

TECHNICAL DATA SHEET

XANTAR™ C CM 406

Mitsubishi EP
(PC+ABS)...

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Product Text

Product Information

General purpose, Vicat 120°C

ISO 1043 (PC+ABS)...

XANTAR Polycarbonate & Blends, your global partner for innovative added value

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	24	cm ³ /10min	ISO 1133
Temperature	260	°C	
Load	5	kg	
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Density of melt	1010	kg/m ³	
Thermal conductivity of melt	0.23	W/(m K)	
Spec. heat capacity of melt	2280	J/(kg K)	
Eff. thermal diffusivity	1E-7	m ² /s	
Ejection temperature	95	°C	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2200	MPa	ISO 527
Yield stress	50	MPa	ISO 527
Yield strain	4	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU

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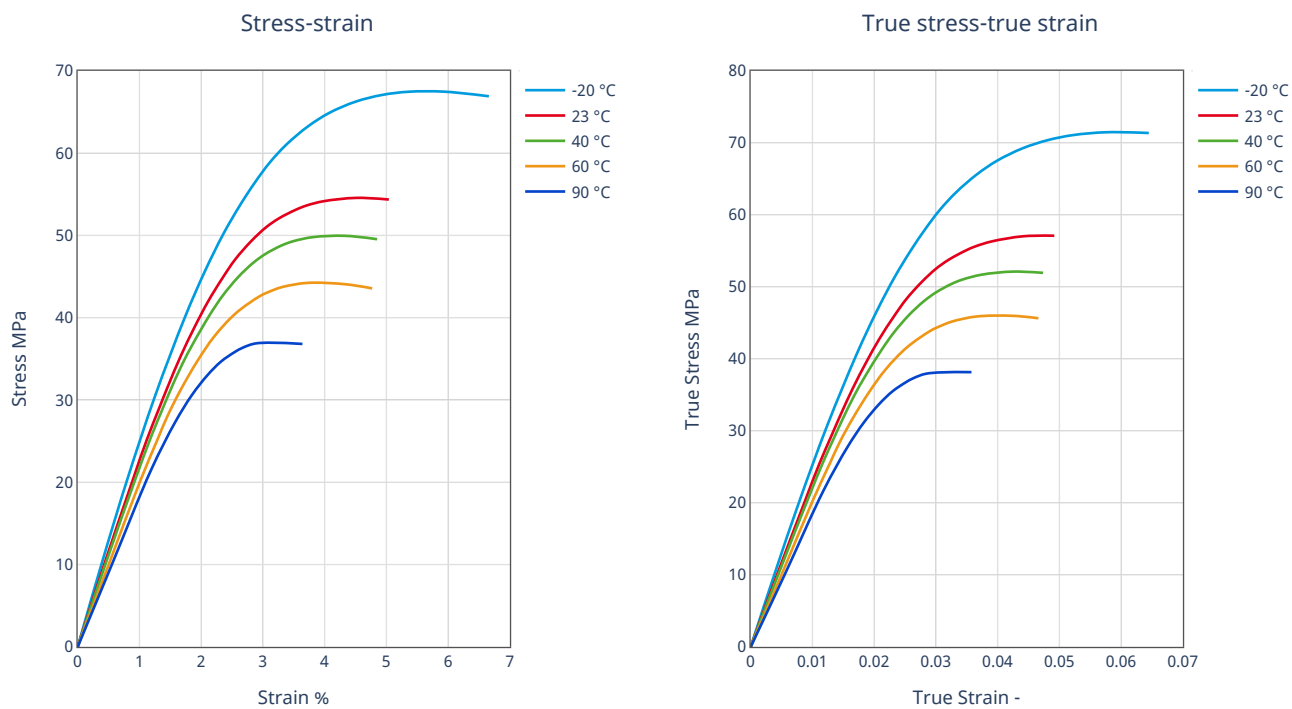
Mechanical Properties	Value	Unit	Standard
Charpy notched impact strength, +23°C	40	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	20	kJ/m ²	ISO 179/1eA
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	105	°C	ISO 75-1/-2
Vicat softening temperature, B	120	°C	ISO 306
Coeff. of linear therm. expansion, parallel	70	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Oxygen index	22	%	ISO 4589-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 1MHz	2.9		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	275		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1130	kg/m ³	ISO 1183
Test Specimen Production	Value	Unit	Standard
Injection molding, melt temperature	280	°C	ISO 294
Injection molding, mold temperature	80	°C	ISO 294
Processing Recommendation Injection Molding	Value	Unit	Standard
Pre-drying - temperature	100	°C	
Pre-drying - time	4	h	
Processing humidity	≤0.03	%	

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Processing Recommendation Injection Molding	Value	Unit	Standard
Melt temperature	240 - 270	°C	
Mold temperature	50 - 80	°C	
Zone 1	230 - 250	°C	
Zone 2	235 - 255	°C	
Zone 3	240 - 260	°C	
Nozzle temperature	230 - 250	°C	

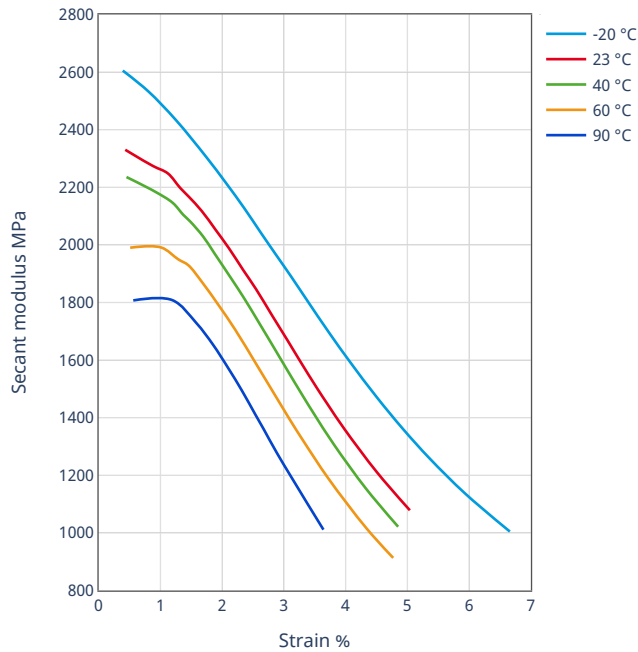
Diagrams



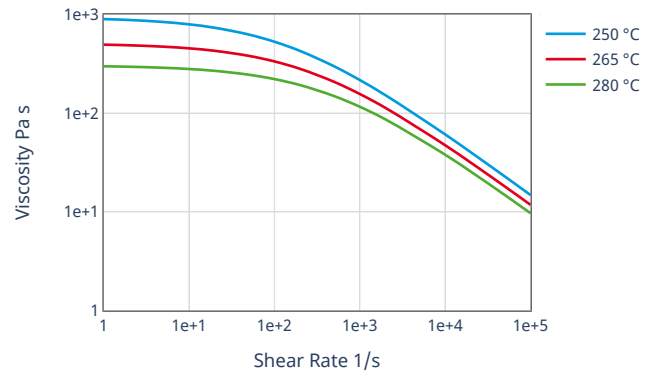
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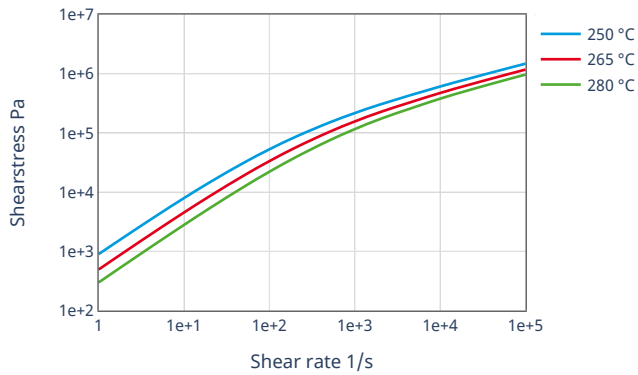
Secant modulus-strain



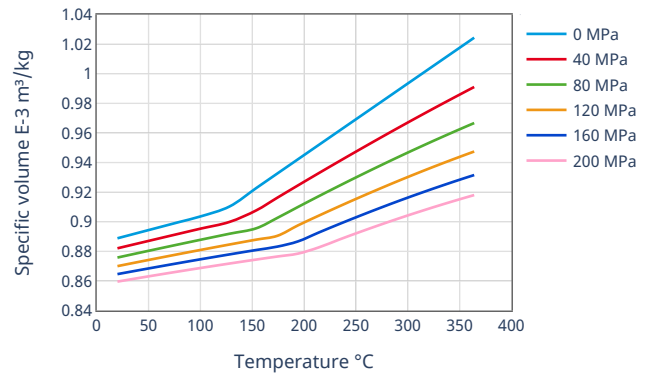
Viscosity-shear rate



Shearstress-shear rate



Spec. volume-Temperature (pVT)



Processing Information

Injection molding

Injection Molding Recommendations