

Properties	Test Method	Terms	Units	GF Reinforced Flame Retardant
				5010GN1-30
				AM2
				Standard
GF30				
Physical properties				
Density	ISO 1183	-	g/cm ³	1.66
Dimensional properties				
Moulding shrinkage (2mmt)	-	MD	%	0.5
		TD		1.2
Rheological properties				
Melt Volume flow Rate	ISO 1133	-	cm ³ /10min -	30 250°C × 5kg
Mechanical properties				
Yield stress	ISO 527-1,2	-	MPa	
Stress at break	ISO 527-1,2	-	MPa	140
Strain at break			%	2
Flexural strength	ISO 178	-	MPa	220
Flexural modulus			MPa	10,500
Charpy impact	ISO 179-1, 2	-	kJ/m ²	46
		notched	kJ/m ²	10
Thermal properties				
Melting temperature	ISO 11357-3	-	°C	224
Temperature of deflection under load	ISO 75-1, 2	1.80MPa	°C	>200
		0.45MPa		>200
Coefficient of Linear thermal expansion	ISO 11359-2	MD: -30~120°C	1E-5/°C	1.4
		MD: -30~35°C		2.0
		MD: 35~120°C		1.0
		TD: -30~120°C		10.8
		TD: -30~35°C		7.3
		TD: 35~120°C		13.5
Flammability	UL94	-	-	V-0(0.71mmt)
Electrical properties				
Volume resistivity	IEC 60093	-	Ω·m	>1E12
Surface resistivity	IEC 60093	-	Ω	>1E14
Electric strength	IEC 60243-1	1mmt	MV/m	24
		2mmt		-
		3mmt		-
CTI	UL746A	-	-	PLC 3
RTI(Elec)	UL746B	-	-	130(0.71mmt)
RTI(Imp)	UL746B	-	-	120(0.71mmt)
RTI(Str)	UL746B	-	-	130(0.71mmt)
Molding Conditions (Standard example)				
Pre-drying Temperature	-	-	°C	120 / 140
Pre-drying Time	-	-	h	5-8 / 4-6
Cylinder temperature	-	-	°C	240-265
Mold temperature	-	-	°C	50-90
Injection speed	-	-	-	Middle-High
Injection pressure	-	-	MPa	20-150
Screw speed	-	-	rpm	80-150

The values described are typical values only.