

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.006	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.006	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Tensile Strength	84	MPa	ASTM D 638
Compressive Modulus	1630	MPa	ASTM D 695
Compressive Strength	109	MPa	ASTM D 695
Flexural Modulus	2550	MPa	ASTM D 790
Flexural Strength	129	MPa	ASTM D 790
Rockwell Hardness	R 120	-	ASTM D 785
Taber Abrasion Resistance	20	mg/1000 cycles	ASTM D 1044
Izod Impact notched, 1/4 in	85	J/m	ASTM D 256
Izod Impact unnotched, 1/4 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
UL 94 Flame rating	V-0	-	UL 94
Thickness tested	0.46	mm	-
Coefficient of Thermal Expansion, MD	55	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	57	E-6/K	ASTM D 696
DTUL @ 66 psi	210	°C	ASTM D 648
DTUL @ 264 psi	203	°C	ASTM D 648
Vicat Temperature	222	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0259	W/(m K)	ASTM C 177
Limiting Oxygen Index	38	%	ASTM D 2863

Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Dielectric Strength, Short Time	16	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.001	-	ASTM D 150
Dielectric Constant, 60 Hz	3.5	-	ASTM D 150
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257
Arc Resistance	70	s	ASTM D 495

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.43	%	ASTM D 570
Density	1370	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	160 - 180	°C	-
Pre-drying - Time	5 - 24	h	-
Mold temperature	120 - 180	°C	-
Zone 1	300 - 340	°C	-
Zone 2	320 - 370	°C	-
Zone 3	330 - 380	°C	-
Nozzle temperature	330 - 380	°C	-
Screw speed	50 - 100	rpm	-
Injection pressure	100 - 200	MPa	-
Back pressure	5 - 10	MPa	-
Holding pressure	50 - 100	MPa	-

## Characteristics

**SUMIKAEXCEL® PES4100G**

PESU

Sumitomo Chemical Co., Ltd.

**Processing**

Injection Molding, Other Extrusion

**Features**

Amorphous

**Delivery form**

Pellets

**Regional Availability**

North America, Europe, Asia Pacific

**Special Characteristics**

Heat stabilized or stable to heat