 178 |
| Shear Modulus | 440 MPa | ISO 6721 |
| Charpy impact strength, 23°C | NB kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C | NB kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 100 kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 15 kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, 23°C | 85 kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -40°C | 14 kJ/m ² | ISO 180/1A |
| Poisson's ratio | 0.498 | |

Thermal properties

| | | |
|---|-----------|----------------|
| Melting temperature, 10°C/min | 166 °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa | 64 °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 124 °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | 120 E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 120 E-6/K | ISO 11359-1/-2 |

Other properties

| | | |
|--------------------------|------------------------|----------------|
| Humidity absorption, 2mm | 0.25 % | Sim. to ISO 62 |
| Water absorption, 2mm | 0.8 % | Sim. to ISO 62 |
| Density | 1330 kg/m ³ | ISO 1183 |

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Injection

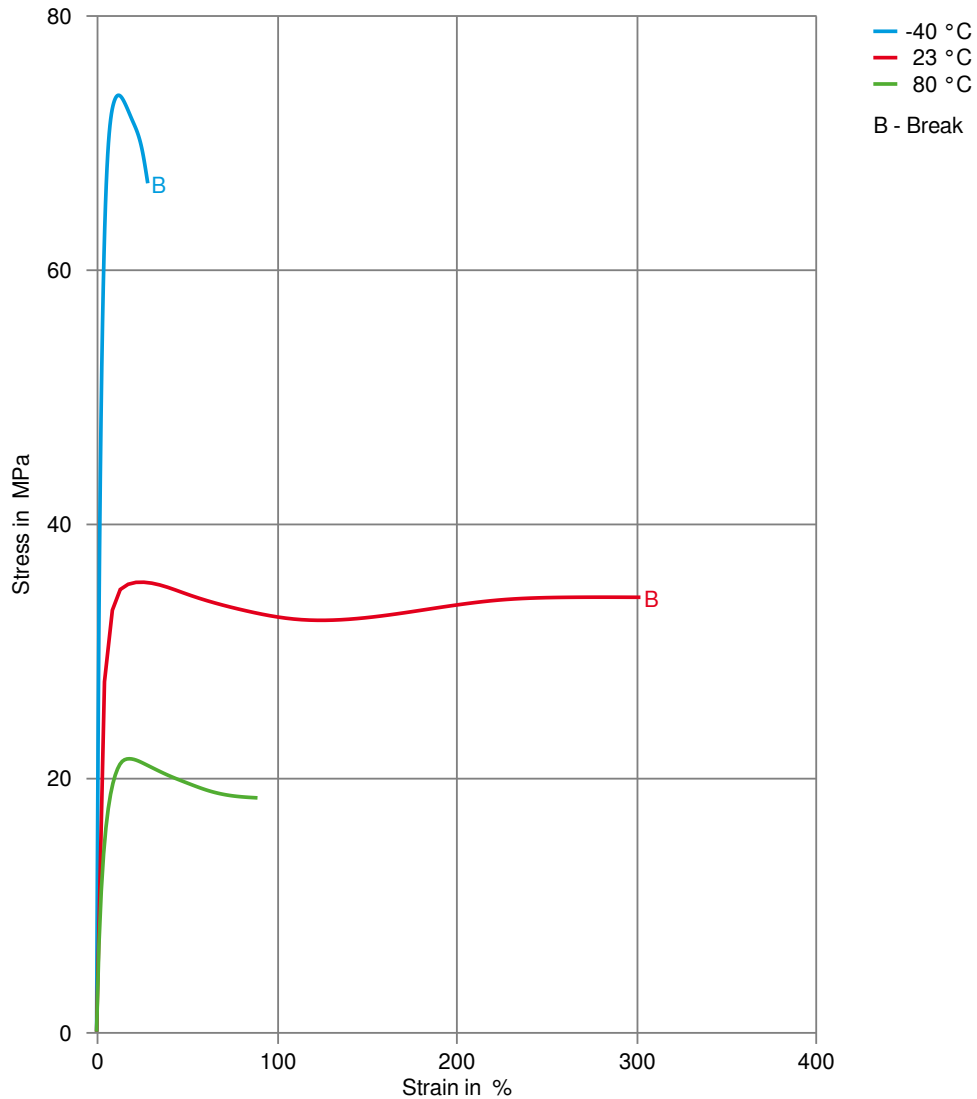
| | | |
|---------------------------------|--------------|----------|
| Drying Temperature | 100 - 120 °C | |
| Drying Time, Dehumidified Dryer | 3 - 4 h | |
| Melt Temperature Optimum | 200 °C | Internal |
| Max. mould temperature | 60 - 80 °C | |
| Back pressure | 2 MPa | |
| Injection speed | slow | |

Characteristics

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

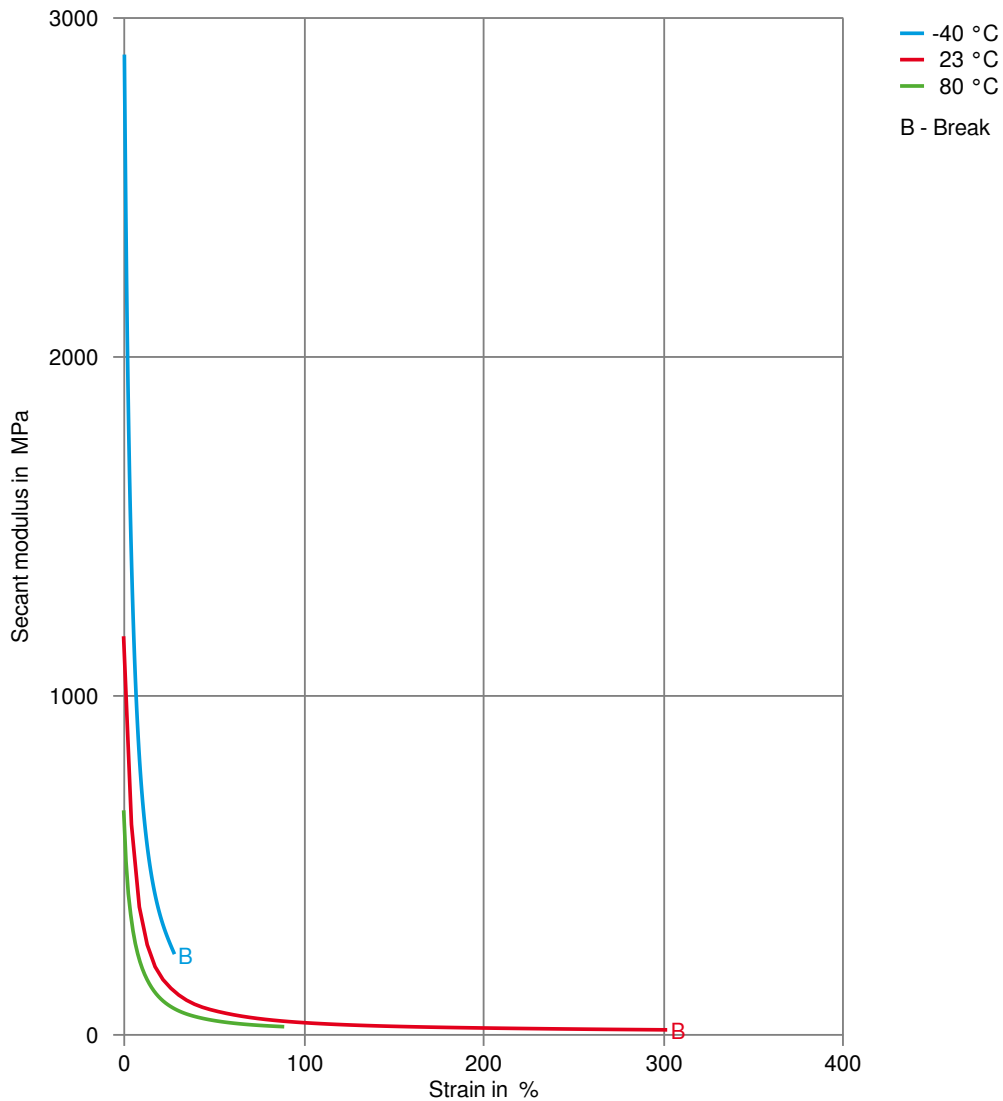
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Stress-strain



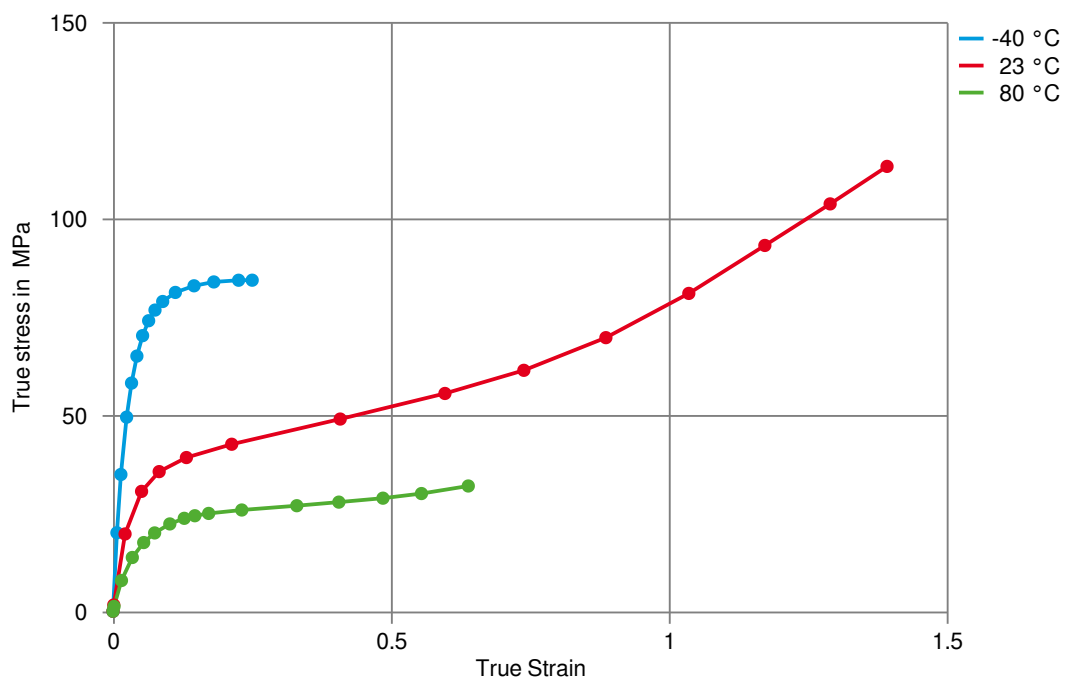
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Secant modulus-strain



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True stress-strain



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Processing Texts

Pre-drying

Drying is suggested specially if material has come in contact with moisture through storage, handling or regrind use. Dry to prevent splay and odor problems.

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