

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 1100-104S Technical Data

CCP PBT 1100-104S

PBT 1100-104S is an unreinforced medium viscosity 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 | : 230-265°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 is 1.0-2.0% under the test method ISO 294. |

Packaging

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

Material handing

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

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

CCP PBT 1100-104S

| Property | Value | Unit | Method |
|---|------------------|------------------------|-----------|
| Density | 1.31 | g/cm ³ | ISO 1183 |
| Melt flow index, 250°C, 2.16kg | 27 | g/10min | ISO 1133 |
| Melt volume rate, 250°C/5.0kg | 26 | cm ³ /10min | ISO 1133 |
| Intrinsic viscosity | 0.99 | cm ³ /g | CCP |
| Melting point | 225 | °C | DSC |
| Heat deflection temperature under load | | | |
| --- 1.80 Mpa | 60 | °C | ISO 75 |
| --- 0.45 Mpa | 155 | °C | ISO 75 |
| Flammability acc. to UL94, 0.8 mm thickness | HB | | UL 94 |
| <hr/> | | | |
| Tensile stress | 58 | MPa | 1SO 527 |
| Tensile strain | 30 | % | 1SO 527 |
| Tensile modulus | 2200 | MPa | 1SO 527 |
| Flexural strength | 87 | MPa | 1SO 178 |
| Flexural modulus | 2300 | MPa | 1SO 178 |
| Charpy impact strength – notched, 23°C | 5.0 | KJ/m ² | 1SO 179 |
| Charpy impact strength – unnotched, 23°C | 70 | KJ/m ² | 1SO 179 |
| Izod impact strength – notched, 23°C | 4.0 | KJ/m ² | 1SO 180 |
| Izod impact strength – unnotched, 23°C | 45 | KJ/m ² | 1SO 180 |
| <hr/> | | | |
| Dielectric strength, 2 mm thickness | 19 | KV/mm | IEC 60243 |
| Volume resistivity | 10 ¹⁵ | Ω-cm | IEC 60093 |
| Surface resistivity | 10 ¹² | Ω | IEC 60093 |
| Arc resistance | 90 | sec | UL 746A |

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