



SUMIKAEXCEL 3601GL30

		Method	Unit	3601GL30
Color				Black
Filler		-		GF
Glass fiber type		-		Chopped
Filler content		-	%	30
Physical property				
Specific gravity		ASTM D792		1.60
Mold shrinkage	MD	Sumitomo Original*1	%	0.20
	TD		%	0.40
Mechanical property				
Tensile	strength	ASTM D638	MPa	140
	elongation		%	3.0
	strength	ISO 527	MPa	134
	modulus		GPa	9.7
	elongation		%	1.8
	strength	ASTM D790	MPa	190
Flexural	modules		GPa	8.4
	strength	ISO 178	MPa	215
	modulus		GPa	9.6
	strength			
Izod impact strength	non-notched	D256	J/m	539
	notched	D256	J/m	81
Charpy impact strength		ISO 179	J/m	54
Non-notched				-
Rockwell strength			R scale	134
Thermal property				
TDUL		ASTM D648	deg C	216
1.82MPa for ASTM/1.80MPa for ISO		ISO 75	deg C	220
Liner expansion coefficient	MD	Sumitomo Original*2	$\times 10^{-5}/\text{deg C}$	2.6
	50 - 250°C	TD		4.8
Electrical property				
Dielectric constant	ASTM D150		1MHz	-
			1GHz	-
Dielectric tangent			1MHz	-
			1GHz	-
Dielectric breakdown voltage		Short time method	kV/mm	-
Specific volume resistance		ASTM D257	Ωm	10^{14}

Arc resistance	ASTM D495	sec.	120 to 180
Tracking resistance	IEC method	V	-
Flammability			
Flame retardency	UL 94		V-0 at 0.43mmt
Limited Oxygen Index	JIS K 7201		-

<Note>

All the data above are just for reference, not intended for any guarantee on the product.

*1: The tool of 64mm X 64mm X 3mmt was used to determine mold shrinkages.

*2: The highest temperature at which dumbbell shaped test pieces of 1.2mmt does not deform after immersing in a solder bath for 60 seconds.

*3: The center part of the test piece for tensile property was used.

Standard molding conditions			
Pre-drying		deg C for hours	50 to 180 deg C for 5 to 24 hou
Cylinder temperature	Nozzle	deg C	330 to 380
	Front	deg C	330 to 380
	Middle	deg C	320 to 370
	Rear	deg C	300 to 340
Tool (Mold) temperature		deg C	120 to 180
Injection velocity		-	Low to Middle
Injection pressure		MPa	100 to 200
Holding pressure		MPa	50 to 100
Back pressure		MPa	5 to 10
Screw rotation		rpm	50 to 100