SUMITOMO CHEMICAL

July 24, 2013

SUMIKAEXCEL 3600G

		Method	Unit	3600G
Color				Natural
Filler		-		-
Glass fiber type		-		-
Filler content		-	%	-
Physical property				
Specific gravity		ASTM D792		1.37
Mold shrinkage	MD	Sumitomo Original*1	%	0.60
	TD		%	0.60
Mechanical property				
Tensile	strength	ASTM D638	MPa	84
	elongation		%	40.0 to 80.0
	strength	ISO 527	MPa	-
	modulus		GPa	-
	elongation		%	-
Flexural	strength	ASTM D790	MPa	129
	modules		GPa	2.6
	strength	ISO 178	MPa	-
	modulus		GPa	-
Izod impact strength	non-notched	D256	J/m	non-breakable
	notched	D256	J/m	85
Charpy impact strength		ISO 179	J/m	-
Non-notched				-
Rockwell strength			R scale	120
Thermal property				
TDUL		ASTM D648	deg C	203
1.82MPa for ASTM/1.80MPa for ISO		ISO 75	deg C	-
Liner expansion coefficient	MD	Sumitomo Original*2	$\times 10^{-5}$/deg C	5.5
50 - 250℃	TD			5.7
Dielectric constant		ASTM D150	1MHz	3.5
			1GHz	3.4
Dielectric tangent			1MHz	0.004
			1GHz	0.004
Dielectric breakdown voltage		Short time method	kV/mm	16
Specific volume resistance		ASTM D257	Ωm	10^{15}

Arc resistance	ASTM D495	sec.	70
Tracking resistance	IEC method	V	150
Flammability			
Flame retardency	UL 94		V-0 at 0.46mmt
Limited Oxygen Index	JIS K 7201		38

<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	160 to 180 deg C for 5 to 24 hours
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