Celanese
The chemistry inside innovation™

HOSTAFORM® C 9021 GV1/30 3134

HOSTAFORM®

POM copolymer
Injection molding type, reinforced with ca 26 % glass fibers; high resistance to thermal and oxidative degradation; reduced thermal expansion and shrinkage.
Product is compliant with European Food Regulation EU 10/2011 and FDA Food Regulation FDA21CFR 177.2470
Ranges of applications: For molded parts with very high strength and rigidity as well as higher hardness.

Product information

Resin Identification	POM-GF26	ISO 1043
Part Marking Code	>POM-GF26<	ISO 11469

Rheological properties

Melt volume-flow rate	4	cm^3/10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	9200	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	135	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.5	%	ISO 527-1/-2
Flexural modulus	7800	MPa	ISO 178
Flexural strength	160	MPa	ISO 178
Tensile creep modulus, 1h	7700	MPa	ISO 899-1
Tensile creep modulus, 1000h	5400	MPa	ISO 899-1
Charpy impact strength, 23°C	30	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	35	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	8	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m^2	ISO 179/1eA
Ball indentation hardness, H 358/30	200	MPa	ISO 2039-1
Poisson's ratio	0.34[C]		

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	160	°C	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	125	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	40	E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	80	E-6/K	ISO 11359-1/-2
Thermal conductivity of melt	0.215	W/(m K)	ISO 22007-2
Effective thermal diffusivity, flow	6.51E-8	m^2/s	ISO 22007-4
Specific heat capacity of melt	1810	J/(kg K)	ISO 22007-4

Celanese
The chemistry inside innovation™

HOSTAFORM® C 9021 GV1/30 3134

HOSTAFORM®

Flammability

Burning Behav. at 1.5mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.6	mm	IEC 60695-11-10
Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.18	mm	IEC 60695-11-10

Electrical properties

Relative permittivity, 100Hz	4.3		IEC 62631-2-1
Relative permittivity, 1MHz	4.3		IEC 62631-2-1
Dissipation factor, 100Hz	30	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	60	E-4	IEC 62631-2-1
Volume resistivity	1E12	Ohm.m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Electric strength	40	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112

Physical/Other properties

Humidity absorption, 2mm	0.17	%	Sim. to ISO 62
Water absorption, 2mm	0.9	%	Sim. to ISO 62
Density	1600	kg/m³	ISO 1183
Density of melt	1350	kg/m³	

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
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
Ejection temperature	140	°C

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Additives	Release agent

Celanese
The chemistry inside innovation™

HOSTAFORM® C 9021 GV1/30 3134

HOSTAFORM®

Additional information

Processing Notes

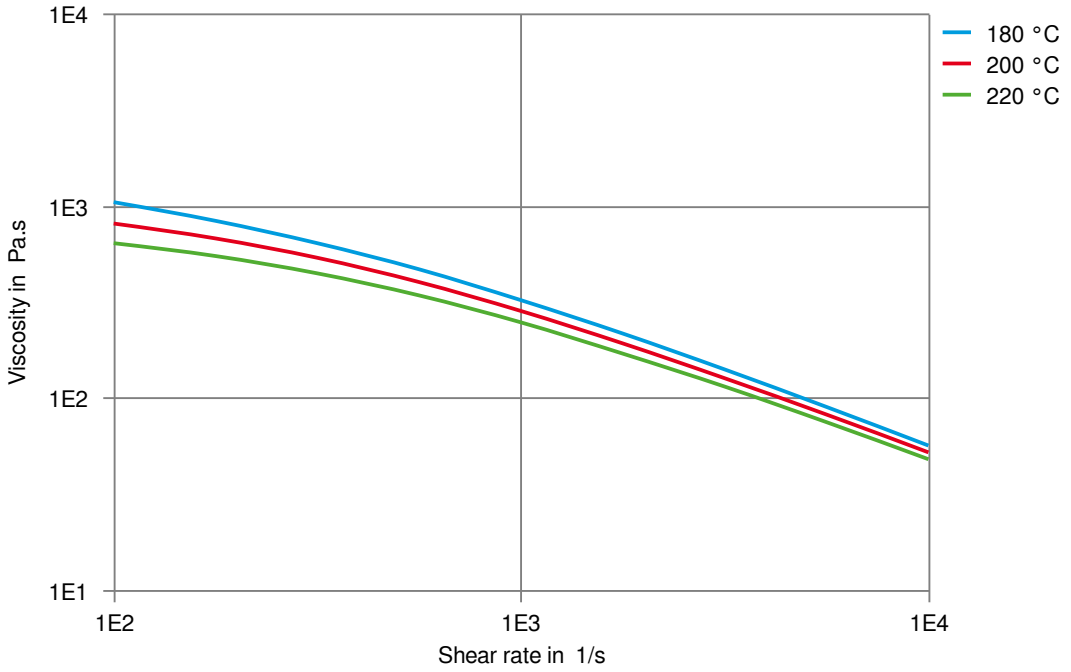
Pre-Drying

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.

Storage

The product can then be stored in standard conditions until processed.

Viscosity-shear rate

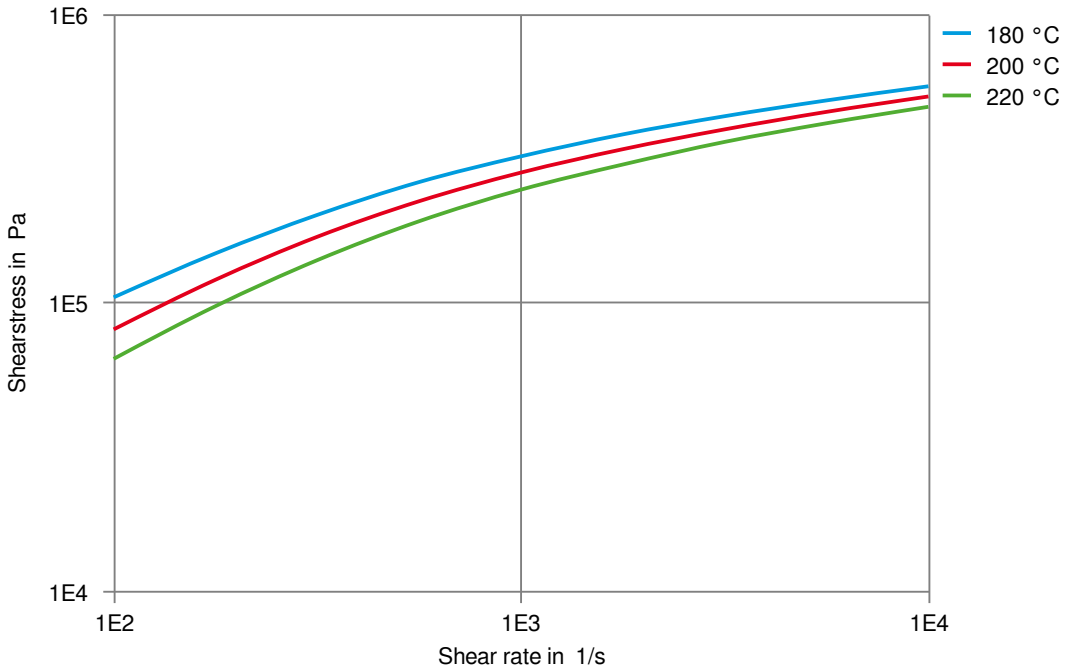


Celanese
The chemistry inside innovation™

HOSTAFORM® C 9021 GV1/30 3134

HOSTAFORM®

Shearstress-shear rate

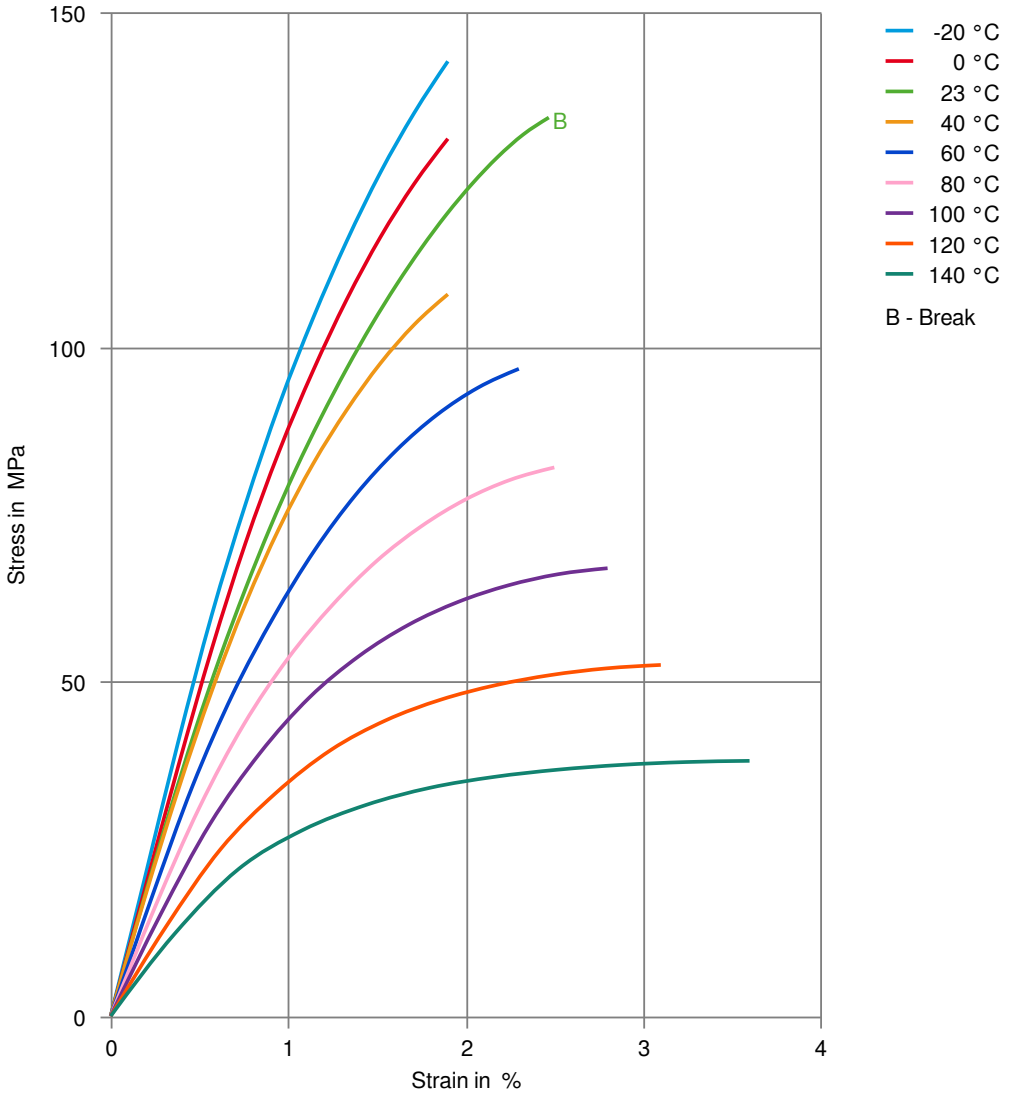


Celanese
The chemistry inside innovation™

HOSTAFORM® C 9021 GV1/30 3134

HOSTAFORM®

Stress-strain

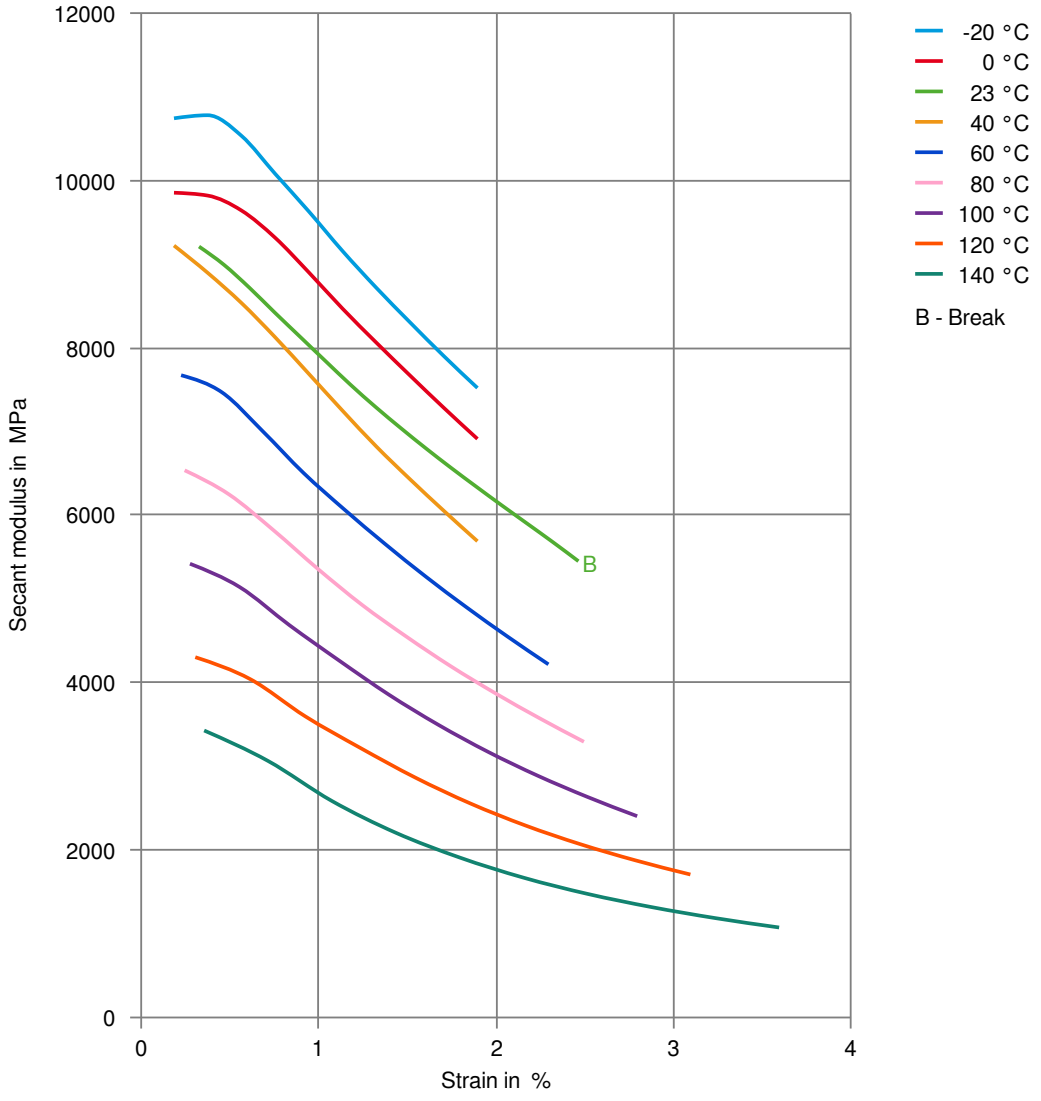


Celanese
The chemistry inside innovation™

HOSTAFORM® C 9021 GV1/30 3134

HOSTAFORM®

Secant modulus-strain



Revised: 2024-10-31 Source: Celanese Materials Database