

**XANTAR® G6F 23 R**

PC-GF30 FR

Mitsubishi Engineering-Plastics Corporation

Product Texts

30% Glass Reinforced, Flame Retardant

ISO 1043 PC-GF30 FR

[XANTAR® Polycarbonate & Blends, your global partner for innovative added value](#)

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	4	cm ³ /10min	ISO 1133
Temperature	300	°C	ISO 1133
Load	1.2	kg	ISO 1133
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	0.4	%	ISO 294-4, 2577
Mechanical properties			
ISO Data			
Tensile Modulus	9500	MPa	ISO 527-1/-2
Stress at break	110	MPa	ISO 527-1/-2
Strain at break	2	%	ISO 527-1/-2
Thermal properties			
ISO Data			
Temp. of deflection under load (1.80 MPa)	145	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	152	°C	ISO 306
Coeff. of linear therm. expansion, parallel	25	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	-	-
Oxygen index	36	%	ISO 4589-1/-2
Electrical properties			
ISO Data			
Relative permittivity, 100Hz	3.4	-	IEC 60250
Relative permittivity, 1MHz	3.4	-	IEC 60250
Dissipation factor, 100Hz	9	E-4	IEC 60250
Dissipation factor, 1MHz	90	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
Comparative tracking index	200	-	IEC 60112
Other properties			
ISO Data			
Water absorption	0.26	%	Sim. to ISO 62
Density	1430	kg/m ³	ISO 1183
Rheological calculation properties			
ISO Data			
Density of melt	1220	kg/m ³	-
Thermal conductivity of melt	0.32	W/(m K)	-

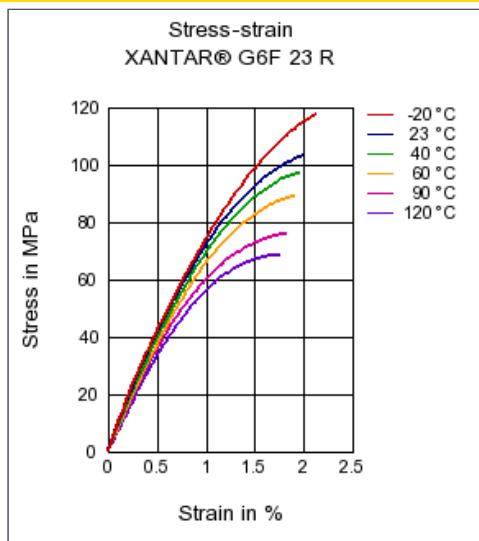
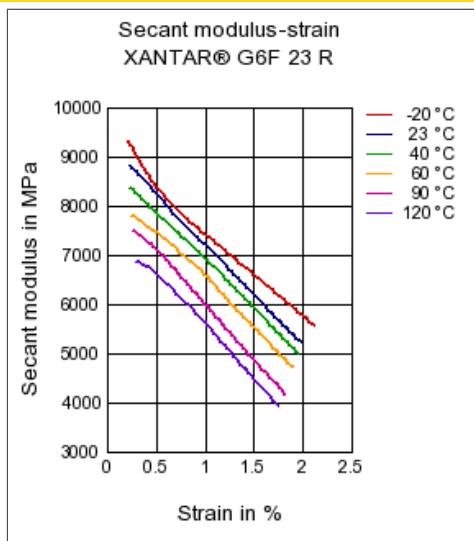
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Spec. heat capacity of melt	1440	J/(kg K)	-
Eff. thermal diffusivity	1.53E-7	m ² /s	-
Ejection temperature	144	°C	-

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	300	°C	ISO 294
Injection Molding, mold temperature	100	°C	ISO 10724

Diagrams**Stress-strain****Secant modulus-strain****Characteristics****Processing**

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Flame retardant, Heat stabilized or stable to heat

Other text information**Injection Molding**[Injection Molding Recommendations](#)**Chemical Media Resistance****Acids**

- Acetic Acid (5% by mass) (23°C)
- Citric Acid solution (10% by mass) (23°C)
- Lactic Acid (10% by mass) (23°C)
- Hydrochloric Acid (36% by mass) (23°C)
- Nitric Acid (40% by mass) (23°C)
- Sulfuric Acid (38% by mass) (23°C)
- Sulfuric Acid (5% by mass) (23°C)
- Chromic Acid solution (40% by mass) (23°C)

Bases

- Sodium Hydroxide solution (35% by mass) (23°C)
- Sodium Hydroxide solution (1% by mass) (23°C)
- Ammonium Hydroxide solution (10% by mass) (23°C)

Alcohols

-  Isopropyl alcohol (23°C)
-  Methanol (23°C)
-  Ethanol (23°C)

Hydrocarbons

-  n-Hexane (23°C)
-  Toluene (23°C)
-  iso-Octane (23°C)

Ketones

-  Acetone (23°C)

Ethers

-  Diethyl ether (23°C)

Salt solutions

-  Sodium Chloride solution (10% by mass) (23°C)
-  Sodium Hypochlorite solution (10% by mass) (23°C)
-  Sodium Carbonate solution (20% by mass) (23°C)
-  Sodium Carbonate solution (2% by mass) (23°C)
-  Zinc Chloride solution (50% by mass) (23°C)

Other

-  Ethyl Acetate (23°C)
-  Hydrogen peroxide (23°C)
-  Water (23°C)
-  Phenol solution (5% by mass) (23°C)