

# 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

### Technical Data

#### CCP PBT 1100-211M

PBT unreinforced middle viscosity injection moulding grade.

(中黏度射出級聚對苯二甲酸丁二醇酯)

#### Characteristics 特性

- 1)excellent electrical property(優越的電氣性質)
- 2)excellent temperature resistance, high heat distortion temperature.  
(耐熱性佳，熱變形溫度高)
- 3)excellent mechanic and chemical property(優越的機械與化學性質)
- 4)excellent weatherability(耐候性佳)
- 5)excellent wear property(耐磨耗性佳)
- 6)excellent moldability(優越的成形性)
- 7)Good chemical resistance.(耐化性佳)
- 8)Good creep behavior.(優越的蠕變性質)
- 9)Very low water absorption. (吸水率低)

#### Injection Moulding Condition (射出成型條件)

Cylinder temperatures 料管溫度	: 230-260°C
Nozzle temperature 射嘴溫度	: 245-250°C
Mould temperature(模溫)	: 30-100°C, suitable temperature 40-80°C
Injection rate(射速)	: middle
Screw speed (螺桿轉速)	: 60-120 rpm, to be chosen in such a way that plasticizing time is just within cooling time.
Pressure (壓力)	Injection pressure(射壓) : 500-1200 kg/cm <sup>2</sup>
	Holding pressure(保壓) : 300-800 kg/cm <sup>2</sup>
	Back pressure(背壓) : 0-3 kg/cm <sup>2</sup>
Mould shrinkage 收縮率	Mould shrinkage 1.6 mm thickness is 1.2-1.8 % under the test method ASTM D955. 1.6mm 測試片，收縮率為 1.2-1.8%

#### Packaging(包裝)

25 kg paper bag or 850 kg super sack. (25 公斤袋裝或 850 公斤太空包裝)

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Property (物性)	Value (規格值)	Unit (單位)	Test method (測試方法) ISO
Intrinsic Viscosity(極限黏度)	1.00±0.015	dl/gr	ISO 1628
Melting index(熔融指數)(235°C)	18~22	g/10min	ISO 1133
Carboxyl End Groups(末端羧基含量)	≤30		Chang Chun
Color L*(色相 L*值)	≥85	-	Chang Chun
Color b*(色相 b*值)	≤2	-	Chang Chun
Density(比重)	1.30-1.32	Kg/m <sup>3</sup>	ISO 1183
Melting point(熔點)	225	°C	ISO 11357-1
Heat deflection temperature under load (熱變形溫度)			
--- 1.80 MPa	60	°C	ISO 075
--- 0.45 MPa	155	°C	ISO 075
Flammability acc. to UL94, 0.8 mm thickness (耐燃性)	HB		UL94
Tensile strength(引張強度)	50-60	MPa	ISO 527
Tensile elongation(引張伸長率)	>100	%	ISO 527
Flexural strength(撓曲強度)	80-90	MPa	ISO 178
Flexural modulus(撓曲模數)	2200-2400	MPa	ISO 178
Charpy notched impact strength(23°C) (Charpy 缺口衝擊強度)	4.9	KJ/m <sup>2</sup>	ISO 179
Dielectric strength, 2 mm thickness (絕緣破壞強度)	20	KV/mm	IEC 243-1
Volume resistivity(體積抵抗率)	10 <sup>15</sup>	Ω-cm	IEC 60093
Surface resistivity(表面抵抗率)	10 <sup>13</sup>	Ω	IEC 60093
Arc resistance(耐電弧)	120	Sec	UL 746A

※ 表中測試數據僅作參考用，非制定之規格值。

(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.