PBT 4115-201D
Technical Data

Engineering Plastics
Polybutylene Terephthalate

PBT 4115-201D

PBT 4115-201D is a glass fiber 15% 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℃	
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^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 0.3-0.6% and vertical is 1.4-2.0% 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

PBT 4115-201D

Property	Value	Unit	Test method ASTM
Glass Fiber Content	15	%	
Specific gravity	1.54	-	D792
Melting point	225	℃	DSC
Coef. of linear thermal expansion	5	10^{-5} ㎝/㎝℃	D696
Heat deflection temperature under load			
--- 18.6 ㎏/㎠	200	℃	D648
--- 4.6 ㎏/㎠	220	℃	D648
Moisture absorption (24h)	0.03	%	D570
Flammability acc. to UL94, 0.8 ㎜ thickness	V-0	-	UL94
Tensile strength	1000	㎏/㎠	D638
Tensile elongation	3.5	%	
Flexural strength	1500	㎏/㎠	D790
Flexural modulus	55000	㎏/㎠	D790
Izod impact strength – notched 1/4”	5.5	㎏.㎝/㎝	D256
Hardness - rockwell	90	M	D785
Dielectric strength, 2 ㎜ thickness	20	KV/㎜	D149
Volume resistivity	10^{15}	Ω-㎝	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