Bayblend® T90 MF-20

(PC+SAN)-I-T20

Covestro Deutschland AG

- Rubber modified (PC SAN) blend
- 20 % mineral filled
- Vicat/B 120 temperature = 130 °C
- very good flow
- reduced coefficient of thermal expansion
- tensile modulus = 4900 MPa
- good heat resistance

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	12	cm³/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	4900	MPa	ISO 527
Yield stress	60	MPa	ISO 527
Yield strain	3.2	%	ISO 527

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	111	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	127	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	128	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	40	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	56	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	0.8	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.3	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.2	-	IEC 62631-2-1
Dissipation Factor, 100Hz	15	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	32	E-4	IEC 62631-2-1
Volume Resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface Resistivity	>1E15	Ohm	IEC 62631-3-2
Electric Strength	35	kV/mm	IEC 60243-1
Comparative tracking index	225	-	IEC 60112

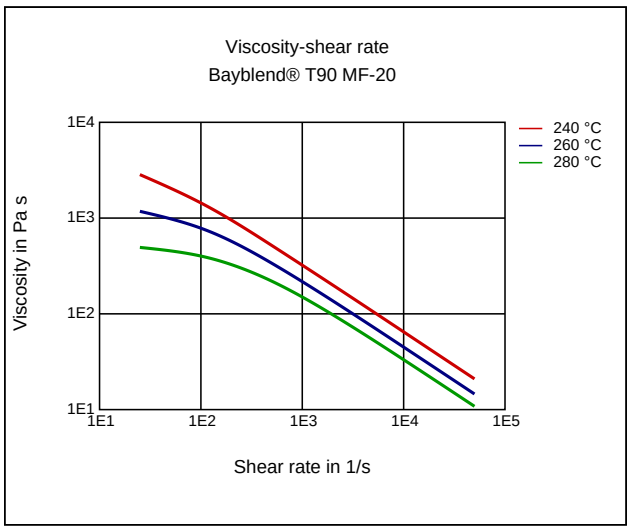
Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.5	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1290	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	240	mm/s	ISO 294

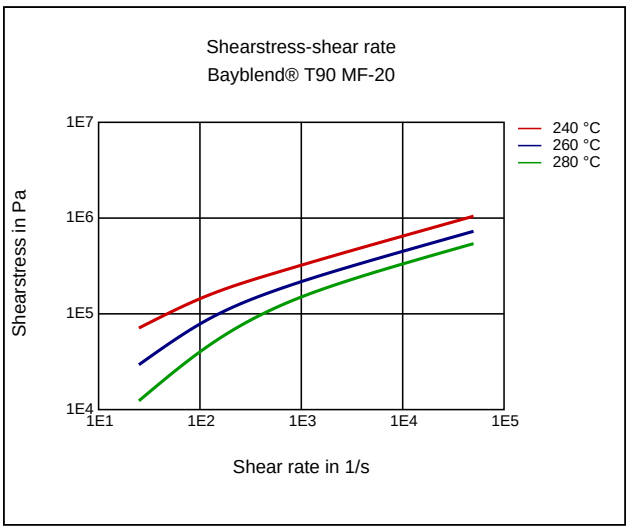
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 110	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	240 - 280	°C	-
Mold temperature	70 - 100	°C	-

Diagrams

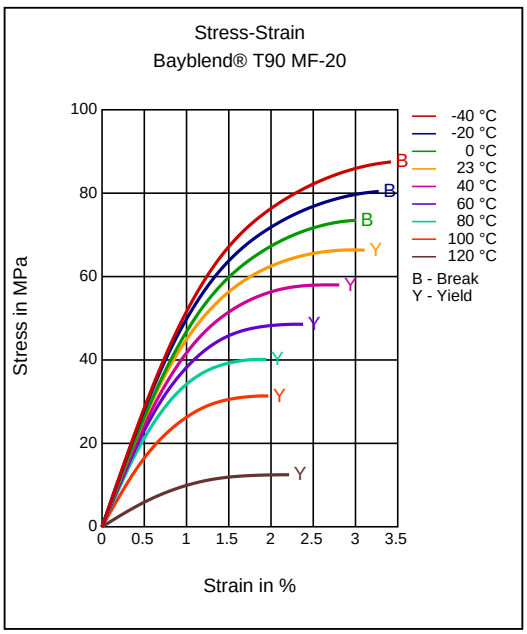
Viscosity-shear rate



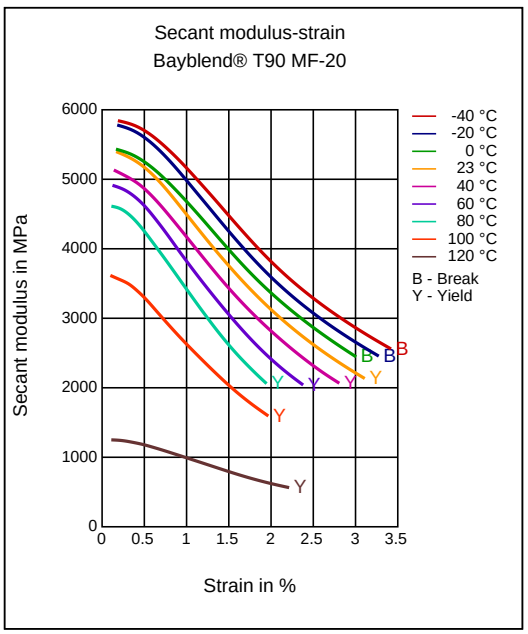
Shearstress-shear rate



Stress-strain



Secant modulus-strain



Characteristics

Processing
Injection Molding

Additives
Release agent

Delivery form
Pellets

Special Characteristics
Impact modified

Injection Molding

PREPROCESSING
Max. Water content: 0.02 %
Drying temperature: 100 - 110 °C
(depending on the grade 10°C below the Vicat VST/B120 temperature, but not higher as the recommended values).

Drying time:
Circulating air drying oven (50 % fresh air) 4-8 h
Fresh air dryer (high speed dryer) 2-4 h
Dry air dryer 2-4 h

PROCESSING
Melt temperature: 240-280 °C
Mold temperature: 70-100 °C

Use open nozzle.

Disclaimer