

LONGLITE® PBT 5829F-105

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

General Information
Product Description

 PBT 5829F-105 is a glass fiber reinforced and flame retardant injection-molding grade PBT.
(Halogen and Antimony Free)

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber		
Additive	• Flame Retardant	• Mold Release	
Features	• Antimony Free	• Flame Retardant	• Halogen Free
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.54	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.80 to 1.0	%	
Flow	0.20 to 0.40	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Break)	18100	psi	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	1.28E+6	psi	ISO 178
Flexural Stress	26100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.8	ft·lb/in ²	ISO 179/1eA
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 ²	437	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength (0.0787 in)	510	V/mil	IEC 60243-1
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	V-0		UL 94

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

