

CHANG CHUN PLASTICS CO., LTD.

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

Engineering Plastics Polybutylene Terephthalate

PBT 3020-104 Technical Data

CCP PBT 3020-104

PBT 3020-104 is a 20% 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 Molding 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 ²
	Holding pressure : 300-800 kg/cm ²
	Back pressure : 0-3 kg/cm ²
Mould shrinkage	Mould shrinkage 1.6 mm thickness horizon is 0.2-0.6% and vertical is 0.8-1.6% 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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Property	Value	Unit	Test method
Glass fiber content	20	%	
Density	1.44	g/cm ³	ISO 1183
Melting point	225	°C	DSC
Heat deflection temperature under load			
--- 1.80 Mpa	200	°C	ISO 75
--- 0.45 Mpa	215	°C	ISO 75
Flammability acc. to UL94, 0.8 mm thickness	HB		UL 94
Tensile stress	100	MPa	1SO 527
Tensile strain	2.8	%	1SO 527
Tensile modulus	7000	MPa	1SO 527
Flexural stress	160	MPa	1SO 178
Charpy impact strength – notched, 23°C	6.0	KJ/m ²	1SO 179
Charpy impact strength – unnotched, 23°C	28	KJ/m ²	1SO 179
Izod impact strength – notched, 23°C	5.0	KJ/m ²	1SO 180
Izod impact strength – unnotched, 23°C	22	KJ/m ²	1SO 180
Dielectric strength, 2 mm thickness	21	KV/mm	IEC 243
Volume resistivity	10 ¹⁵	Ω-cm	IEC 60093
Surface resistivity	10 ¹³	Ω	IEC 60093
Arc resistance	110	sec	UL 746A

* All data are the typical values of the material and not the minimum values of the material specifications.