

TECHNICAL DATA SHEET

XANTAR™ MX 1000

Mitsubishi EP
PC-I FR(16)

Processing

Injection molding, Other extrusion, Thermoforming

Delivery Form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant, Platable, High impact or impact modified,
Heat stabilized or stable to heat

Product Text

Product Information

Impact Modified, Flame Retardant, High Flow

ISO 1043 PC-I FR(16)

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

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	30	cm ³ /10min	ISO 1133
Temperature	300	°C	
Load	1.2	kg	
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Density of melt	1010	kg/m ³	
Thermal conductivity of melt	0.24	W/(m K)	
Spec. heat capacity of melt	1710	J/(kg K)	
Eff. thermal diffusivity	1.4E-7	m ² /s	
Ejection temperature	128	°C	

Mechanical Properties	Value	Unit	Standard
Tensile modulus	2200	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	6	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Poisson's ratio	0.35		ISO 527

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Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	115	°C	ISO 75-1/-2
Vicat softening temperature, B	135	°C	ISO 306
Coeff. of linear therm. expansion, parallel	65	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2	mm	
Yellow card available	yes		
Oxygen index	33	%	ISO 4589-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	2.9		IEC 62631-2-1
Relative permittivity, 1MHz	2.8		IEC 62631-2-1
Dissipation factor, 100Hz	6.6	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	92	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	29	kV/mm	IEC 60243-1
Other Properties	Value	Unit	Standard
Water absorption	0.35	%	Sim. to ISO 62
Density	1190	kg/m ³	ISO 1183
Test Specimen Production	Value	Unit	Standard
Injection molding, melt temperature	290	°C	ISO 294
Injection molding, mold temperature	80	°C	ISO 294
Processing Recommendation Injection Molding	Value	Unit	Standard
Pre-drying - temperature	110	°C	
Pre-drying - time	4	h	
Processing humidity	≤0.03	%	
Melt temperature	270 - 290	°C	

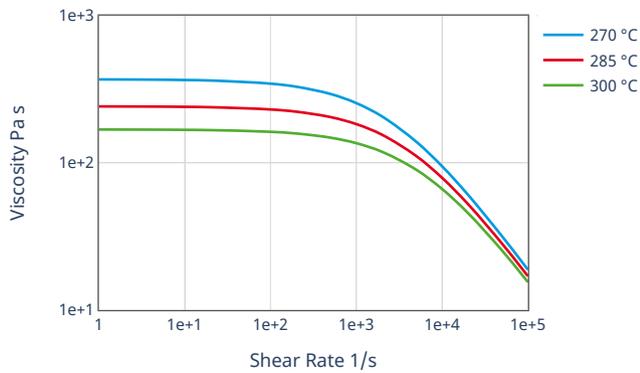
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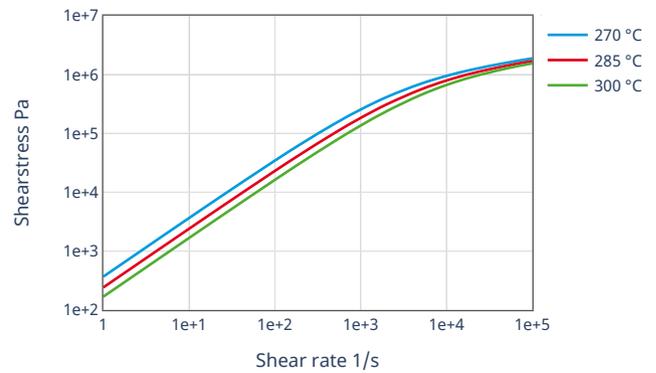
Processing Recommendation Injection Molding	Value	Unit	Standard
Mold temperature	70 - 100	°C	
Zone 1	255 - 265	°C	
Zone 2	265 - 275	°C	
Zone 3	270 - 280	°C	
Nozzle temperature	260 - 270	°C	

Diagrams

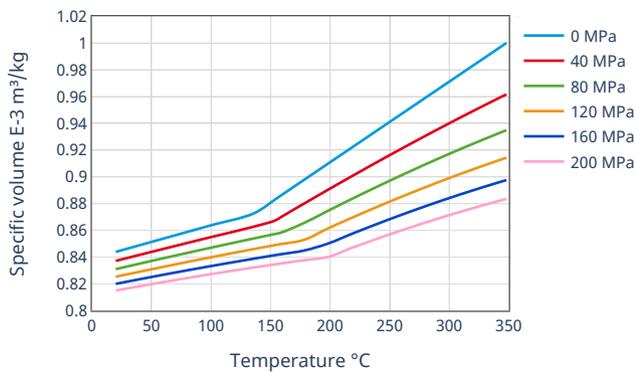
Viscosity-shear rate



Shearstress-shear rate



Spec. volume-Temperature (pVT)



Processing Information

Injection molding

Injection Molding Recommendations