

# Urethane Sponge Sheets, Rubber Sponge Sheets

For Sponge Gaskets, see P.455. For Sponge Tapes, see P.449.

Standard Type		Configurable Type		Material	Hardness	Color
No Adhesive	Adhesive	No Adhesive	Adhesive			
SGNN	SGNS	SGNNF	SGNSF	Polyurethane Sponge	(Less than Asker C1)	Black
-	-	SGNC	SGNCA	Chloroprene Rubber Sponge	Asker C25	Black
-	-	SGNW	SGNWA	Chloroprene Rubber Sponge	Asker C25	White
-	-	SGNP	SGNPA	EPDM Sponge	Asker C8	Black
-	-	SGNB	SGNBA	NBR Sponge	Asker C30	Black
SISP	SISA	SGNA	SGNAA	Silicon Rubber Sponge	Asker C35* (Asker C22)	Orange
-	-	SGNL	SGNLA	Silicon Rubber Sponge	Asker C15	Orange
-	-	SGNF	SGNFA	Fluororubber Sponge	Asker C35	Black

\* Values in ( ) are applicable to Standard Type of silicon sponge.

Temperature limit for seals is 80°C.  
SGNW and SGNWA might discolor by aging.

(No Adhesive)

(Adhesive)

Adhesive thickness is 0.14 ~ 0.2mm.

**Accuracy Standards**

Polyurethane Sponge		Others	
A, B	Tolerance	A, B	Tolerance
390 or Less	±2	190 or Less	±1.5
400~790	±2.5	200~390	±2
800	±3	400 or More	±3

**Standard Type**

Part Number	Type	T Selection	Selection	
			A	B
SGNN	SGNS	10	100	100
		30	200	400
		50	500	800
SISP	SISA	3	100	100
		5	250	100
		10	250	100

**Standard Type**

Part Number - [A] - [B]

SGNN10 - 100 - 100

SGNS10 - 250 - 100

**Configurable Type**

Part Number - [A] - [B] - [T]

SGNCA - 320 - 220 - 10

**Configurable Type**

Part Number	10mm Increment		T Selection	Tolerance
	A	B		
SGNC	20~500	20~500	3	±0.5
			5	±1
			8	
			10	
			15	
			20	
SGNA	20~500	20~500	2	
			3	
			5	
			10	±1.5
15				
20				
SGNNF	10~500	10~500	10	±1
			30	±2
			50	±3

**Characteristics of Sponges**

Item	Unit	Polyurethane Sponge	Chloroprene Rubber Sponge	EPDM Sponge	NBR Sponge	Silicon Rubber Sponge			Fluororubber Sponge
						Hs35	Hs22	Hs15	
Apparent Density	g/cm <sup>3</sup>	0.022	0.18	0.13	0.21	0.35~0.37	0.35~0.37	0.3	0.45
Air Bubble	-	Continuous Cell	Independent Cell	Independent Cell	Independent Cell	Independent Cell			Independent Cell
Tensile Strength	MPa (kgf/cm <sup>2</sup> )	≥0.076 (≥0.77)	0.9 (9)	0.5 (5)	0.8 (8)	1.6~1.8 (16~18)	0.7 (7)	1 (10)	2.7 (27)
Elongation	%	≥120	170	200	200	200~250		250	280
25% Compression Load	MPa (kgf/cm <sup>2</sup> )	-	5.3×10 <sup>-2</sup> (0.54)	3.1×10 <sup>-2</sup> (0.32)	6.5×10 <sup>-2</sup> (0.66)	- (*1)		- (*3)	- (*1)
Continuous Use Temperature <sup>2</sup>	°C	-10~70	-35~130	-40~130	-10~140	-70~200			-20~230
Abrasion Resistance		○	○	○	○	△			○
Anti-Aging		○	○	○	○	○			○
Water Resistance		△	○	○	○	○			○
Chemical Resistance	Oil (Gasoline)	○	○	×	○	△			○
	Acid	×~△	○	×	○	△~○			○
	Alkali	×	○	○	○	○			△~○
	Organic Solvent	×	×	×	×	×			×

For Adhesive Type, the adhesion strength decreases under high temperature (at approx. 80°C or more).

\*1 Compression Set <40% During Compression> (100°C/24h) 29%

\*2 The temperature of continuous use is the temperature where long-term use does not cause a sharp decline in quality.

\*3 Compression Set <40% During Compression> (150°C/24h) 8% (based on JIS K6250)

**Standard Type**

Part Number	Type	T	A	Unit Price							
				B							
				SGNN	SGNS	SGNN	SGNS	SGNN	SGNS		
SGNN	SGNS	10	100	100							
				200							
				500							
				100							
				200							
				500							
		30	100	100							
				200							
				500							
				100							
				200							
				500							
50	100	100									
		200									
		500									
		100									
		200									
		500									

**Standard Type**

Part Number	Type	T	A	Unit Price	
				SISP	SISA
SISP	SISA	3	100	100	
				250	
		5	100	100	
				250	
		10	100	100	
				250	

SISP and SISA are double side coated.

**Configurable Type**

The price of this product is the unit price shown in the table multiplied by material multiplier.

(Ex.) Part Number - [A] - [B] - [T] >> (Unit Price) x (Material Multiplier) = Standard Type Unit Price

SGNCA - 200 - 150 - 10

**Configurable Type**

Part Number	T	A	Unit Price					
			20-100	110-200	210-300	310-400	410-500	
No Adhesive	3	20~100						
			110~200					
			210~300					
			310~400					
			410~500					
			20~100					
	5	110~200						
			210~300					
			310~400					
			410~500					
			20~100					
			110~200					
8	210~300							
		310~400						
		410~500						
		20~100						
		110~200						
		210~300						
10	210~300							
		310~400						
		410~500						
		20~100						
		110~200						
		210~300						
15	210~300							
		310~400						
		410~500						
		20~100						
		110~200						
		210~300						
20	310~400							
		410~500						
		20~100						
		110~200						
		210~300						
		310~400						
25	410~500							
		20~100						
		110~200						
		210~300						
		310~400						
		410~500						
30	410~500							
		20~100						
		110~200						
		210~300						
		310~400						
		410~500						

**Configurable Type**

Part Number	T	A	Unit Price					
			10-100	110-200	210-300	310-400	410-500	
No Adhesive	10	10~100						
			110~200					
			210~300					
			310~400					
			410~500					
			10~100					
	30	110~200						
			210~300					
			310~400					
			410~500					
			10~100					
			110~200					
50	210~300							
		310~400						
		410~500						
		10~100						
		110~200						
		210~300						

**Configurable Type**

Part Number	T	A	Unit Price					
			20-100	110-200	210-300	310-400	410-500	
No Adhesive	2	20~100						
			110~200					
			210~300					
			310~400					
			410~500					
			20~100					
	3	110~200						
			210~300					
			310~400					
			410~500					
			20~100					
			110~200					
5	210~300							
		310~400						
		410~500						
		20~100						
		110~200						
		210~300						
10	210~300							
		310~400						
		410~500						
		20~100						
		110~200						
		210~300						
2	110~200							
		210~300						
		310~400						
		410~500						
		20~100						
		110~200						
3	110~200							
		210~300						
		310~400						
		410~500						
		20~100						
		110~200						
5	110~200							
		210~300						
		310~400						
		410~500						
		20~100						
		110~200						
10	110~200							
		210~300						
		310~400						
		410~500						
		20~100						
		110~200						