

# CHANG CHUN PLASTICS CO., LTD.

NO. 301, SONGKIANG ROAD, 7<sup>TH</sup> FL., TAIPEI, 10477 TAIWAN

## Engineering Plastics Polybutylene Terephthalate

### Technical Data

#### **CCP PBT 5630-104**

PBT glass fiber 30% reinforced injection moulding grade.

##### **Characteristics**

- 1) Halogen-free PBT
- 2) excellent electrical property
- 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 : 240-270

Nozzle temperature : 260-270

Mould temperature : 40-120 , suitable temperature 60-80

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 0.1-0.4% and vertical is 0.8-1.4% under the test method ASTM D955.

##### **Packaging**

25 kg/ paper bag .

##### **Material handing**

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

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### CCP PBT 5630-104

| Property                                    | Value            | Unit               | Test method<br>ASTM |
|---------------------------------------------|------------------|--------------------|---------------------|
| Glass Fiber Content                         | 30               | %                  | CCP                 |
| Specific gravity                            | 1.58             | -                  | D792                |
| Melting point                               | 225              |                    | DSC                 |
| Heat deflection temperature under load      |                  |                    |                     |
| --- 18.6 kg/cm <sup>2</sup>                 | 195              |                    | D648                |
| --- 4.6 kg//cm <sup>2</sup>                 | 210              |                    | D648                |
| Moisture absorption (24h)                   | 0.03             | %                  | D570                |
| Flammability acc. to UL94, 1.6 mm thickness | V-0              | -                  | UL94                |
| Tensile strength                            | 800              | kg/cm <sup>2</sup> | D638                |
| Tensile elongation                          | 3.0              | %                  | D638                |
| Flexural strength                           | 1350             | kg/cm <sup>2</sup> | D790                |
| Flexural modulus                            | 85000            | kg/cm <sup>2</sup> | D790                |
| Izod impact strength - notched 1/4"         | 7.5              | kg.cm/cm           | D256                |
| Dielectric strength, 2 mm thickness         | 21               | KV/mm              | D149                |
| Volume resistivity                          | 10 <sup>15</sup> | Ω-cm               | D257                |
| Surface resistivity                         | 10 <sup>12</sup> | Ω                  | D257                |
| Comparative tracking index (CTI)            | 600              | V                  | D3638               |
| Arc resistance                              | 100              | 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.