

# HOSTAFORM® LX90Z ECO-B

Specialty metallic appearance UV resistant grade for interior automotive

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.

## Rheological properties

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

## Typical mechanical properties

|                                       |                     |              |
|---------------------------------------|---------------------|--------------|
| Tensile Modulus                       | 2800 MPa            | ISO 527-1/-2 |
| Yield stress, 50mm/min                | 54 MPa              | ISO 527-1/-2 |
| Yield strain, 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 <sup>2</sup> | ISO 179/1eA  |
| Charpy notched impact strength, -30°C | 4 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Izod notched impact strength, 23°C    | 5 kJ/m <sup>2</sup> | ISO 180/1A   |
| Izod notched impact strength, -40°C   | 4 kJ/m <sup>2</sup> | ISO 180/1A   |

## Thermal properties

|                                             |           |                |
|---------------------------------------------|-----------|----------------|
| Melting temperature, 10°C/min               | 166 °C    | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa     | 88 °C     | ISO 75-1/-2    |
| Temp. of deflection under load, 0.45 MPa    | 151 °C    | ISO 75-1/-2    |
| Coeff. of linear therm. expansion, parallel | 90 E-6/K  | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal   | 100 E-6/K | ISO 11359-1/-2 |

## Other properties

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



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## Injection

|                                 |              |
|---------------------------------|--------------|
| Drying Temperature              | 100 - 120 °C |
| Drying Time, Dehumidified Dryer | 3 - 4 h      |
| Max. mould temperature          | 100 - 125 °C |
| Back pressure                   | 4 MPa        |
| Injection speed                 | slow         |

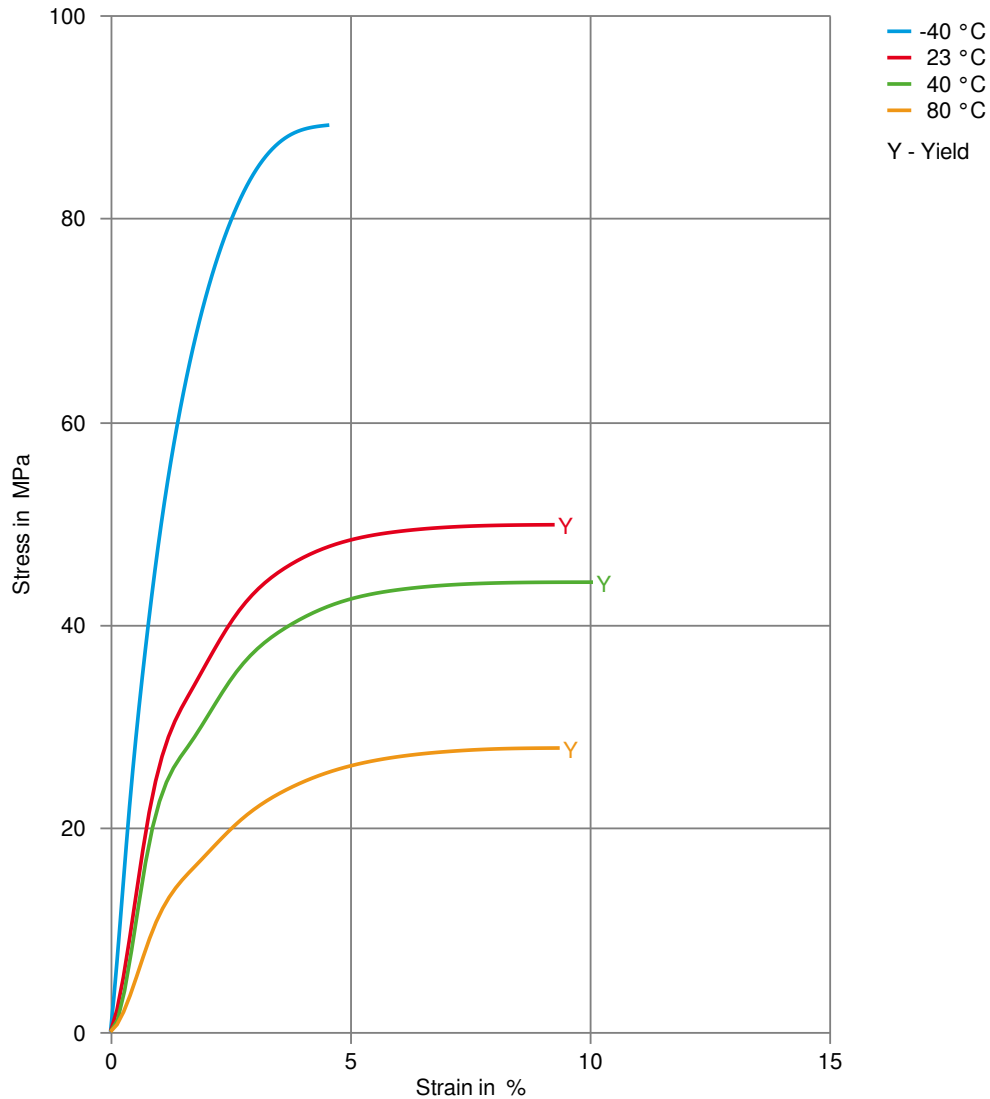
## Characteristics

|           |                         |
|-----------|-------------------------|
| Additives | Release agent, Biobased |
|-----------|-------------------------|



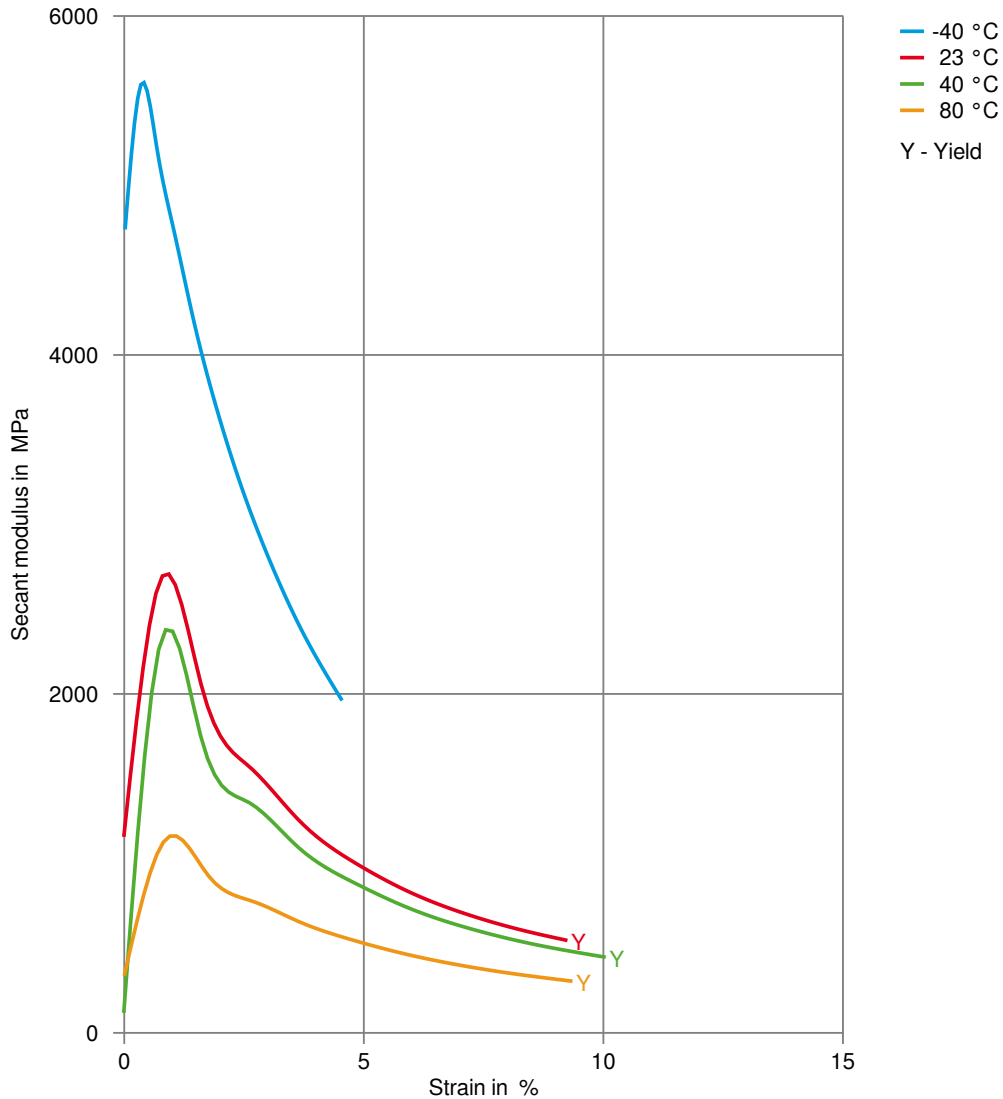
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## Stress-strain



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## Secant modulus-strain



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## Processing Texts

### Pre-drying

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

