XANTAR™ G4F 23 R

PC-GF20 FR | Mitsubishi Engineering-Plastics Corporation

Product Texts

20% Glass Reinforced, Flame Retardant

ISO 1043 PC-GF20 FR

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

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**6**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
[C] Molding shrinkage, parallel	**0.2**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.5**	%	ISO 294-4, 2577
[C] Density of melt	**1170**	kg/m³	-
[C] Thermal conductivity of melt	**0.29**	W/(m K)	-
[C] Spec. heat capacity of melt	**1530**	J/(kg K)	-
[C] Eff. thermal diffusivity	**1.62E-7**	m²/s	-
[C] Ejection temperature	**134**	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**6000**	MPa	ISO 527
[C] Stress at break	**95**	MPa	ISO 527
[C] Strain at break	**4**	%	ISO 527
[C] Puncture - maximum force, +23°C	**900**	N	ISO 6603-2
[C] Puncture - maximum force, -30°C	**900**	N	ISO 6603-2
[C] Puncture energy, +23°C	**6**	J	ISO 6603-2
[C] Puncture energy, -30°C	**4**	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**145**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**150**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**30**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Yellow Card available	**yes**	-	-
[C] Burning Behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.2**	mm	-
Yellow Card available	**yes**	-	-
[C] Oxygen index	**35**	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.25**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.2**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**9**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**90**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**29**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**200**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.29**	%	Sim. to ISO 62
[C] Density	**1350**	kg/m³	ISO 1183

[C]: CAMPUS

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

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test 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	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Additives
Release agent

Special Characteristics
Flame retardant, Heat stabilized or stable to heat

Regional Availability
North America, Europe

Other text information

Injection molding
Injection Molding Recommendations