

CHANG CHUN PLASTICS CO., LTD.

NO. 301, SONGKIANG ROAD, 7TH FL., TAIPEI, 10477 TAIWAN
TEL : (02) 2503-8131 (REF) FAX : (02) 2503-3378

Engineering Plastics Polybutylene Terephthalate

Technical Data

CCP PBT 1100-211X

PBT unreinforced high viscosity injection/extrusion moulding 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	: 230-260°C
Nozzle temperature	: 245-250°C
Mould temperature	: 30-100°C, suitable temperature 40-60°C
Injection rate	: middle
Screw speed	: 60-120 rpm, to be chosen in such a way that plasticizing time is just within cooling time.
Pressure	Injection pressure : 500-1000 kg/cm ²
	Holding pressure : 300-700 kg/cm ²
	Back pressure : 0-3 kg/cm ²
Mould shrinkage	Mould shrinkage 1.6 mm thickness is 1.2-1.8 % under the test method ASTM D955.

Packaging

25 kg/paper bag or 850 kg/super sack.

Material handling

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

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Property	Value	Unit	Test method ASTM
Intrinsic Viscosity	1.30±0.02	dl/gr	D2857
Carboxyl End Groups	≤ 40	meq/kg	Chang Chun
Color L	≥ 85	-	Chang Chun
Color b	≤ 4	-	Chang Chun
Specific gravity	1.30-1.32	-	D792
Melting point	225±2	°C	DSC
Coef. of linear thermal expansion	9	10 ⁻⁵ cm/cm°C	D696
Heat deflection temperature under load			
--- 18.6 kg/cm ²	60	°C	D648
--- 4.6 kg/cm ²	155	°C	D648
Moisture absorption (24h)	0.06	%	D570
Flammability acc. To UL94 (1.6 mm)	HB	-	UL94
Tensile strength	500-600	kg/cm ²	D638
Tensile elongation	≥ 200	%	D638
Flexural strength	800-900	kg/cm ²	D790
Flexural modulus	23000	kg/cm ²	D790
Hardness - rockwell	85-90	M	D785
Dielectric strength, 2 mm thickness	20	KV/mm	D149
Volume resistivity	≥ 10 ¹⁵	Ω-cm	D257
Surface resistivity	≥ 10 ¹³	Ω	D257
Dielectric constant	3.3	60Hz	D150
Dielectric dissipation factor	0.001	60Hz	D150
Arc resistance	120	SEC	D495

(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.