XANTAR® MX 1000

PC-I FR(16) Mitsubishi Engineering-Plastics Corporation

Product Texts

Impact Modified, Flame Retardant, High Flow

ISO 1043 PC-I FR(16)

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

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	30	cm³/10min	ISO 1133
Temperature	300	°C	ISO 1133
Load	1.2	kg	ISO 1133
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2200	MPa	ISO 527-1/-2
Yield stress	55	MPa	ISO 527-1/-2
Yield strain	6	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	115	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	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	IEC 60695-11-10
UL recognition	UL	-	-
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3.0	mm	IEC 60695-11-10
UL recognition	UL	-	-
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2.0	mm	IEC 60695-11-20
UL recognition	UL	-	-
Oxygen index	33	%	ISO 4589-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	2.9	-	IEC 60250
Relative permittivity, 1MHz	2.8	-	IEC 60250
Dissipation factor, 100Hz	6.6	E-4	IEC 60250
Dissipation factor, 1MHz	92	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093
Electric strength	29	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.35	%	Sim. to ISO 62
Density	1190	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			

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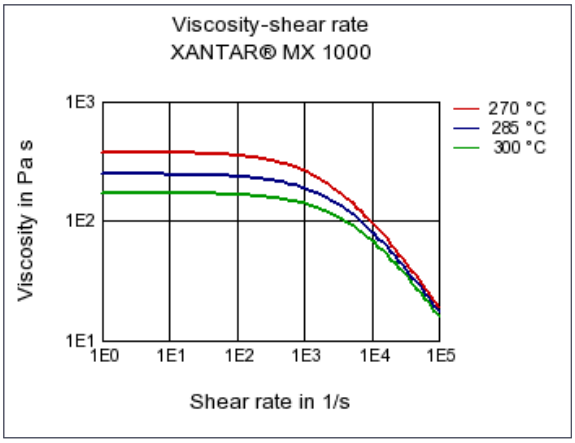
Density of melt	1010	kg/m³	-
Thermal conductivity of melt	0.24	W/(m K)	-
Spec. heat capacity of melt	1710	J/(kg K)	-
Eff. thermal diffusivity	1.4E-7	m²/s	-
Ejection temperature	128	°C	-

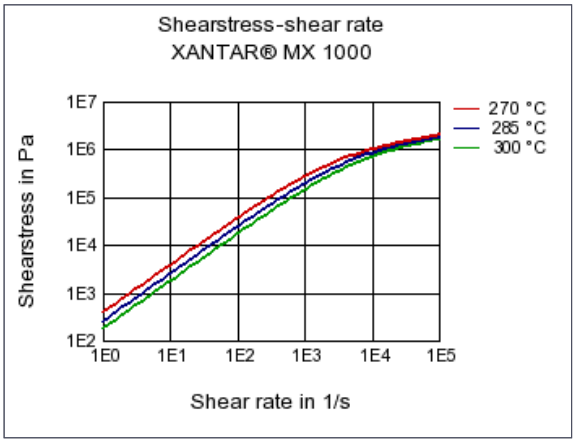
Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	290	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 10724

Diagrams

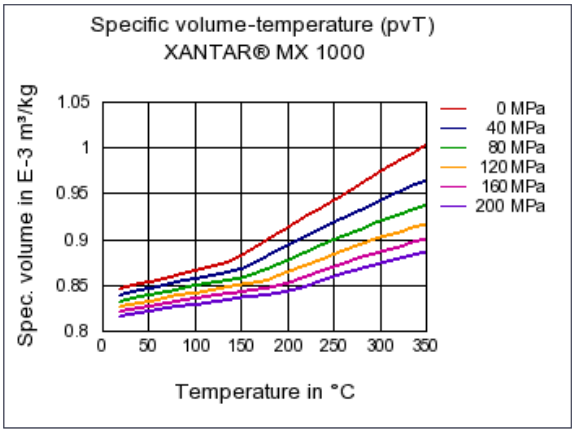
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Characteristics

Processing
Injection Molding, Other Extrusion, Thermoforming

Additives
Release agent

Delivery form
Pellets

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

Other text information

Injection Molding
Injection Molding Recommendations