

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

CCP PBT 4820G-203X THERMOPLASTIC POLYESTER RESIN

Product Description

PBT 4820G-203X is a 20% glass fiber reinforced flame retardant injection grade.

Characteristics

Processing • Injection Moulding

Deliver form • Pellets

Additives • Flame Retardant • Release agent • Antioxidant

General information	Value	Unit	Test Method
Part Marking Code	>PBT-GF20 FR(17)<	-	ISO 11469
Physical properties	Value	Unit	Test Method
Density	1.58	kg/m ³	ISO 1183
Viscosity Number	-	cm ³ /g	ISO 1628
Moulding shrinkage, parallel	0.1-0.5	%	ISO 294-4, 2577
Moulding shrinkage, normal	0.8-1.6	%	ISO 294-4, 2577
Moisture		%	ISO 62
Rheological properties	Value	Unit	Test Method
Melt mass-flow rate, 250°C 2.16kg	12.0	g/10min	ISO 1133
Melt viscosity, 260°C 1000sec ⁻¹	-	Pa*s	ISO 1143
Mechanical properties	Value	Unit	Test Method
Stress at break	115	MPa	ISO 527-1/-2
Strain at break	2.3	%	ISO 527-1/-2
Tensile Modulus	-	MPa	ISO 527-1/-2
Flexural Strength	165	MPa	ISO 178
Flexural Modulus	5500	MPa	ISO 178
Charpy impact strength – notched			
23°C	7.5	kJ/m ²	ISO 179/1eA
-40°C	-	kJ/m ²	
Charpy impact strength – unnotched			
23°C	-	kJ/m ²	ISO 179/1eU
-40°C		kJ/m ²	

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Thermal properties	Value	Unit	Test Method
Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
Heat deflection temperature under load			
1.80 Mpa	195	°C	ISO 75-1/-2
0.45 MPa	210	°C	
Flammability	Value	Unit	Test Method
Flammability acc. to UL94, 1.6mm thickness	V-0	-	UL 94
Glow Wire Flammability Index			
0.75mm	-	°C	IEC 60695-2-1/2
1.5mm	-	°C	
3mm	-	°C	
Glow Wire Ignition Temperature			
0.75mm	-	°C	IEC 60695-2-1/3
1.5mm	-	°C	
3mm	-	°C	
Electrical properties	Value	Unit	Test Method
Electric strength, 2mm	22	kV/mm	IEC 60243-1
Volume resistivity	10 ¹⁵	Ω*m	IEC 60093
Surface resistivity	10 ¹³	Ω	IEC 60093
Comparative tracking index	-	V	IEC 60112
Injection molding			
Pre-drying :	120°C , 5hours or longer 140°C , 3hours or longer		
Processing moisture content :	≤ 0.04%		
Resin temperature :	240~270°C		
Mold temperature :	40~80°C		

These property values are typical values obtained under varying conditions prescribed by certain standards and test methods and therefore are not the minimum values of the material specifications.