

## PBT 4140-201D Technical Data

### PBT 4140-201D

PBT 4140-201D is a glass fiber 40% reinforced injection 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	: 240-270°C
Nozzle temperature	: 260-270°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 <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 0.7-1.3% 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.

## Engineering Plastics Polybutylene Terephthalate

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Property	Value	Unit	Test method ASTM
Glass Fiber Content	40	%	
Specific gravity	1.75	-	D792
Melting point	225	°C	DSC
Coef. of linear thermal expansion	3	$10^{-5}$ cm/cm°C	D696
Heat deflection temperature under load			
--- 18.6 kg/cm <sup>2</sup>	190	°C	D648
--- 4.6 kg/cm <sup>2</sup>	210	°C	D648
Moisture absorption (24h)	0.03	%	D570
Flammability acc. to UL94, 0.8 mm thickness	V-0	-	UL94
Tensile strength	1350	kg/cm <sup>2</sup>	D638
Tensile elongation	3.0	%	
Flexural strength	1800	kg/cm <sup>2</sup>	D790
Flexural modulus	110000	kg/cm <sup>2</sup>	D790
Izod impact strength – notched 1/4"	10.0	kg.cm/cm	D256
Hardness - rockwell	95	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	3.5	60Hz	D150
Dielectric dissipation factor	0.001	60Hz	D150
Arc resistance	90	Sec	D495