

# CHANG CHUN PLASTICS CO., LTD.

NO. 301, SONGKIANG ROAD, 7<sup>TH</sup> FL., TAIPEI, 10477 TAIWAN  
TEL : 886-2-2503-8131 (REF) FAX : 886-2- 2501-8018

## Engineering Plastics Polybutylene Terephthalate

### PBT 3010-104 Technical Data

#### CCP PBT 3010-104

PBT 3010-104 is a 10% glass fiber reinforced injection molding grade.

#### Characteristics

- 1)excellent electrical property
- 2)excellent temperature resistance, high heat distortion temperature.
- 3)excellent mechanic and chemical property
- 4)excellent weatherability
- 5)excellent wear property
- 6)excellent moldability
- 7)High resistance to fuels, oil, fats and many solvents

#### Injection Moulding Condition

Cylinder temperatures	: 235-270°C
Nozzle temperature	: 240-265°C
Mould temperature	: 40-120°C, suitable temperature 60-80°C
Injection rate	: middle - fast
Screw speed	: 60-120 rpm, to be chosen in such a way that plasticizing time is just within cooling time.
Pressure	Injection pressure : 500-1200 kg/cm <sup>2</sup>
	Holding pressure : 300-800 kg/cm <sup>2</sup>
	Back pressure : 0-3 kg/cm <sup>2</sup>
Mould shrinkage	Mould shrinkage 1.6 mm thickness horizon is 0.3-0.6% and vertical is 0.9-1.5% under the test method ISO 527.

#### Packaging

25 kg/ paper bag .

#### Material handling

Moisture pick-up from ambient air should be avoided. Keep hopper properly closed.

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### CCP PBT 3010-104

Property	Value	Unit	Test method
Glass fiber content	10	%	
Density	1.37	g/cm <sup>3</sup>	ISO 1183
Melt index, 250°C/2.16kg	30-42	g/10min	
Melting point	225	°C	DSC
Heat deflection temperature under load			
--- 1.80 Mpa	185	°C	ISO 75
--- 0.45 Mpa	210	°C	ISO 75
Flammability acc. to UL94, 0.8 mm thickness	HB		UL 94
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Tensile stress	70	MPa	1SO 527
Tensile strain	2.1	%	1SO 527
Tensile modulus	4200	MPa	1SO 527
Flexural stress	130	MPa	1SO 178
Charpy impact strength – notched, 23°C	4.0	KJ/m <sup>2</sup>	1SO 179
Charpy impact strength – unnotched, 23°C	20	KJ/m <sup>2</sup>	1SO 179
Izod impact strength – notched, 23°C	3.5	KJ/m <sup>2</sup>	1SO 180-1A
Izod impact strength – unnotched, 23°C	15	KJ/m <sup>2</sup>	1SO 180-1C
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Dielectric strength, 2 mm thickness	21	KV/mm	IEC 243
Volume resistivity	10 <sup>15</sup>	Ω-cm	IEC 63
Surface resistivity	10 <sup>13</sup>	Ω	IEC 93
Arc resistance	110	sec	UL 746A

(1) For reference only.

(2) All data in the table are the typical values of the material and not the minimum values of the material specifications.