NOVADURAN™

MITSUBISHI CHEMICAL GROUP

Properties	Test Method	Terms	Units	GF Reinforced Flame Retardant
				5010GN6-15M8X
				Low Outgas 0.30mm V-0
				GF15
Physical properties				
Density	ISO 1183	-	g/cm³	1.57
Dimensional properties				
Moulding shrinkage (2mmt)	-	MD TD	% %	0.8 1.7
Rheological properties				
Melt Volume flow Rate	ISO 1133	-	cm³/10min -	26 250℃×5kg
Mechanical properties				
Yield stress	ISO 527-1,2	-	MPa	-
Stress at break Strain at break	ISO 527-1,2	-	MPa %	105 3
Flexural strength Flexural modulus	ISO 178	-	MPa MPa	165 6,500
Charpy impact	ISO 179-1, 2	- notched	kJ/m² kJ/m²	30 7
Thermal properties				
Melting temperature	ISO 11357-3	-	℃	224
Temperature of deflection under load	ISO 75-1, 2	1.80MPa 0.45MPa	℃	198 >200
Coefficient of Linear thermal expansion	ISO 11359-2	MD:-30～120℃ MD:-30～35℃ MD:35～120℃ TD:-30～120℃ TD:-30～35℃ TD:35～120℃	1E-5/℃	3.0 3.2 3.0 11.9 8.2 14.7
Flammability	UL94	-	-	V-0(0.3mmt) V-0(0.75mmt) V-0,5VA(1.5mmt) V-0,5VA(3mmt)
Electrical properties				
Volume resistivity	IEC 60093	-	Ω・m	>1E12
Surface resistivity	IEC 60093	-	Ω	>1E14
Electric strength	IEC 60243-1	1mmt 2mmt 3mmt	MV/m	23 - -
CTI	UL746A	-	-	PLC 2
RTI(Elec)	UL746B	-	-	130(0.3mmt)
RTI(Imp)	UL746B	-	-	130(0.3mmt)
RTI(Str)	UL746B	-	-	140(0.3mmt)
Molding Conditions (Standard example)				
Pre-drying Temperature	-	-	℃	120 / 140
Pre-drying Time	-	-	h	5-8 / 4-6
Cylinder temperature	-	-	℃	240-265
Mold temperature	-	-	℃	50-90
Injection speed	-	-	-	Middle-High
Injection speed	-	-	MPa	20-150
Screw speed	-	-	rpm	80-150

The values described are typical values only.