

LONGLITE® PBT 4120-200X

 Chang Chun Plastics Co., Ltd. (CCP Group) - *Polybutylene Terephthalate*
General Information
Product Description

PBT 4120-200X is a glass fiber reinforced and injection-molding grade PBT.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Flame Retardant • Mold Release
Features	• Flame Retardant
Forms	• Pellets
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >PBT-GF20 FR(17)<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.56	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	20	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/2.16 kg)	23	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.90 to 1.3	%	
Flow	0.30 to 0.60	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Break)	16700	psi	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	870000	psi	ISO 178
Flexural Stress	23200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.6	ft·lb/in ²	
73°F	3.8	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	17	ft·lb/in ²	
73°F	19	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	383	°F	ISO 75-2/A
Melting Temperature ²	437	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength (0.0787 in)	610	V/mil	IEC 60243-1
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)	115	Pa·s	ISO 11443

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248 to 284	°F
Drying Time	3.0 to 5.0	hr



Suggested Max Moisture	0.040 %
Processing (Melt) Temp	464 to 518 °F
Mold Temperature	104 to 176 °F

Notes

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

² 10°C/min

