

**LONGLITE® PBT 1100-103A**

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

PBT 1100-103A is an unreinforced injection molding grade. 1100-103A 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	• RENAULT PMR
Forms	• Pellets
Processing Method	• Extrusion      • Injection Molding      • Profile Extrusion
Part Marking Code (ISO 11469)	• >PBT<

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density	1.31	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	35	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.0	%	
Flow	2.0	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	0.40	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	406000	psi	ISO 527-1
Tensile Stress (Break)	8120	psi	ISO 527-2
Tensile Strain (Break)	20	%	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)	2.5	ft·lb/in <sup>2</sup>	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 <sup>2</sup>	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)	640	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 <sup>-1</sup> )	130	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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 10°C/min

