

Properties	Test Method	Terms	Units	GF Reinforced Alloy Flame Retardant	
				5830GN6-40	
				Improved Glow Wire Resistance	
				(GF+MD)40	
Physical properties					
Density	ISO 1183	-	g/cm ³	1.70	
Dimensional properties					
Moulding shrinkage (2mmt)	-	MD TD	%	0.4 1.0	
Rheological properties					
Melt Volume flow Rate	ISO 1133	-	cm ³ /10min -	20 250°C × 5kg	
Mechanical properties					
Yield stress	ISO 527-1,2	-	MPa	-	
Stress at break	ISO 527-1,2	-	MPa	100	
Strain at break	ISO 527-1,2	-	%	1	
Flexural strength	ISO 178	-	MPa	150	
Flexural modulus	ISO 178	-	MPa	10,700	
Charpy impact	ISO 179-1, 2	-	notched	kJ/m ²	32
				kJ/m ²	7
Thermal properties					
Melting temperature	ISO 11357-3	-	°C	224	
Temperature of deflection under load	ISO 75-1, 2	1.80MPa 0.45MPa	°C	>200	
				>200	
Coefficient of Linear thermal expansion	ISO 11359-2	MD: -30~120°C MD: -30~35°C MD: 35~120°C	1E-5/°C	1.3	
				1.0	
				1.0	
		TD: -30~120°C TD: -30~35°C TD: 35~120°C		9.1	
				6.7	
				10.9	
Flammability	UL94	-	-	V-0(0.3mmt) V-0(3mmt)	
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 2	
RTI(Elec)	UL746B	-	-	0.3 (130)	
RTI(Imp)	UL746B	-	-	0.3 (130)	
RTI(Str)	UL746B	-	-	0.3 (140)	
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.