

LONGLITE® PBT 3020-114XQ

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

General Information

Product Description

PBT 3020-114XQ is a 20% glass fiber reinforced impact modified injection molding grade.

General

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

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.43	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Flow : 0.0354 in	0.20 to 0.60	%	
Across Flow : 0.0630 in	0.80 to 1.6	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress	14500	psi	ISO 527-2
Tensile Strain (Break)	2.5	%	ISO 527-2
Flexural Modulus	725000	psi	ISO 178
Flexural Stress	21000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.8	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	410	°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+14	ohms·cm	IEC 60093
Electric Strength (0.0787 in)	510	V/mil	IEC 60243-1
Arc Resistance	100	sec	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	HB		UL 94
Fill Analysis	Nominal Value	Unit	Test Method
Melt Viscosity (500°F, 1000 sec ⁻¹)	250	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

