

TECHNICAL DATA SHEET

XANTAR™ G2F 23 UR

Mitsubishi EP
PC-GF10 FR

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant, Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Product Text

Product Information

10% Glass Reinforced, Flame Retardant, UV Stabilized

ISO 1043 PC-GF10 FR

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

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	6	cm ³ /10min	ISO 1133
Temperature	300	°C	
Load	1.2	kg	
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	0.55	%	ISO 294-4, 2577
Density of melt	1090	kg/m ³	
Thermal conductivity of melt	0.26	W/(m K)	
Spec. heat capacity of melt	1620	J/(kg K)	
Eff. thermal diffusivity	1.48E-7	m ² /s	
Ejection temperature	134	°C	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	3500	MPa	ISO 527
Yield stress	65	MPa	ISO 527
Yield strain	5	%	ISO 527
Nominal strain at break	15	%	ISO 527

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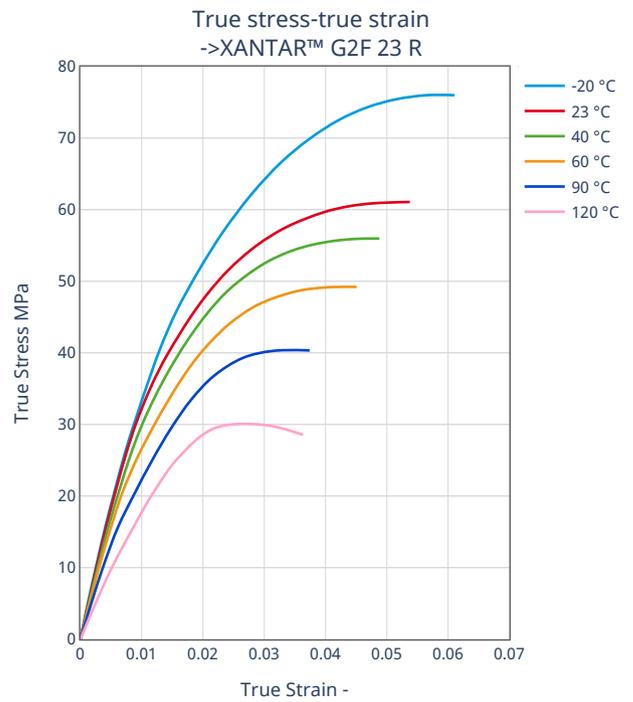
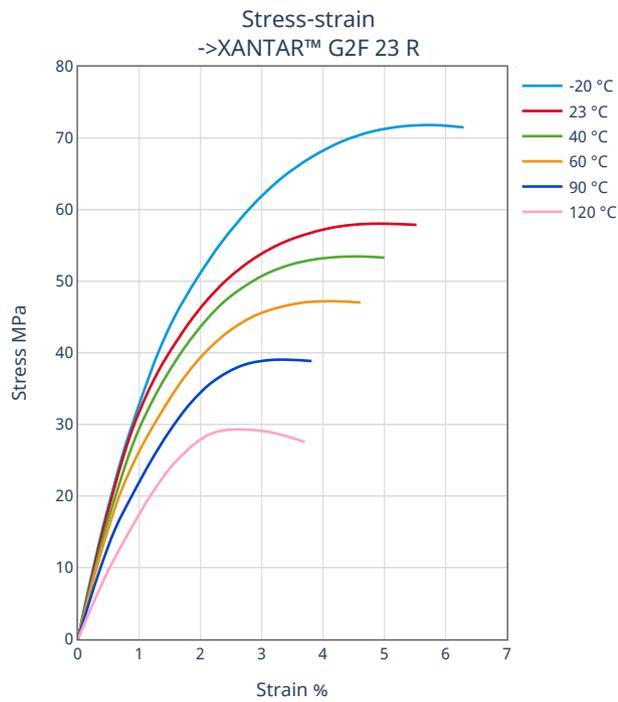
Mechanical Properties	Value	Unit	Standard
Poisson's ratio	0.35		ISO 527
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	145	°C	ISO 75-1/-2
Vicat softening temperature, B	150	°C	ISO 306
Coeff. of linear therm. expansion, parallel	45	E-6/K	ISO 11359-1/-2
Burning behav. at 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	5VA	class	IEC 60695-11-20
Thickness tested	3	mm	
Yellow card available	yes		
Oxygen index	35	%	ISO 4589-1/-2
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.1		IEC 62631-2-1
Relative permittivity, 1MHz	3		IEC 62631-2-1
Dissipation factor, 100Hz	9	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	90	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
Comparative tracking index	200		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	0.31	%	Sim. to ISO 62
Density	1270	kg/m ³	ISO 1183
Test Specimen Production	Value	Unit	Standard
Injection molding, melt temperature	300	°C	ISO 294
Injection molding, mold temperature	100	°C	ISO 294

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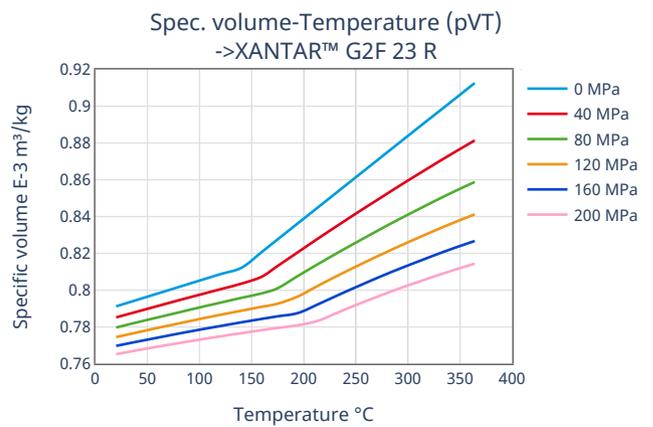
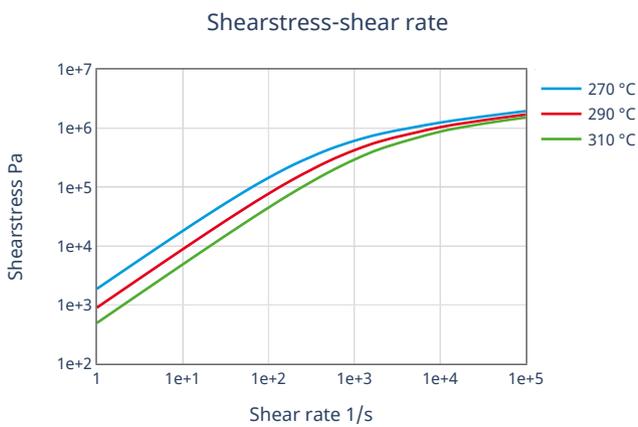
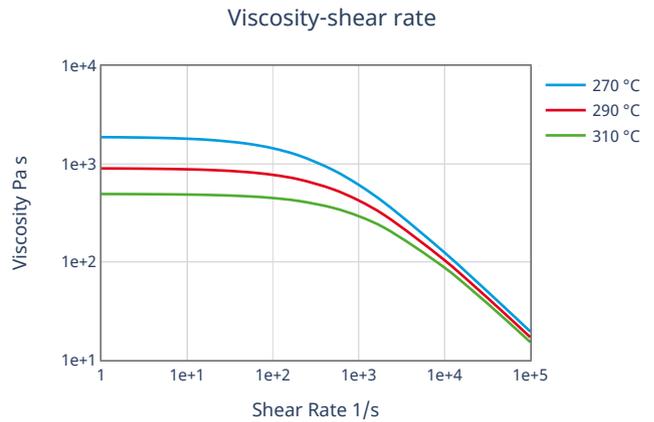
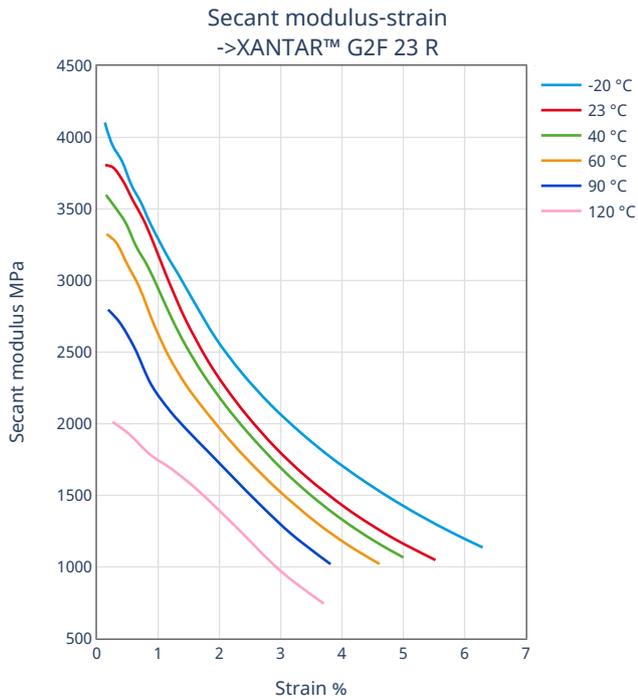
Processing Recommendation Injection Molding	Value	Unit	Standard
Pre-drying - temperature	120	°C	
Pre-drying - time	4	h	
Processing humidity	≤0.03	%	
Melt temperature	290 - 320	°C	
Mold temperature	80 - 120	°C	
Zone 1	260 - 280	°C	
Zone 2	270 - 290	°C	
Zone 3	280 - 300	°C	
Nozzle temperature	270 - 290	°C	

Diagrams



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Injection Molding Recommendations