

Low emission grade based on Celcon M90™ for interior automotive

Hostaform® acetal copolymer grade M90XAP® is a low emission version, medium viscosity polymer providing optimum performance in general purpose injection molding primarily for the interior automotive market. This grade provides overall excellent performance in many applications.

## Rheological properties

| Melt volume-flow rate        | 8 cm <sup>3</sup> /10min | ISO 1133        |
|------------------------------|--------------------------|-----------------|
| Temperature                  | 190 °C                   |                 |
| Load                         | 2.16 kg                  |                 |
| Moulding shrinkage, parallel | 1.8 %                    | ISO 294-4, 2577 |
| Moulding shrinkage, normal   | 1.8 %                    | ISO 294-4, 2577 |

# Typical mechanical properties

| Tensile Modulus                      | 2600 | MPa               | ISO 527-1/-2 |
|--------------------------------------|------|-------------------|--------------|
| Yield stress, 50mm/min               | 65   | MPa               | ISO 527-1/-2 |
| Yield strain, 50mm/min               | 9.5  | %                 | ISO 527-1/-2 |
| Flexural Modulus                     | 2560 | MPa               | ISO 178      |
| Flexural Stress at 3.5%              | 73   | MPa               | ISO 178      |
| Charpy notched impact strength, 23°C | 6.4  | kJ/m <sup>2</sup> | ISO 179/1eA  |
| Izod notched impact strength, 23°C   | 5.4  | 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     | 100 °C    | ISO 75-1/-2    |
| Temp. of deflection under load, 0.45 MPa    | 157 °C    | ISO 75-1/-2    |
| Vicat softening temperature, 50°C/h, 50N    | 160 °C    | ISO 306        |
| 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

| Density | 1410 kg/m <sup>3</sup>                | ISO 1183 |
|---------|---------------------------------------|----------|
|         | · · · · · · · · · · · · · · · · · · · |          |

## Injection

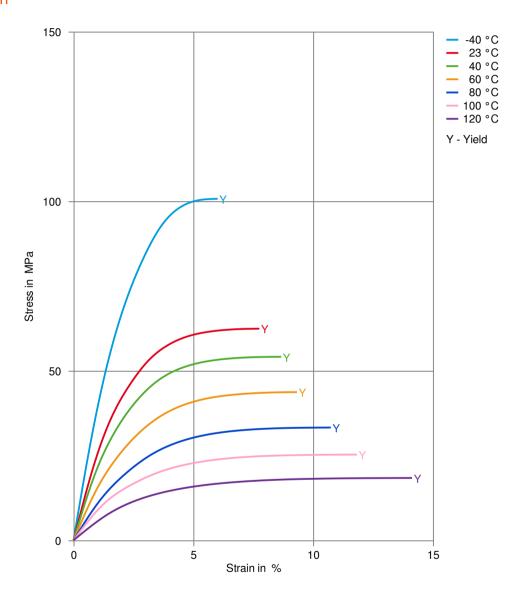
| Drying Temperature              | 100 - 120   | $^{\circ}\mathrm{C}$ |
|---------------------------------|-------------|----------------------|
| Drying Time, Dehumidified Dryer | 3 - 4       | h                    |
| Max. mould temperature          | 80 - 120    | °C                   |
| Back pressure                   | 4           | MPa                  |
| Injection speed                 | slow-medium |                      |

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#### Stress-strain

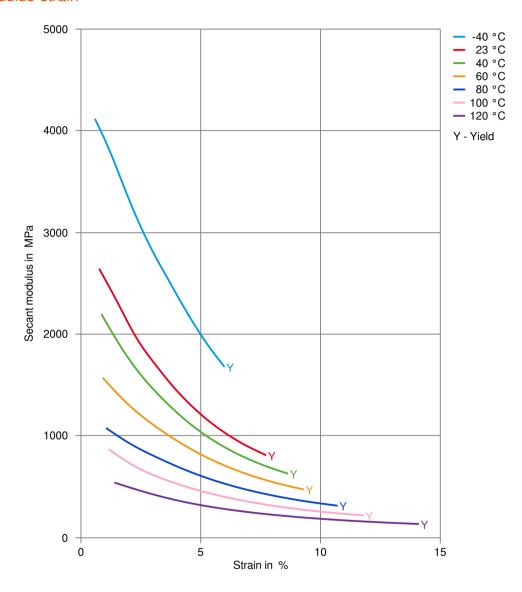


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## Secant modulus-strain



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#### **Processing Texts**

Pre-drying

Drying is recommended to obtain optimum emission performance. If material contacts moisture through improper storage or handling, drying may be necessary to prevent splay and odor issues.

## Other Approvals

Other Approvals

| OEM                           | Specification     | Additional Information |
|-------------------------------|-------------------|------------------------|
| Changan                       | MTS-F01-02-001-A3 | 2019                   |
| Mercedes-Benz Group (Daimler) | DBL 5410          |                        |
| Toyota                        | TSM5515G-1BV      |                        |

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