LONGLITE® PBT 4120-104X

Chang Chun Plastics Co., Ltd. (CCP Group) - *Polybutylene Terephthalate*

General Information

Product Description

PBT 4120-104X is a 20% glass fiber reinforced flame retarded injection molding grade.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Chemical Resistant • Excellent Weather Resistance • Flame Retardant	• Good Electrical Properties • Good Moldability • High Dimensional Stability	• High Heat Resistance • Wear Resistant
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.53	g/cm³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow : 0.0630 in	0.80 to 1.2	%	
Flow : 0.0630 in	0.10 to 0.50	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.16E+6	psi	ISO 527-1
Tensile Stress	15200	psi	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	914000	psi	ISO 178
Flexural Stress	22500	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	3.3	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength (73°F)	21	ft·lb/in²	ISO 179
Notched Izod Impact Strength (73°F)	2.9	ft·lb/in²	ISO 180
Unnotched Izod Impact Strength (73°F)	17	ft·lb/in²	ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	419	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	392	°F	ISO 75-2/A
Melting Temperature	437	°F	DSC
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Electric Strength (0.0787 in)	510	V/mil	IEC 60243-1
Arc Resistance	90.0	sec	UL 746
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.031 in)	V-0		UL 94
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Viscosity (500°F, 1000 sec^-1)	150	Pa·s	ISO 11443

Processing Information

Injection	Nominal Value	Unit
Middle Temperature	455 to 518	°F
Nozzle Temperature	464 to 509	°F
Mold Temperature	104 to 248	°F
Injection Pressure	7110 to 17100	psi

Injection Rate	Moderate-Fast
Holding Pressure	4270 to 11400 psi
Back Pressure	0.00 to 42.7 psi
Screw Speed	60 to 120 rpm

Notes

[1] Typical properties: these are not to be construed as specifications.