

LONGLITE® PBT 4840-BK

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

General Information

Product Description

PBT glass fiber 40% reinforced injection moulding grade.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Features	• Chemical Resistant • Good Weather Resistance • Wear Resistant • Good Electrical Properties • High Heat Resistance • Good Moldability • Low Warpage
Processing Method	• Injection Molding

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.70		ASTM D792
Molding Shrinkage - Flow (0.0630 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.0630 in)	8.0E-3 to 0.014	in/in	ASTM D955
Water Absorption (24 hr)	0.030	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	19200	psi	ASTM D638
Tensile Elongation (Break)	3.2	%	ASTM D638
Flexural Modulus	1.71E+6	psi	ASTM D790
Flexural Strength	28400	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.250 in)	1.6	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	401	°F	ASTM D648
Melting Temperature	437	°F	DSC
CLTE - Flow	1.7E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+12	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (0.0787 in)	510	V/mil	ASTM D149
Dielectric Constant (60 Hz)	3.50		ASTM D150
Dissipation Factor (60 Hz)	1.0E-3		ASTM D150
Arc Resistance	100	sec	ASTM D495
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.13 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Middle Temperature	464 to 518	°F
Nozzle Temperature	500 to 518	°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.

