



ChangZhou Yi Yi International Trading Co., Ltd.

PBT 9K22120 FR1

Product description				
Material designation	>PBT-GF20%<			
Colour	Natural colour			
Material properties	Granular			
Processing method	Injection molding			
Physical property	Condition	Test standard	Data	unit
Density		ISO 1183	1.58	g/cm ³
Mold shrinkage	MD	ISO 294-4	0.30	%
Mold shrinkage	TD	ISO 294-4	1.1	%
Water absorption	(23°C, 50RH)	ISO 62	0.20	%
Mechanical properties	Condition	Test standard	Data	unit
Tensile strength	23°C	ISO 527-2	120	MPa
Elongation at break	23°C	ISO 527-2	2.5	%
Tensile modulus	23°C	ISO 527-2	8500	MPa
Charpy notched impact strength	23°C	ISO 179/1eA	9	kJ/m ²
Notched impact strength of simply supported beam	23°C	ISO 179/1eU	40	kJ/m ²
Charpy notched impact strength	23°C	ISO 180/1A	8	kJ/m ²
Unnotched izod impact strength	23°C	ISO 180/1U	55	kJ/m ²
Thermal	Condition	Test standard	Data	unit
Heat deflection temperature	0.45MPa No annealing	ISO 75-2/Bf	220	°C
Heat deflection temperature	1.80MPa No annealing	ISO 75-2/Af	210	°C
Vst		ISO 306/B50	204	°C
Melting temperature		ISO 11357-3	225	°C
Electrical properties	Condition	Test standard	Data	unit
Volume resistivity		IEC 60093	1.0E+16	Ω.cm
Surface resistivity		IEC 60093	1.0E+14	Ω.cm
Comparative Tracking Index		IEC 60112	500	V
Flammability	Condition	Test standard	Data	unit
Fire protection grade		UL-94	1.60mm	V-0
The relative temperature of glow wire	0.20mm	IEC 60695-2-13	960	°C
Injection molding condition	Condition		Recommended value	unit
Drying temperature range			120-	°C
Drying time			2-4	Hr
Moisture content			0.040	%
Mold temperature range			60-100	°C