



SUMIKASUPER E4009

		Method	Unit	E4009
Color				Natural
Filler		-		Glass Fiber
Glass fiber type		-		Milled
Filler content		-	%	45
Physical property				
Specific gravity		ASTM D792		1.76
Mold shrinkage	MD	Sumitomo Original* ¹	%	0.11
	TD		%	1.22
Mechanical property				
Tensile	strength	ASTM D638	MPa	152
	elongation		%	5.4
	strength	ISO 527	MPa	-
	modulus		GPa	-
	elongation		%	-
Flexural	strength	ASTM D790	MPa	145
	modules		GPa	13.3
	strength	ISO 178	MPa	-
	modulus		GPa	-
Izod impact strength		D256	J/m	84
Non-notched		ISO 180	J/m	374
Charpy impact strength		ISO 179	J/m	-
Non-notched				-
Rockwell strength			R scale	-
Thermal property				
TDUL		ASTM D648	deg C	326
1.82MPa for ASTM/1.80MPa for ISO		ISO 75	deg C	-
Solder resistance		Sumitomo Original* ²	deg C	330
Liner expansion coefficient	MD	Sumitomo Original* ³	×10 ⁻⁵ /deg C	1.5
	TD			6.3
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 ¹³
Specific surface resistance			Ω	-
Arc resistance		ASTM D495	sec.	-
Tracking resistance		IEC method	V	-

Flammability			
Flame retardency	UL 94		V-0 at 0.15mmt
Limited Oxygen Index	JIS K 7201		42

<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	About 130 deg C for 4 to 24 hours
Cylinder temperature	Nozzle	deg C	370 to 390
	Front	deg C	370 to 390
	Middle	deg C	350 to 370
	Rear	deg C	330 to 350
Suitable resin temperature		deg C	380
Tool (Mold) temperature		deg C	40 to 160
Injection velocity		-	Middle to High
Injection pressure		MPa	120 to 160
Holding pressure		MPa	40 to 60
Back pressure		MPa	1 to 5
Screw rotation		rpm	50 to 100