Clariant PC PC-1100G10

Polycarbonate

Clariant Corporation

Message:

Clariant PC PC-1100G10 is a polycarbonate (PC) material, which contains a 10% glass fiber reinforced material. This product is available in North America and is processed by injection molding.
The main features of Clariant PC PC-1100G10 are:
flame retardant/rated flame
high strength
Good processability
Hard
Corrosion resistance
Typical application areas include:
electrical appliances
military applications
Sporting goods

General Information	
Filler / Reinforcement	Glass fiber reinforced material, 10% filler by weight
Features	Good dimensional stability Rigidity, high High strength Workability, good Good corrosion resistance Good coloring Good chemical resistance Good toughness Low or no water absorption
Uses	Electrical appliances Metal substitution Military application Sporting goods
Appearance	Available colors Natural color
Forms	Particle
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.25	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.30	%	ASTM D955
Water Absorption			ASTM D570
24 hr	0.12	%	ASTM D570

Saturation	0.31	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness			ASTM D785
Class m	91		ASTM D785
Class r	119		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	75.8	MPa	ASTM D638
Tensile Elongation (Break)	10	%	ASTM D638
Flexural Modulus	3450	MPa	ASTM D790
Flexural Strength	110	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.18 mm)	110	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	146	°C	ASTM D648
1.8 MPa, not annealed	143	°C	ASTM D648
CLTE - Flow	3.2E-5	cm/cm/°C	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	18	kV/mm	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-1		UL 94
Injection	**Nominal Value**	**Unit**	
Drying Temperature	121	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.020	%	
Rear Temperature	304 - 343	°C	
Middle Temperature	304 - 343	°C	
Front Temperature	304 - 343	°C	
Processing (Melt) Temp	304 - 327	°C	
Melt Temperature (Aim)	316	°C	
Mold Temperature	82.2 - 121	°C	
Injection Rate	Fast		
Back Pressure	0.345 - 0.689	MPa	
Screw Speed	45 - 75	rpm	
Cushion	3.18 - 6.35	mm	

Injection instructions

The minimum injection pressure required to fill the part should be used for the first stage. The hold pressure should be set between 50% and 75% of the injection pressure.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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