

LONGLITE® PBT 1100-103AA

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

PBT 1100-103AA is an unreinforced injection molding grade. 1100-103AA typically is used in the direct-metalized reflectors and bezels.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Additive	• Mold Release
Uses	• Automotive Applications
Automotive Specifications	• GM GMW17025P-PBT
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding • Profile Extrusion
Part Marking Code (ISO 11469)	• >PBT<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.31	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	50	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.8 to 2.2	%	
Flow	1.8 to 2.2	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	0.40	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	363000	psi	ISO 527-1
Tensile Stress (Break)	7980	psi	ISO 527-2
Tensile Strain (Break)	12	%	ISO 527-2
Flexural Modulus	348000	psi	ISO 178
Flexural Stress	11900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	311	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	131	°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+16	ohms·cm	IEC 60093
Electric Strength (0.0787 in)	480	V/mil	IEC 60243-1
Comparative Tracking Index	600	V	IEC 60112
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)	160	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 509 °F
Mold Temperature	104 to 176 °F

Notes

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

² 10°C/min

