HOSTAFORM® EC140CF10

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Hostaform® acetal copolymer grade EC140CF10 is a 10% carbon fiber reinforced grade for increase strength, stiffness and electrical conductivity.

Preliminary Data Sheet

Product information

Resin Identification	POM-CF10	ISO 1043
Part Marking Code	>POM-CF10<	ISO 11469

Rheological properties

Melt volume-flow rate	12	cm^3/10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	0.8	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	8500	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	70	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.5	%	ISO 527-1/-2
Flexural modulus	8500	MPa	ISO 178
Charpy notched impact strength, 23°C	3.2	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	3.2	kJ/m^2	ISO 179/1eA
Poisson's ratio	0.454		

Thermal properties

Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	158	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	162	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	30	E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	100	E-6/K	ISO 11359-1/-2

Electrical properties

Surface resistivity	1000	Ohm	IEC 62631-3-2
Resistivity, conductive plastics	0.2	Ohm.m	ISO 3915

Physical/Other properties

Density	1440	kg/m^3	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	200	°C
Min. melt temperature	190	°C

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Max. melt temperature	210	°C
Screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	80	°C
Max. mould temperature	120	°C
Hold pressure range	60 - 120	MPa
Back pressure	2	MPa

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	Increased electrical conductivity, Static dissipative

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 may be necessary to prevent splay and odor problems.

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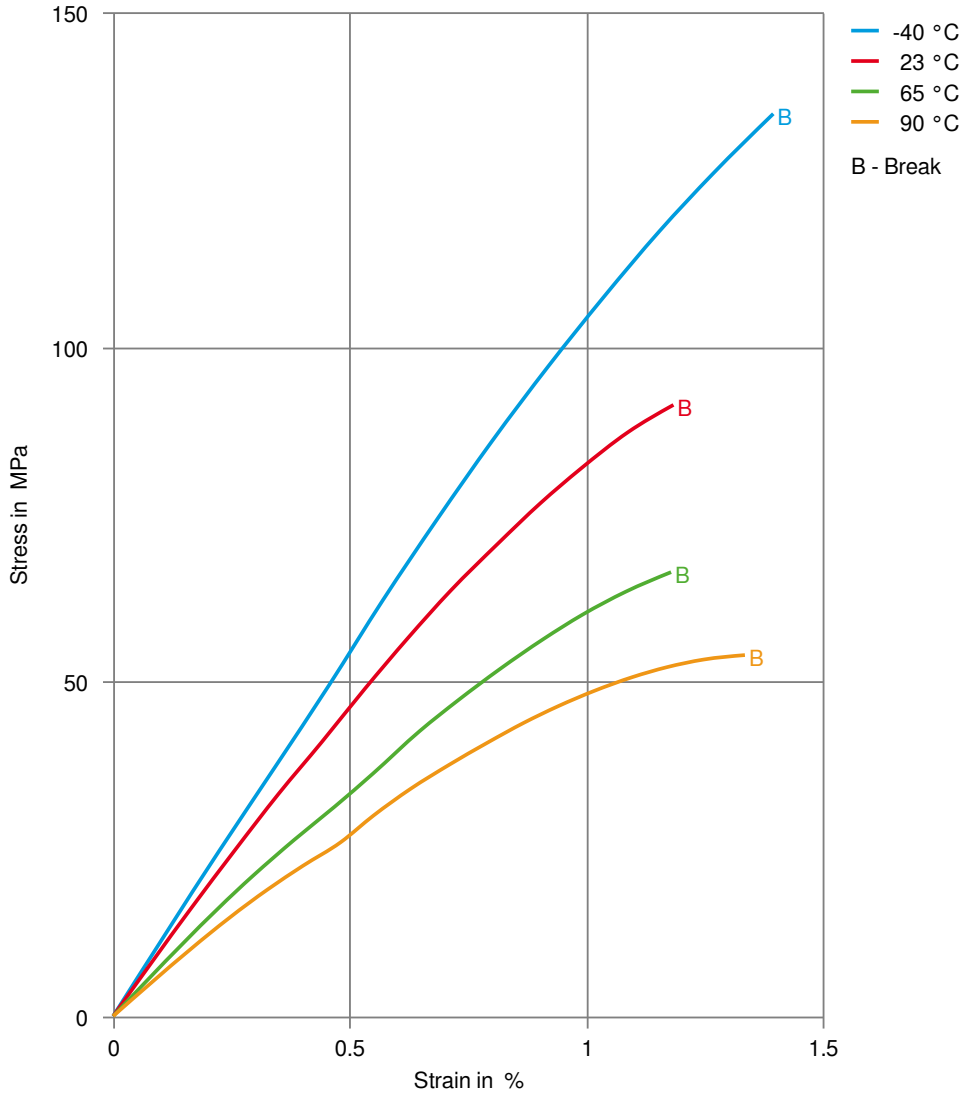
Stress-strain



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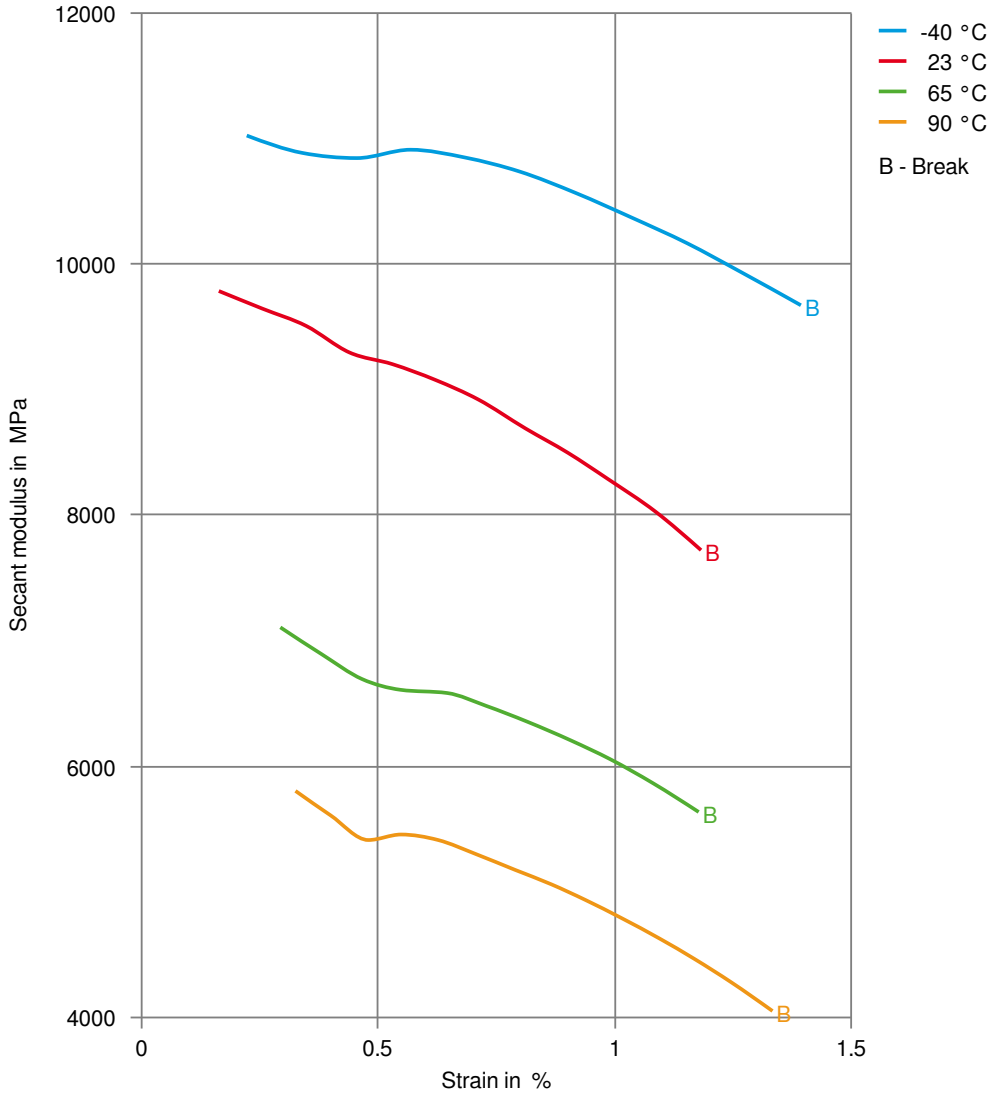
Secant modulus-strain



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