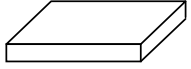
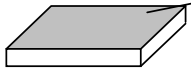
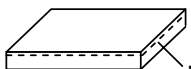



# Product Name : Sarcon® GR-L Series

## Thermally Conductive and Non-Flammable Silicone Gel

### 1] Features

- 1) Low thermal resistance due to the high thermal conductivity
- 2) UL94 V-0 class
- 3) Low content of Low Molecular Weight Siloxane
- 4) Sarcon® GR-L series has below four variety products.

Sarcon® GR-L	Silicone Compound	
Sarcon® GR-HL	Silicone Compound with hardened top surface	 Thin hardened layer/surface
Sarcon® GR-FL	Silicone Compound with mesh embedded overall	 Nylon mesh
Sarcon® GR-HFL	Silicone Compound with hardened top surface and mesh embedded overall	 Thin hardened layer/surface Nylon mesh

### 2] Typical Product Properties

Table-1

Property	Unit	GR-L	GR-HL	GR-FL	GR-HFL	Test Method
Color	—	Gray				Visual
Specific Gravity <sup>1)</sup>	—	2.7				JIS K 6220 ASTM D-792
Hardness <sup>3)</sup>	ASKER C (Shore00)	26 (53)				JIS K 7312 ASTM D-2240
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.8	0.8	JIS K 6251(#2) ASTM D-412
Elongation <sup>1)</sup>	%	64	32	40	30	JIS K 6251(#2) ASTM D-412
Tear Strength <sup>1)</sup>	kN/m	1	1	3	3	JIS K 6252 (Angle) ASTM D-624
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	2×10 <sup>4</sup>	4×10 <sup>4</sup>	3×10 <sup>4</sup>	JIS K 6249 ASTM D-257
Breakdown Voltage <sup>2)</sup>	kV/mm	13	15	13	19	JIS K 6249 ASTM D-149
Withstand Voltage <sup>2)</sup>	kV/mm	7	10	8	10	JIS K 6249 ASTM D-149
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8				JIS R 2616 / ASTM D-2326 equivalent

[Remark] Specimen :

- 1) 2.0mm Thickness
- 2) 120mm Width x 120mm Length x 1.0mm Thickness
- 3) 60mm Width x 120mm Length x 20mm Thickness (GR-L for all product)

### 3] Thermal Resistance

(°C · cm<sup>2</sup>/W) Table-2

Thickness	Force(kPa)	GR-L	GR-HL	GR-FL	GR-HFL
0.5mm	100	1.77	2.05	2.64	2.88
	300	1.50	1.79	2.26	2.33
	500	1.39	1.70	2.11	2.17
1.0mm	100	2.87	3.56	4.24	4.33
	300	2.50	3.06	3.71	3.78
	500	2.29	2.83	3.37	3.47
1.5mm	100	4.40	4.89	5.60	6.03
	300	3.98	4.40	4.85	5.29
	500	3.67	3.99	4.44	4.92
2.0mm	100	5.57	6.56		
	300	4.94	5.86		
	500	4.55	5.30		
2.5mm	100	7.24	7.83		
	300	6.31	6.84		
	500	5.75	6.18		
3.0mm	100	8.10	8.74		
	300	6.83	7.54		
	500	6.06	6.75		
4.0mm	100	10.06	11.57		
	300	8.51	9.92		
	500	7.58	8.90		
5.0mm	100	11.61	12.85		
	300	9.62	10.72		
	500	8.47	9.59		

[Remark] Test Method : Fujipoly Test Method TIM1300 Tester based on ASTM D5470

### 4] Extractable Volatiles

#### Low Molecular Weight Siloxane Content

Table-3

	Sarcon® GR-L
D <sub>4</sub> - D <sub>10</sub>	less than 0.0010 wt%
D <sub>11</sub> - D <sub>20</sub>	0.0039 wt%
Total less than D <sub>20</sub>	0.0039 wt%

[Remark] Test Method : Gas Chromatographic Analysis by abstracting acetone

### Bellcore Test

Table-4

Sarcon® GR-L	Passed Bellcore Specification TR-NWT000930
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### 5] Flame Retardancy

Table-5

Sarcon® GR-L	94V-0 ( more than 0.3mm )
Sarcon® GR-FL	94V-0 ( more than 0.3mm )

## 6] Compression Load

Sarcon® GR-L

(N) Table-6

	50G-L	100G-L	150G-L	200G-L	250G-L	300G-L	400G-L	500G-L
10 %	118	106	83	63	64	45	40	38
20 %	301	211	176	149	138	117	104	98
30 %	460	368	320	289	268	241	208	201
40 %	638	577	529	481	435	416	342	334
50 %	844	820	771	732	655	630	515	501
sustain 50 %	510	434	413	389	350	347	270	258

Sarcon® GR-HL

(N) Table-7

	50G-HL	100G-HL	150G-HL	200G-HL	250G-HL	300G-HL	400G-HL	500G-HL
10 %	174	157	128	90	84	66	49	37
20 %	395	309	286	219	186	192	131	124
30 %	600	553	542	401	355	375	254	244
40 %	840	875	827	622	570	597	408	384
50 %	1117	1232	1162	889	842	839	583	551
sustain 50 %	946	906	790	539	488	444	341	288

Sarcon® GR-FL

(N) Table-8

	50G-FL	100G-FL	150G-FL					
10 %	194	173	152					
20 %	440	440	401					
30 %	745	704	729					
40 %	1103	977	1119					
50 %	1499	1280	1493					
sustain 50 %	1131	1064	965					

Sarcon® GR-HFL

(N) Table-9

	50G-HFL	100G-HFL	150G-HFL					
10 %	226	184	140					
20 %	485	450	341					
30 %	806	719	583					
40 %	1183	996	831					
50 %	1599	1248	1103					
sustain 50 %	1247	1075	929					

[Remark] Test Method : Fujipoly Test Method

- Compression Ratio : 5.0mm/min (1960N(200kgf) Load Cell)
- Compression Area : 6.25cm<sup>2</sup> (25mm x 25mm)
- Sustain 50% at one minute after

## 7] Heat Aging Test

7] - 1) Test Condition : 70°C×1,000hrs.

Sarcon® GR-L

Table-10

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.9	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	26	26	26	26	26	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.2	0.2	0.2	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	64	59	59	50	40	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	5×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	14	14	14	14	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HL

Table-11

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.9	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(25)	(25)	(25)	(25)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.2	0.3	0.2	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	32	32	32	32	30	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	2×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	5×10 <sup>4</sup>	5×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	15	18	17	17	17	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-FL

Table-12

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.8	2.7	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(25)	(25)	(26)	(26)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.8	0.8	0.9	0.8	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	40	40	30	30	29	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	4	3	3	3	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	4×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	10	9	15	19	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HFL

Table-13

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.8	2.8	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(25)	(25)	(25)	(25)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.9	0.8	0.8	0.8	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	30	30	30	30	29	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	3	3	3	5	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	5×10 <sup>4</sup>	5×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	19	19	20	19	19	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

[Remark] Specimen :

- 1) 2.0mm Thickness
- 2) 120mm Width x 120mm Length x 1.0mm Thickness
- 3) 60mm Width × 120mm Length × 20mm Thickness (GR-L for all product)

7] - 2) Test Condition : 120°C × 1,000hrs.

Sarcon® GR-L

Table-14

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.9	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	26	26	26	26	30	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.2	0.2	0.3	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	64	29	30	30	20	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	6×10 <sup>4</sup>	9×10 <sup>4</sup>	1×10 <sup>5</sup>	2×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	15	18	18	18	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HL

Table-15

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.9	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(26)	(26)	(26)	(29)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.3	0.3	0.3	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	32	30	30	20	20	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	2×10 <sup>4</sup>	5×10 <sup>4</sup>	8×10 <sup>4</sup>	1×10 <sup>5</sup>	2×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	15	15	18	19	19	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-FL

Table-16

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(26)	(26)	(26)	(30)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.8	0.7	0.4	0.4	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	40	38	35	33	24	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	3	3	3	2	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	4×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	5×10 <sup>4</sup>	8×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	15	15	15	17	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HFL

Table-17

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.8	2.8	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(26)	(26)	(26)	(30)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.8	0.8	0.7	0.6	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	30	24	20	15	15	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	3	3	2	2	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	3×10 <sup>4</sup>	5×10 <sup>4</sup>	6×10 <sup>4</sup>	1×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	19	19	18	19	21	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

7] - 3) Test Condition : 150°C×1,000hrs.

Sarcon® GR-L

Table-18

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.8	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	26	27	29	31	34	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.2	0.2	0.2	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	64	37	35	37	10	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	6×10 <sup>4</sup>	1×10 <sup>5</sup>	2×10 <sup>5</sup>	3×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	15	17	16	17	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HL

Table-19

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.8	2.8	2.8	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(27)	(29)	(31)	(34)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.3	0.3	0.3	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	32	34	34	25	15	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	2×10 <sup>4</sup>	7×10 <sup>4</sup>	1×10 <sup>5</sup>	4×10 <sup>5</sup>	4×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	15	15	17	16	17	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-FL

Table-20

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.8	2.7	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(27)	(29)	(31)	(34)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.2	0.2	0.4	0.2	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	40	23	13	20	14	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	1	2	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	4×10 <sup>4</sup>	7×10 <sup>4</sup>	1×10 <sup>5</sup>	3×10 <sup>5</sup>	5×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	15	17	17	13	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HFL

Table-21

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.8	2.8	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(27)	(29)	(31)	(34)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.6	0.4	0.2	0.2	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	30	15	15	15	15	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	2	2	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	8×10 <sup>4</sup>	2×10 <sup>5</sup>	5×10 <sup>5</sup>	7×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	19	19	20	19	19	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

## 8] Humidity Test

Test Condition : 60°C×90%×1,000hrs.

Sarcon® GR-L

Table-22

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.9	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	26	26	26	26	27	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.2	0.2	0.2	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	64	66	50	50	35	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	4×10 <sup>4</sup>	5×10 <sup>4</sup>	6×10 <sup>4</sup>	6×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	14	15	14	14	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HL

Table-23

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.9	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(26)	(26)	(26)	(27)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.2	0.2	0.2	0.2	0.2	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	32	34	34	35	34	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	1	1	1	1	1	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	2×10 <sup>4</sup>	4×10 <sup>4</sup>	5×10 <sup>4</sup>	6×10 <sup>4</sup>	1×10 <sup>5</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	15	16	15	16	16	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-FL

Table-24

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.7	2.7	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(26)	(26)	(26)	(27)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.7	0.9	0.5	0.5	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	40	45	40	40	35	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	3	3	3	3	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	4×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	4×10 <sup>4</sup>	3×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	13	12	13	13	13	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

Sarcon® GR-HFL

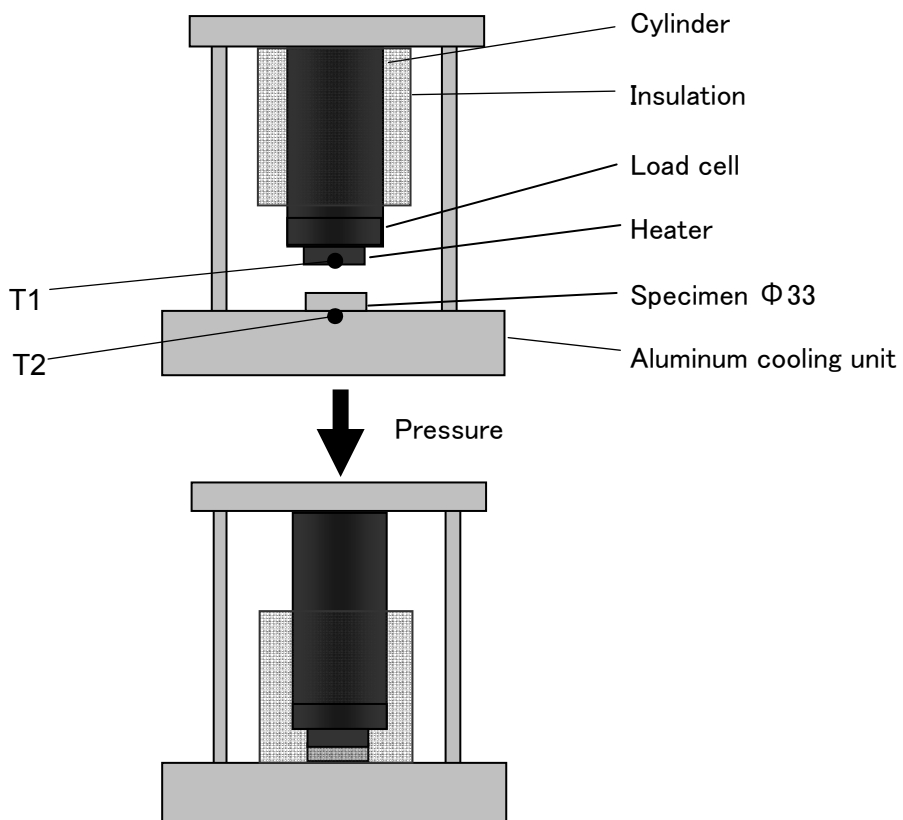
Table-25

Property	Unit	Initial	100hrs	250hrs	500hrs	1,000hrs	Test Method
Specific Gravity <sup>1)</sup>	—	2.7	2.7	2.8	2.8	2.8	JIS K 6220
Hardness <sup>3)</sup>	ASKER C	(26)	(26)	(26)	(26)	(27)	JIS K 7312
Tensile Strength <sup>1)</sup>	MPa	0.8	0.9	0.9	0.6	0.6	JIS K 6251(#2)
Elongation <sup>1)</sup>	%	30	30	30	30	30	JIS K 6251(#2)
Tear Strength <sup>1)</sup>	kN/m	3	3	4	3	4	JIS K 6252 (Angle)
Volume Resistivity <sup>2)</sup>	MΩ·m	3×10 <sup>4</sup>	3×10 <sup>4</sup>	3×10 <sup>4</sup>	4×10 <sup>4</sup>	5×10 <sup>4</sup>	JIS K 6249
Breakdown Voltage <sup>2)</sup>	kV/mm	19	19	20	19	19	JIS K 6249
Thermal Conductivity <sup>3)</sup>	W/m·K	2.8	2.8	2.8	2.8	2.8	JIS R 2616

[Test Method]

Test method of Thermal Conductivity

Thermal conductivity value is calculated with the measured thermal resistance using below testing method and the specimen's thickness.



$$\text{Thermal Resistance (R)} = \frac{T1 - T2}{Q} \times S$$

- R : Thermal Resistance (°C·cm<sup>2</sup>/W)
- T1 : Heater temperature (°C)
- T2 : AL cooling plate temperature (°C)
- Q : Applied voltage (W)
- S : Area of the compressed specimen (cm<sup>2</sup>)



## 9] Types and Configuration

### Standard Product Form

Sarcon® GR-L series is placed between PET (Polyester) film and special polyethylen film, Kisscut into the required shape.

These products are not in-stock items. Please contact us for an inventory status.

Series	Product Description	Thickness	Sheet size
Sarcon® GR-L	Sarcon® 50G-L	0.5mm±0.1mm	300mm×200mm  ( Usable size 280mm×180mm )
	Sarcon® 100G-L	1.0mm±0.2mm	
	Sarcon® 150G-L	1.5mm±0.2mm	
	Sarcon® 200G-L	2.0mm±0.3mm	
	Sarcon® 250G-L	2.5mm±0.3mm	
	Sarcon® 300G-L	3.0mm±0.3mm	
	Sarcon® 400G-L	4.0mm±0.3mm	
	Sarcon® 500G-L	5.0mm±0.3mm	
Sarcon® GR-HL	Sarcon® 50G-HL	0.5mm±0.1mm	
	Sarcon® 100G-HL	1.0mm±0.2mm	
	Sarcon® 150G-HL	1.5mm±0.2mm	
	Sarcon® 200G-HL	2.0mm±0.3mm	
	Sarcon® 250G-HL	2.5mm±0.3mm	
	Sarcon® 300G-HL	3.0mm±0.3mm	
	Sarcon® 400G-HL	4.0mm±0.3mm	
	Sarcon® 500G-HL	5.0mm±0.3mm	
Sarcon® GR-FL	Sarcon® 50G-FL	0.5mm±0.1mm	
	Sarcon® 100G-FL	1.0mm±0.2mm	
	Sarcon® 150G-FL	1.5mm±0.2mm	
Sarcon® GR-HFL	Sarcon® 50G-HFL	0.5mm±0.1mm	
	Sarcon® 100G-HFL	1.0mm±0.2mm	
	Sarcon® 150G-HFL	1.5mm±0.2mm	

## 10] Other

### Notes:

- Properties of the products may be revised due to some changes for improving performance.
- Properties values in this document are not specification or guaranteed.
- All Fujipoly test data in this document are based on Fujipoly test method and are believe to be accurate and reliable. Nevertheless, any Fujipoly test data shows typical product properties, and does not show the guaranteed product properties.
- Some silicone oil may exude from the product according to operating conditions.
- Some low molecular siloxane may vaporize from the product according to operating conditions.
- It is advisable to use the product under recommended operating condition. Some more silicone oil may exude from the product if it was used over the recommended condition.
- It is advisable to use the product under parallel and even compression. Some more silicone oil may exude from the product if it was used under excessive or partial stress.
- Products testing by the purchaser is recommended in order to meet expected results such as performance and application.
- The products in the document are low hardness ones. The products may deform to some extend when taking the sheets off the liner. Customer are advised to test the handling performance before use.

### Statement of Lieu of Warranty:

All technical information and data in this document is based on tests and is believed to be accurate and reliable. Nevertheless, since the products described herein are not provided to conform with mutually accepted specifications and the use thereof is unknown, the manufacturer and seller of the product do not guarantee results, freedom from patent infringement, or suitability of the product for any application thereof. The manufacturer and seller of the product described in this document will provide all possible technical assistance and will replace any products proven defective. No statement or recommendation made by the manufacturer or seller not contained herein shall have any force of effect unless in conformity with an agreement signed by an officer of the seller or manufacturer. Product testing by the purchaser is recommended in order to confirm expected results.

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Fuji Poly Industries Co., Ltd. Tech Dept.

# Fujipoly® Global Network

## **Fuji Polymer Industries Co., Ltd.**

**JAPAN**

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