

HOSTAFORM® LX90Z ECO-B

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Hostaform® LX90Z specialty metallic appearance grades are an integrally colored nominal 9 melt flow rate based acetal copolymer material stabilized for use where ultraviolet radiation exposure is to be encountered. The material is formulated to prevent discoloration, fading, chalking and mechanical property change in severe ultraviolet exposure. This product, formerly called Celcon® UV90Z metallics, is available in many molded-in-color metallic colors formulated for the interior automotive market and other applications. Besides material, optimal finish for specialty metallic parts is dependent on proper drying, gate design, knit line locations, and special processing. Please contact Celanese Technical Service for assistance with your application.

ECO-B: Hostaform® ECO-B is a POM-Copolymer with the same properties and performance as standard grades but produced with sustainability in mind. Using a mass-balance approach, biogenic feedstocks are used to offset the use of fossil-based raw materials and decrease greenhouse gas emissions. The process is audited and certified according to the ISCC Plus mass balance approach.

Product information

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

Rheological properties

| | | |
|------------------------------|-------|-----------------|
| Moulding shrinkage, parallel | 2.3 % | ISO 294-4, 2577 |
| Moulding shrinkage, normal | 1.4 % | ISO 294-4, 2577 |

Typical mechanical properties

| | | |
|---------------------------------------|-----------------------|--------------|
| Tensile modulus | 2800 MPa | ISO 527-1/-2 |
| Tensile stress at yield, 50mm/min | 54 MPa | ISO 527-1/-2 |
| Tensile strain at yield, 50mm/min | 10 % | ISO 527-1/-2 |
| Flexural modulus | 2850 MPa | ISO 178 |
| Flexural stress at 3.5% | 67 MPa | ISO 178 |
| Charpy notched impact strength, 23°C | 4 kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 4 kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, 23°C | 5 kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -40°C | 4.0 kJ/m ² | ISO 180/1A |
| Poisson's ratio | 0.37 ^[C] | |

[C]: Calculated

Thermal properties

| | | |
|--|-----------|----------------|
| Melting temperature, 10°C/min | 165 °C | ISO 11357-1/-3 |
| Temperature of deflection under load, 1.8 MPa | 88 °C | ISO 75-1/-2 |
| Temperature of deflection under load, 0.45 MPa | 151 °C | ISO 75-1/-2 |
| Coefficient of linear thermal expansion (CLTE), parallel | 90 E-6/K | ISO 11359-1/-2 |
| Coefficient of linear thermal expansion (CLTE), normal | 100 E-6/K | ISO 11359-1/-2 |

Physical/Other properties

| | | |
|--------------------------|------------------------|----------------|
| Humidity absorption, 2mm | 0.2 % | Sim. to ISO 62 |
| Water absorption, 2mm | 0.75 % | Sim. to ISO 62 |
| Density | 1430 kg/m ³ | ISO 1183 |

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Injection

| | |
|---------------------------------|--------------|
| Drying Recommended | no |
| Drying Temperature | 100 °C |
| Drying Time, Dehumidified Dryer | 3 - 4 h |
| Processing Moisture Content | ≤0.2 % |
| Melt Temperature Optimum | 190 °C |
| Min. melt temperature | 180 °C |
| Max. melt temperature | 195 °C |
| Screw tangential speed | ≤0.3 m/s |
| Mold Temperature Optimum | 110 °C |
| Min. mould temperature | 100 °C |
| Max. mould temperature | 125 °C |
| Hold pressure range | 60 - 120 MPa |
| Back pressure | 4 MPa |

Characteristics

| | |
|-------------------------|---|
| Processing | Injection Moulding, Extrusion |
| Delivery form | Pellets |
| Additives | Release agent |
| Special characteristics | Light stabilised or stable to light, U.V. stabilised or stable to weather, Specialty appearance |
| Sustainability | Bio-Content |

Additional information

Processing Notes

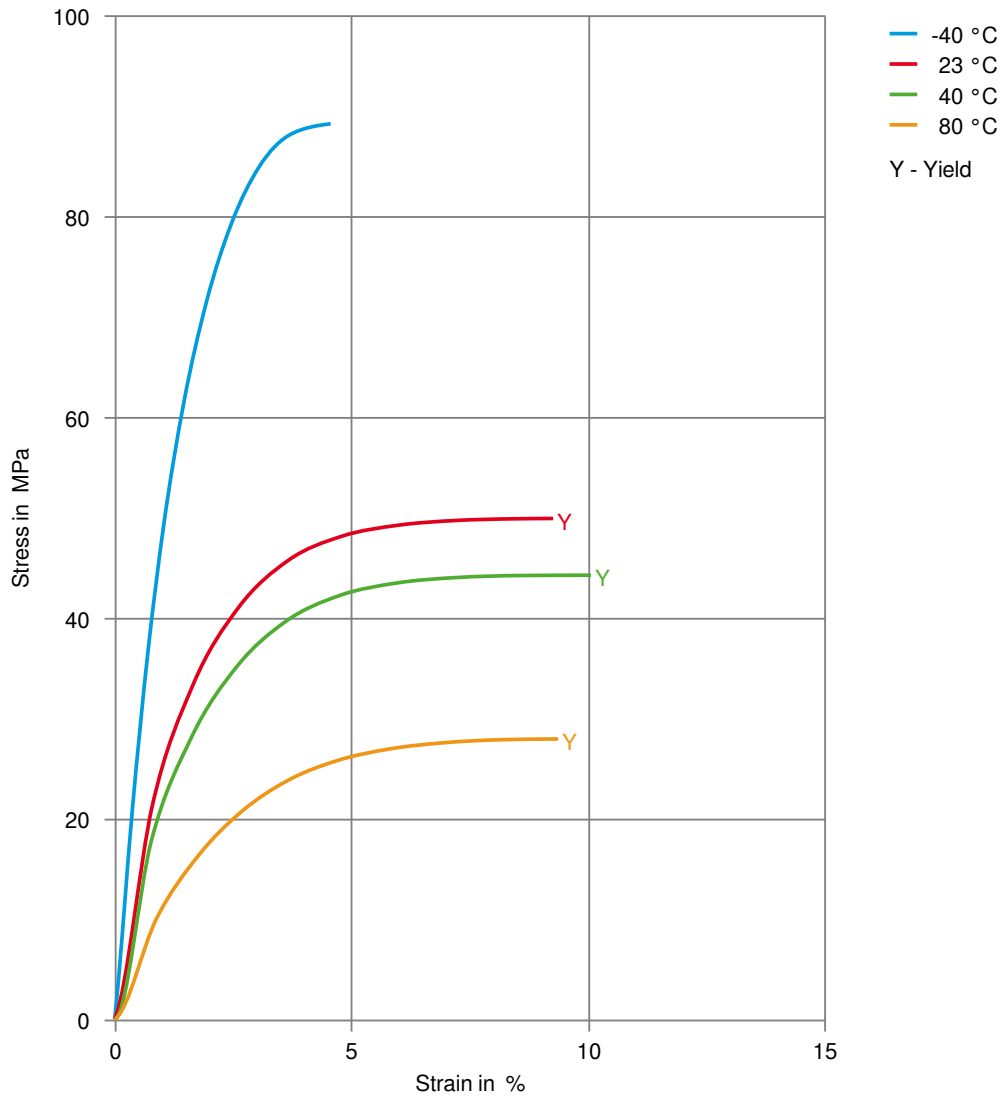
Pre-Drying

Drying is required for this material to prevent poor appearance and performance of the part.

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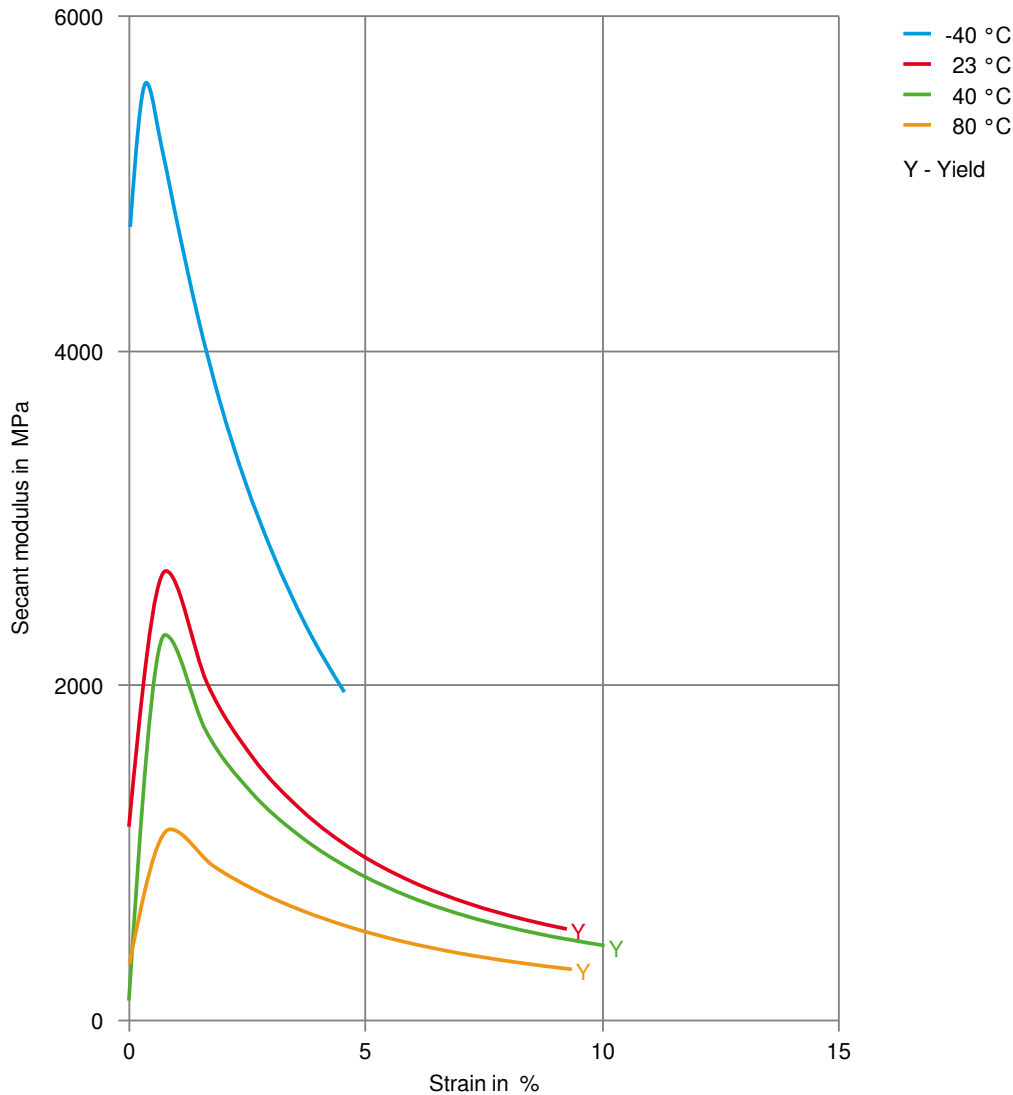
Stress-strain



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Secant modulus-strain



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