Celanese
The chemistry inside innovation™

HOSTAFORM® S 9364 ECO-C 772

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Hostaform® acetal copolymer grade S 9364 ECO-C 772 is highly impact modified grade for demanding applications. Hostaform® S 9364 ECO-C 772 provides a significant improvement in impact strength and flexibility over standard impact modified grades such as Hostaform® S 9362 and S 9363. Chemical abbreviation according to ISO 1043-1: POM-HI ECO-C: Hostaform® S 9364 ECO-C 772 incorporates circular content derived from captured carbon dioxide emissions in the finished product through mass balance allocation. The product is a drop-in replacement to the standard grade with the same performance and processing properties and contributes to the displacement of virgin fossil fuel resources. The feedstock utilizing captured carbon dioxide emissions is ISCC CFC certified as low carbon intensity methanol.

Product information

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

Rheological properties

Melt volume-flow rate	4	cm^3/10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	1.6	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.5	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	1650	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	43	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	16	%	ISO 527-1/-2
Flexural modulus	1550	MPa	ISO 178
Flexural stress at 3.5%	42	MPa	ISO 178
Charpy impact strength, 23°C	N	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	21	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	11	kJ/m^2	ISO 179/1eA
Izod notched impact strength, 23°C	20	kJ/m^2	ISO 180/1A
Izod notched impact strength, -30°C	12.0	kJ/m^2	ISO 180/1A
Izod notched impact strength, -40°C	10.0	kJ/m^2	ISO 180/1A
Izod impact strength, 23°C	N	kJ/m^2	ISO 180/1U
Izod impact strength, -30°C	N	kJ/m^2	ISO 180/1U
Hardness, Rockwell, M-scale	48		ISO 2039-2
Poisson's ratio	0.43		
Shore D hardness, 15s	76		ISO 48-4 / ISO 868

Thermal properties

Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	75	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	140	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	120	E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	110	E-6/K	ISO 11359-1/-2

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Physical/Other properties

Humidity absorption, 2mm	0.25	%	Sim. to ISO 62
Water absorption, 2mm	0.8	%	Sim. to ISO 62
Density	1360	kg/m³	ISO 1183

Injection

Drying Recommended	no	
Drying Temperature	100	°C
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	195	°C
Min. melt temperature	180	°C
Max. melt temperature	210	°C
Screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	65	°C
Min. mould temperature	60	°C
Max. mould temperature	70	°C
Hold pressure range	60 - 120	MPa
Back pressure	2	MPa
Ejection temperature	127	°C

Characteristics

Processing	Injection Moulding, Extrusion
Delivery form	Pellets
Additives	Release agent
Special characteristics	High impact or impact modified
Sustainability	Carbon Capture

Additional information

Processing Notes

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 to prevent splay and odor problems.

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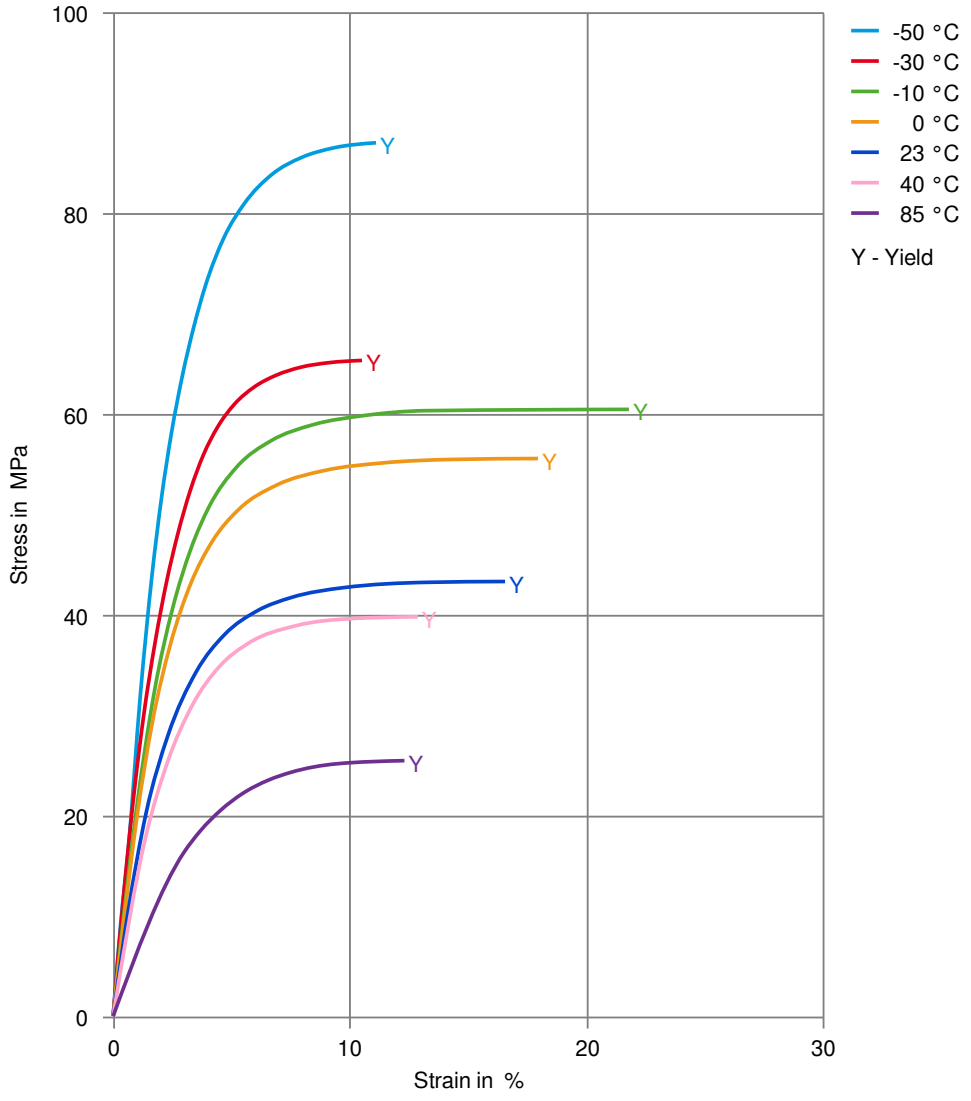
Stress-strain



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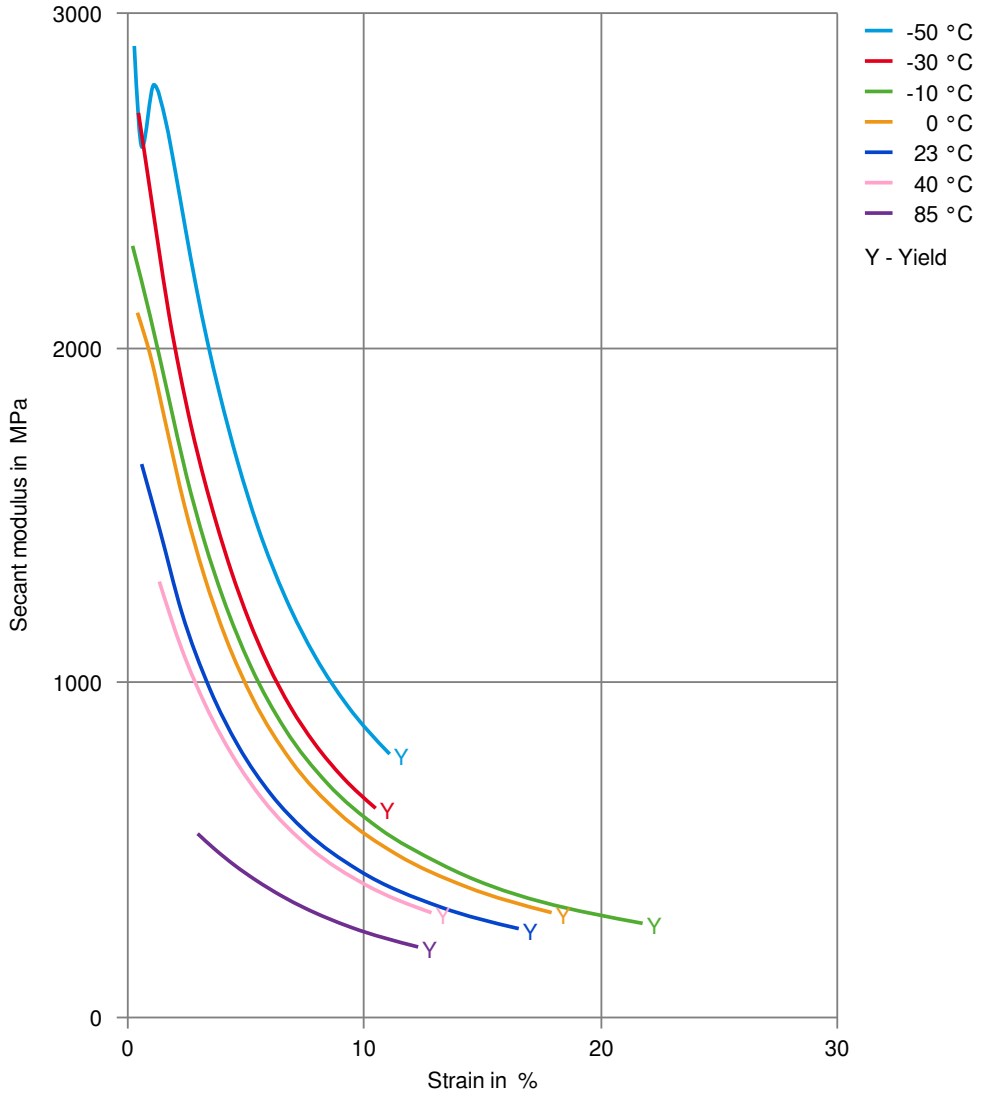
Secant modulus-strain



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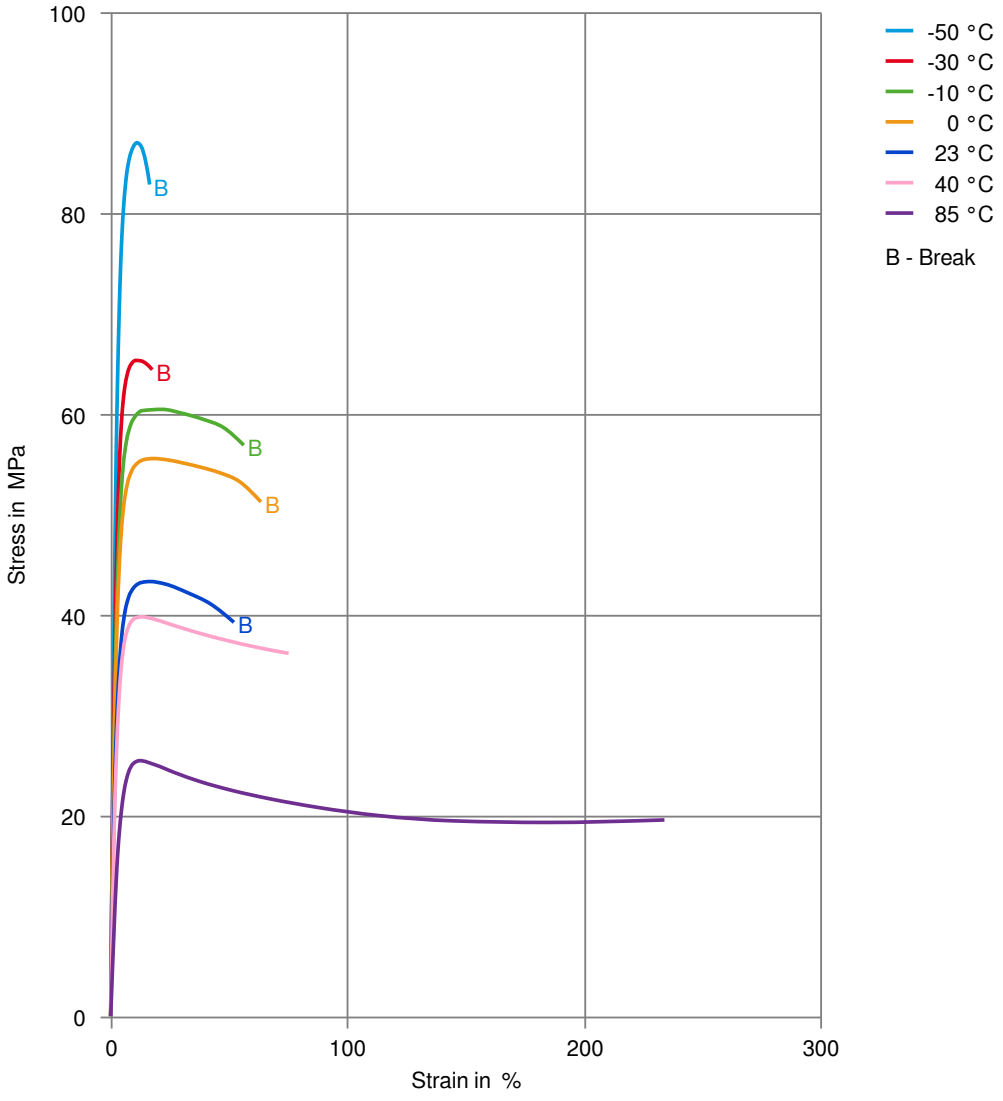
Stress-strain, 50mm/min



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Secant modulus-strain, 50mm/min