XANTAR® G6F 23 R

Property Data

PC-GF30 FR

30% Glass Reinforced, Flame Retardant

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES			
Melt volume-flow rate	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
Molding shrinkage (normal)	0.4	%	ISO 294-4
MECHANICAL PROPERTIES			
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
Flexural modulus	7000	MPa	ISO 178
Flexural strength	150	MPa	ISO 178
Izod notched impact strength (23°C)	10	kJ/m²	ISO 180/4A
Rockwell hardness, M scale	91	-	ISO 2039-2
THERMAL PROPERTIES			
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)	0.25	E-4/°C	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
Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
Oxygen index	36	%	ISO 4589-1/-2
Ball pressure temperature	125	°C	IEC 60695-10-2
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	1.5	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	3	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	850	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	1.5	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	875	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	3	mm	IEC 60695-2-13
Relative Temperature Index - electrical	130	°C	UL746B
RTI electrical (Thickness (1) tested)	1.5	mm	UL746B
Relative Temperature Index - electrical	130	°C	UL746B
RTI electrical (Thickness (2) tested)	3	mm	UL746B
Relative Temperature Index - with impact	125	°C	UL746B
RTI with impact (Thickness (1) tested)	1.5	mm	UL746B
Relative Temperature Index - with impact	130	°C	UL746B



XANTAR® G6F 23 R

RTI with impact (Thickness (2) tested)	3	mm	UL746B
Relative Temperature Index - without impact	125	°C	UL746B
RTI without impact (Thickness (1) tested)	1.5	mm	UL746B
Relative Temperature Index - without impact	130	°C	UL746B
RTI without impact (Thickness (2) tested)	3	mm	UL746B
ELECTRICAL PROPERTIES			
Relative permittivity (100Hz)	3.4	-	IEC 60250
Relative permittivity (1 MHz)	3.4	-	IEC 60250
Dissipation factor (100 Hz)	9	E-4	IEC 60250
Dissipation factor (1 MHz)	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
Comparative tracking index (PLC)	3	class	UL 746A
OTHER PROPERTIES			
Water absorption	0.26	%	Sim. to ISO 62
Density	1430	kg/m³	ISO 1183
MATERIAL SPECIFIC PROPERTIES			
Limiting Viscosity Number	48	cm³/g	ISO 1628-4
RHEOLOGICAL CALCULATION PROPERTIES			
Thermal conductivity of melt	0.32	W/(m K)	

04.02.2009

All information supplied by or on behalf of Mitsubishi Engineering-Plastics Corporation in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but Mitsubishi Engineering-Plastics Corporation assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the aforementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.