The case for conveyance of precision devices.
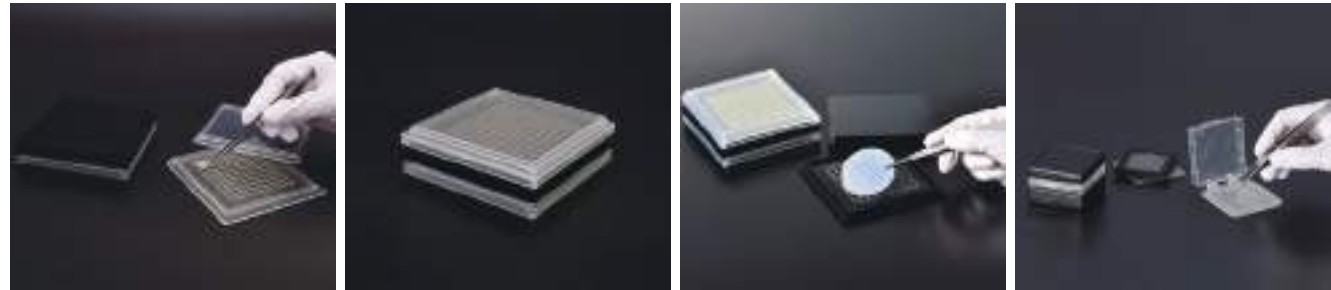
GEL-BASE® series

POINT

① Soft gel prevents some damages from vibration during convey the precision parts.

② Since no adhesive is used, an adhesive does not transfer to parts.

③ Silicone is not used as material.

④ Cloudy and Mesh type has an uneven surface, so it is possible to pick up without a vacuum equipment.

Image for use

Check the video ▶▶

Adhesive gel has an uneven surface, so it is possible to pick up easily without a vacuum equipment. (Cloudy / Mesh)

Case and tray are stackable.

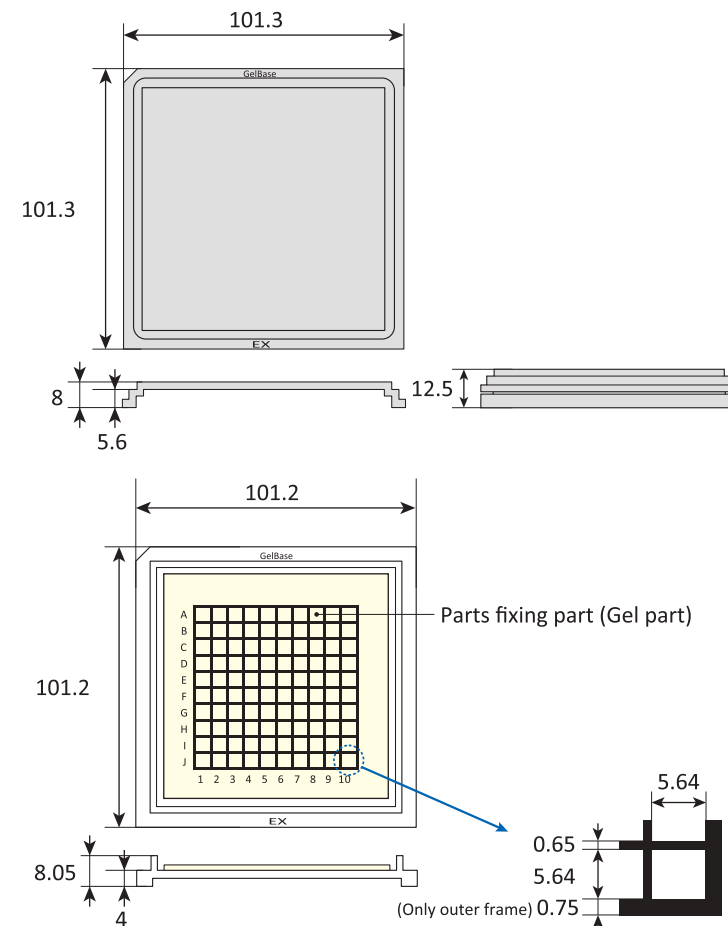For transporting electronic components.

Also available 2-inch size.

Characteristics / Product dimensions

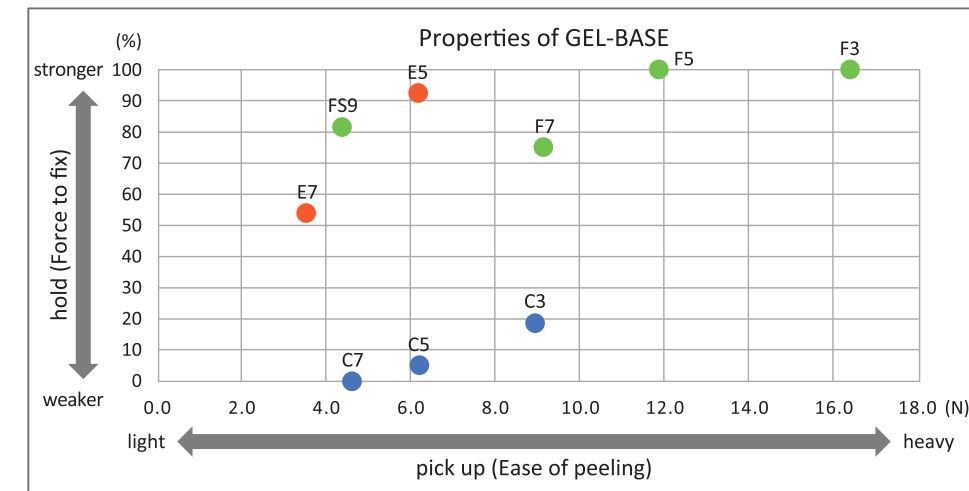*We also hear to custom printing. (Special order) *Measured value is a reference, not guaranteed value.

GEL-BASE® 4-inch

		Size (mm)	Color	Surface resistance (Ω)	Silicone
Case lid		101.3×101.3 ×8	Black	10^{11}	Non Silicone
			Clear	10^{13}	
Case body		101.2×101.2 ×8.05	Black	10^{11}	
			Clear	10^{13}	
Gel	FS9	85×85	Amber	10^{9}	
	F7			10^{9}	
	F5			10^{8}	
	F3			10^{7}	
	C7			10^{9}	
	C5			10^{8}	
	C3			10^{8}	
	E7			10^{9}	
	E5			10^{8}	

Case lid / Case body

101.3

GelBase

EX

101.3

8

12.5

5.6

101.2

GelBase

A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10

EX

101.2

8.05

4

Parts fixing part (Gel part)

5.64

0.65

5.64

(Only outer frame) 0.75

Adhesive properties of GEL-BASE

Properties of GEL-BASE

(%)
stronger 100
90
80
70
60
50
40
30
20
10
0
weaker

hold (Force to fix)

0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 (N)

light ←→ heavy

pick up (Ease of peeling)

F3, F5, E5, FS9, F7, E7, C3, C5, C7

*Varies depending on surface condition, material, weight and size.
*A glass plate is used for the pick-up test, and a ceramic plate is used for the hold test.
*"Pick up" means how easy it is to peel off the conveyed product.
*"hold" means the force to fix the conveyed product.
*Measured values are reference values, not guaranteed values.
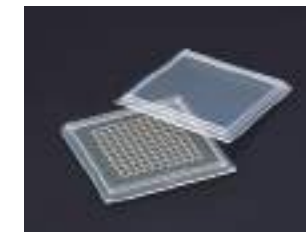
GEL-BASE® 4-inch

SDS RoHS | Antistatic | No plasticizer | Non silicone

A set of body and lid. Please choice the color of case.
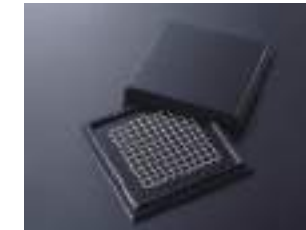
GEL-BASE® 4-inch Flat type

Part Number		Shape of gel	Adhesive force (N/25mm)	Clearance
Black	Clear			
4CB-FS9P	4CT-FS9P	Flat FS9	approx. 0.007	4.5mm
4CB-F7P	4CT-F7P	Flat F7	approx. 0.24	
4CB-F5P	4CT-F5P	Flat F5	approx. 1.23	
4CB-F3P	4CT-F3P	Flat F3	approx. 1.51	

*Adhesive force (N/25mm) is a reference value.

GEL-BASE® 4-inch Cloudy type

Part Number		Shape of gel	Adhesive force (N/25mm)	Clearance
Black	Clear			
4CB-C7P	4CT-C7P	Cloudy C7	approx. 0.04	4.5mm
4CB-C5P	4CT-C5P	Cloudy C5	approx. 0.14	
4CB-C3P	4CT-C3P	Cloudy C3	approx. 0.74	

*Adhesive force (N/25mm) is a reference value.

GEL-BASE® 4-inch Mesh type

Part Number		Shape of gel	Adhesive force (N/25mm)	Clearance
Black	Clear			
4CB-E7P	4CT-E7P	Mesh E7	approx. 0.09	4.5mm
4CB-E5P	4CT-E5P	Mesh E5	approx. 0.48	

*Adhesive force (N/25mm) is a reference value.

CHECK We also accept consultations regarding printing specifications for adhesive strength and part fixing parts.

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For temporary fixing sheet of precision device.

GEL-BASE® sheet series

POINT

① Cloudy, Mesh, and Dot type have an uneven surface, so it is possible to pick up without a vacuum equipment.

② Since no adhesive is used, an adhesive does not transfer to parts.

③ It is possible to use it by attaching the sheet to your existing tray.

④ Silicone is not used as material and separator.

Image for use
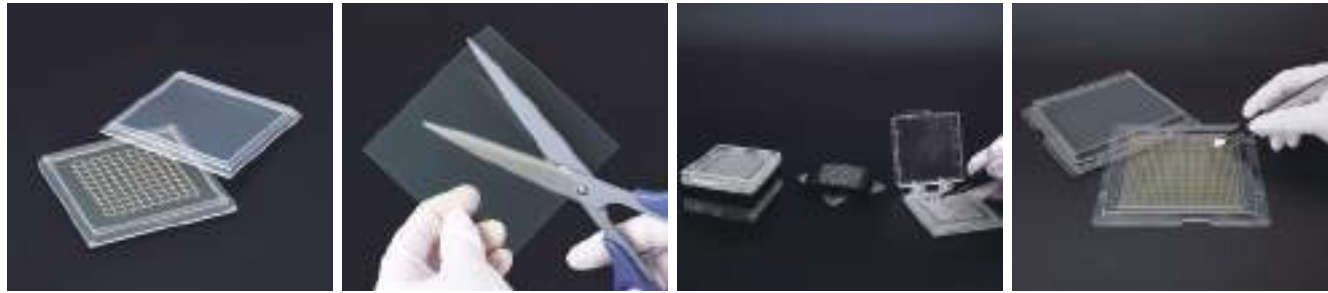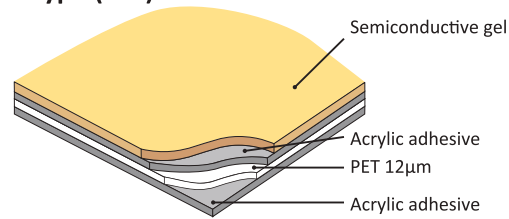
It is possible to paste into a tray.
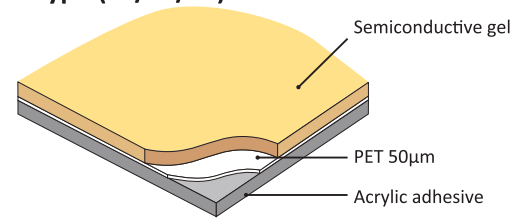
It can be cut with scissors.

Also sold with a case.

It is possible to use it by attaching the sheet to your existing tray.

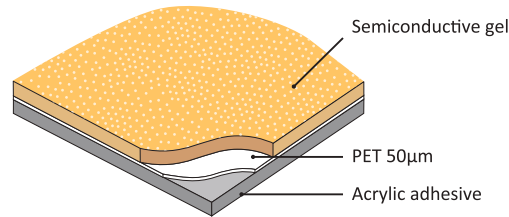## Structure (There are protective films on both sides of the product.)
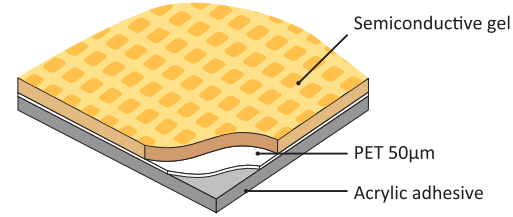
Flat type (FS9)
Semiconductive gel
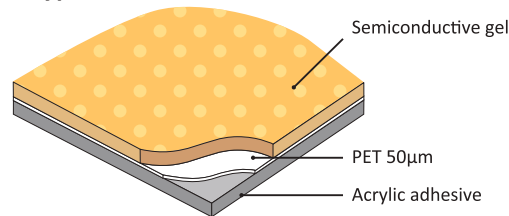Acrylic adhesive
PET 12µm
Acrylic adhesive

Flat type (F7/F5/F3)
Semiconductive gel
PET 50µm
Acrylic adhesive

Cloudy type
Semiconductive gel
PET 50µm
Acrylic adhesive

Mesh type
Semiconductive gel
PET 50µm
Acrylic adhesive
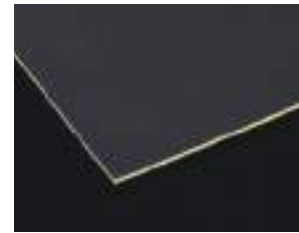
Dot type
Semiconductive gel
PET 50µm
Acrylic adhesive

GEL-BASE® sheet Flat type

It is possible to paste the sheet into your tray with cutting. One side is adhesive.

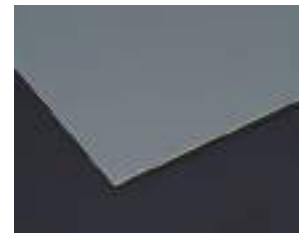| Part Number	Shape	Size (mm)	Thickness (mm)	Color
GB-FS9T	Flat FS9	500×400	0.5	Amber
GB-F7T	Flat F7			
GB-F5T	Flat F5			
GB-F3T	Flat F3			

GEL-BASE® sheet Cloudy type

Surface is fine unevenness shape, and it is easy to pick up. One side is adhesive.
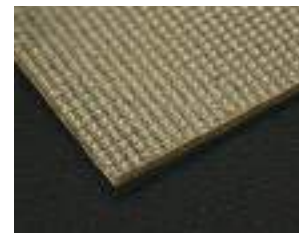
Part Number	Shape	Size (mm)	Thickness (mm)	Color
GB-C7	Cloudy C7	500×400	0.5	Amber
GB-C5	Cloudy C5			
GB-C3	Cloudy C3			

GEL-BASE® sheet Mesh type

Surface is mesh-patterned, and it is easy to pick up. One side is adhesive.

Part Number	Shape	Size (mm)	Thickness (mm)	Color
GB-E7	Mesh E7	500×400	0.5	Amber
GB-E5	Mesh E5			

GEL-BASE® sheet Dot type

Surface is unevenness shape, and it is easy to pick up. One side is adhesive.
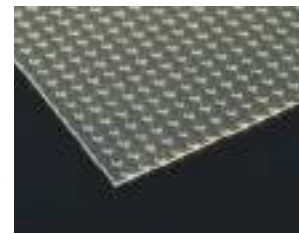
Part Number	Shape	Size (mm)	Thickness (mm)	Color
GB-D7	Dot D7	240×240	1.0	Amber

CHECK
It is possible to change the adhesive force to slightly stronger gel. (Build-to-order)
We also accept requests for cutting and punching, so please feel free to contact us.

Semiconductive adhesive mat for soles of shoes and hand trucks.

STEP-MAT® semiconductive type

POINT
1. The semiconductive adhesive mat for soles of shoes that can be used repeatedly by wiping with water.
2. Remove contaminants of soles of shoes 90% or more. (When stepping three times on the mat.)
3. Because the surface resistance is $10^9\Omega$, it can be used in environments where static electricity is a concern.
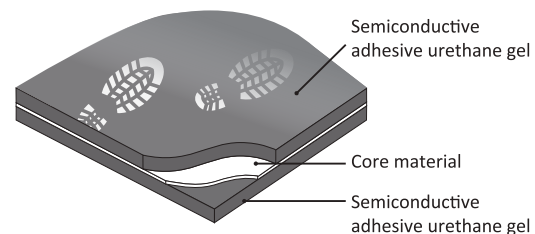4. Antibacterial and antifungal agents were mixed and the mats prevent breeding of bacteria.

Image for use

Before entering the clean area.

For removing dirt of tire from hand trucks.

Structure (There are protective films on both sides of the product.)

Semiconductive adhesive urethane gel

Core material

Semiconductive adhesive urethane gel

It does not needed double sided tape to install, so it is possible to install as it is.
*If you install the mat to rough surface, please install stainless steel plate to the floor and then install the mat on it.

How to clean

Please clean the mats with water or our special detergent when the adhesive becomes weak. Then adhesive force will return to normal after cleaning and can be used repeatedly.
*We recommend to increase the number of cleaning or area of mats if traffic is a lot. Then the effect persists.

Test of removal rate Check the details ▶

! ATP (+AMP) Wipe inspection

STEP-MAT semiconductive type	Peeling type of mat
90% or more	about 60%

*Lumitester is made by Kikkoman.
*This result is confirmation test in-house. There is also the case that the same result can not be obtained.

Peeling type of mat does not remove about 40% of dust and grime, so dusts may move with the soles of shoes.
While STEP-MAT semiconductive type can remove 90% or more.

STEP-MAT® semiconductive type

SDS RoHS Antistatic Antibacterial Antifungal

Remove fine dust and grime from soles of shoes. It is possible to use repeatedly by wiping with water.

Part Number	Size (mm)	Thickness (mm)	Color	Surface resistance (Ω)
MAT3-0906VE	900×600	3.0	Gray	10^9
MAT3-1209VE	1200×900			

*Avoid installing on floors containing a lot of soft PVC or plasticizer.

Related products Aluminum slope / Sponge mop / Disinfectant cleaner (P.11,12)

Remove the dust and grime of clothes and gloves.

Body-roller semiconductive type

POINT
1. It can be used repeatedly by washing with water, and it is not peeling type.
2. The soft and thick gel removes dirt and dust adhering to clothing.
3. Because the surface resistance is $10^9\Omega$, it can be used in environments where static electricity is a concern.
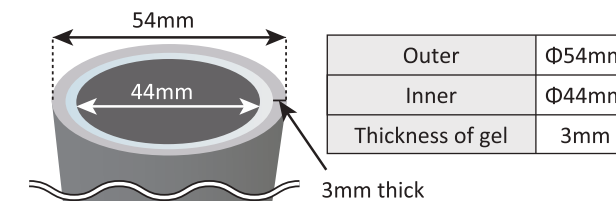4. Silicone is not included in roller part. (*Excluding handle)

Image for use

Before entering workrooms.

For cleaning workbench in clean room.

Structure

54mm

44mm

3mm thick

Outer	Φ54mm
Inner	Φ44mm
Thickness of gel	3mm

How to clean

The dirt of roller is rubbed softly with the palm with running water, and adhesive force will return to normal after dried. So it is possible to use repeatedly. It is possible to use longer and more clean with using our special detergent (P.12).

Test of removal rate Check the details ▶

! ATP (+AMP) Wipe inspection

Body-roller semiconductive type	Peeling type of roller
90% or more	about 60%

*Lumitester is made by Kikkoman.
*This result is confirmation test in-house. There is also the case that the same result can not be obtained.

Peeling type of roller does not remove about 40% of dust and grime, so dusts may move with the hands or clothes.
While Body-roller semiconductive type can remove 90% or more.

Body-roller semiconductive type

SDS RoHS Antistatic Antibacterial Antifungal Non silicone

It is for body, which with a handle to make it easier to have. It can easily reach your back.

Part Number	Roller Size (mm)	Color	Surface resistance (Ω)
BR30-5016VE	Φ54×160 (all dimensions : about 35cm)	Gray	10^9
BR30-5016VE-S	Φ54×160 Spare of roller		

*Please do not store while remaining in contact with wall or floor.
*Two caps to attach handle are included spare of roller.

CHECK Custom-width are also available, please contact us.
(Inner Φ44mm / Outer Φ54mm) ***Maximum width : 500mm**

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Gel cleaner pen series

Image for use

Remove dust of printed board and devices, and for picking of small parts.
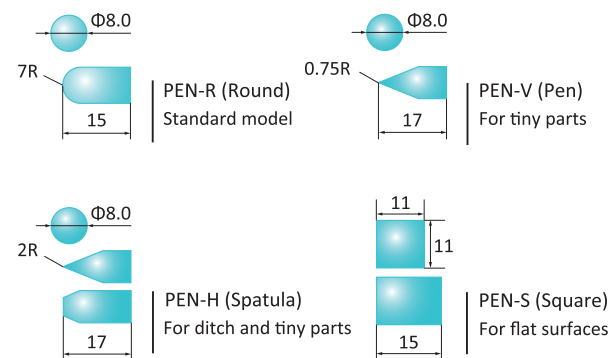
Remove dust softly with adhesive of gel.

In an original box to keep clean the nib. (Gel cleaner pen 4 pieces set)

For picking parts.

Structure

You can choice the shapes of nib according to use.

Φ8.0
7R
15
PEN-R (Round)
Standard model

Φ8.0
0.75R
17
PEN-V (Pen)
For tiny parts

Φ8.0
2R
17
PEN-H (Spatula)
For ditch and tiny parts

11
11
15
PEN-S (Square)
For flat surfaces

How to clean

It is possible to reduce the number of cleanings by transferring a dirt of nib to Cleaner base or Semiconductive gel sheet. Then it is possible to use repeatedly by washing with water if Gel cleaner pen, Cleaner base, and transferred sheet are stained.

How to use

・Pat the parts you care a dust and dirt with nib, and collect foreign matters like a dust.
・The foreign matters you collected transfer to Cleaner base or Semiconductive gel sheet (sold separately), or wash out by water.
・It is possible to use as picking of small parts with adhesive of gel.
*Please patting nib, not draging. If you drag, the nib may shave.

Gel cleaner pen

Remove dusts and grime without glue.

Part Number	Shape	Quantity
PEN-R	Round	1
PEN-V	Pen	
PEN-H	Spatula	
PEN-S	Square	

CHECK It is possible to change the adhesive force, please contact us.

Gel cleaner pen spare

Part Number	Shape	Quantity
PEN-RS	Round	1
PEN-VS	Pen	
PEN-HS	Spatula	
PEN-SS	Square	

Gel cleaner pen 4 pieces set

The set includes 4 types pens and transferred sheet in a convenient case for storage.

Part Number	Details
PENSET	Gel cleaner pen (Round/Pen/Spatula/Square) each 1pc, Transferred sheet

*It is possible to use Semiconductive gel sheet (P.31) as a transferred sheet.

Cleaner base

A cased adhesive sheets transfer a dirt of nib by stronger adhesion. It is possible to use repeatedly by washing with water.

Part Number	Size (mm)	Thickness (mm)	Details
PEN-CB	40×40	3.0	With case

Semiconductive gel sheet

POINT

① It is used adhesive urethane gel with an antistatic effect.
② Remove dust of gloves or parts by self-adhesive of urethane gel.
③ It is possible to use repeatedly by washing with a water.
④ It can be used in areas where static electricity is a problem.

Caution

■Notes■
·It may deteriorate depending on washing with water frequency and how to use.
·Avoid using to materials containing a lot of soft PVC or plasticizer.

Image for use

Adhesive sheet that transfers and absorbs dust with the power of urethane gel.

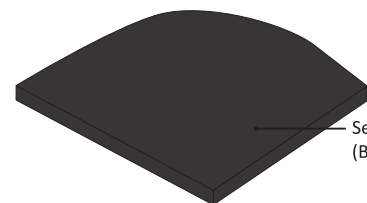It can be used in areas where static electricity is a problem.

As transferred sheet of dirty Gel cleaner pen (P.29).

As transferred sheet of dirty Semiconductive gel roller (P.33).

Structure (There are protective films on both sides of the product.)

Semiconductive gel sheet (Black)

The urethane gel sheet has semiconductivity. The material has an adhesive and an antistatic effect. It is possible to use for dust removal sheet or anti-slip sheet.

■ Characteristics

Hardness	Surface resistance(Ω)
Asker C15	10^8
Asker C30	10^8
Asker C50	10^8

*This measured value is a reference value, it is not a guaranteed value.
*It changes without notice by specification changes.

How to use

·Lightly press the object you want to remove dust against the sheet.
·When transferring dust on the roller, roll the dirty roller on the sheet.
·When the adhesive strength is reduced due to dirt, wash it with water to restore the adhesive strength and use it repeatedly.

Press gloves against a sheet to remove dusts.

Transfer the dusts which removed by adhesive roller to Semiconductive gel sheet.

The adhesive power is restored by washing with water.

Semiconductive gel sheet

SDS RoHS / Antistatic / No plasticizer

Semiconductivity urethane gel sheet. It is possible to use for dust removal sheet or anti-slip sheet.

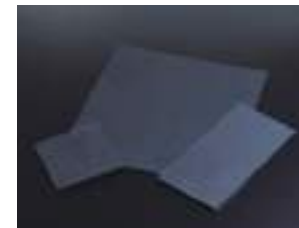| Part Number / Hardness			Size (mm)	Thickness (mm)
Asker C15	Asker C30	Asker C50		
E1510	E3010	E5010		1.0
E1520	E3020	E5020	500×500	2.0
E1530	E3030*	E5030		3.0

The mark of "*" is normal stock.

CHECK We also hear to cut to the size your choice, please contact us.

Semiconductive gel sheet cutting type

SDS RoHS / Antistatic / No plasticizer

The sheets are cut to tabletop sizes for using easily. It is possible to use as transferred sheet of Gel cleaner pen (P.29).

Part Number / Hardness			Size (mm)	Thickness (mm)
Asker C15	Asker C30	Asker C50		
E1530-1010	E3030-1010*	E5030-1010	100×100	
E1530-2010	E3030-2010*	E5030-2010	200×100	3.0
E1530-2525	E3030-2525*	E5030-2525	250×250	
E1530-2550	E3030-2550*	E5030-2550	500×250	

The mark of "*" is normal stock.

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Semiconductive gel roller

Urethane washer

POINT
1. Adhesive gel roller with anti-static effect.
2. Remove dusts without glue because of self-adhesive of urethane gel.
3. Acceptable value of detection limit for residual ion concentration (Cation : 0.05ppm, Anion : under 0.01ppm)

POINT
1. Urethane washer punched from the Pit cushion sheet (P.41).
2. Prevents scratches and cracks when tightening glass or acrylic.
3. It makes it difficult to transmit vibration and sound, and then it is the most suitable for locking of screw.

Image for use

For removing dust in places where static electricity is a problem.

It is possible to transfer a dirt to Semiconductive gel sheet (P.31).

How to use

·Clean an area where you want to remove dusts with a roller.
·Please roll the dirty roller on the transfer sheet if you transfer dusts.
·It is possible to use repeatedly by washing with water when the adhesive force gets to weak by dirt.
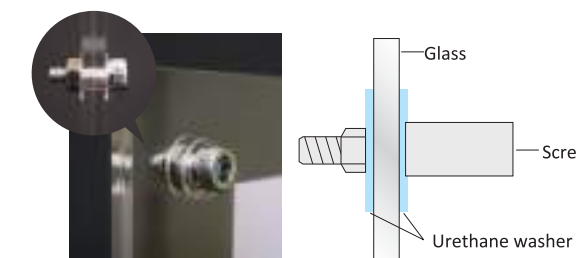
Image for use

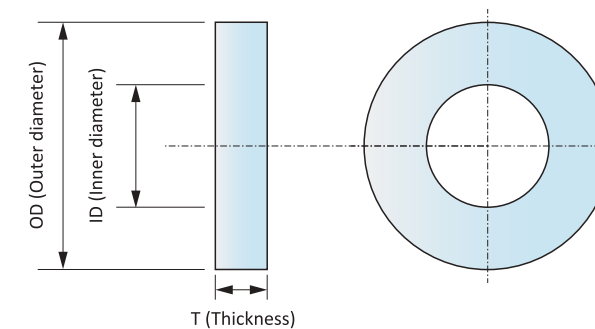Transparent and soft Urethane washer.

It is also easy to use at where you care an appearance such as glass or acrylic.

How to use

It is used by putting between glass or acrylic and screw.
Example of use : To install hard disk and fan motor.
For buffering of screws of glass and acrylic.

Glass
Screw
Urethane washer

Semiconductive gel roller

SDS RoHS | Antistatic | No plasticizer

Conductive urethane gel is used for the roller and metal is used for the grip to ensure conductivity.

Part Number	Roller Diameter (mm)	Roller Width (mm)	Adhesive force (N/cm2)	External dimensions (mm) Full length×Width×Height
EX215-AS	Φ20	17.5	approx.7	160×20×20
EX230-AS	Φ20	30		154×36×38
EX355-AS	Φ30	55		169×65×52
EX311C-AS	Φ30	111		150×132×63
EX316C-AS	Φ30	160		150×182×63
EX325C-AS	Φ30	250		150×272×63
EX430C-AS	Φ40	300		155×322×68

Related products
Semiconductive gel sheet (P.31)
It can be used as a transfer sheet for dust removed with a roller.

Product size

OD (Outer diameter)
ID (Inner diameter)
T (Thickness)

Urethane washer

SDS RoHS | Food hygiene | No plasticizer

It is a transparent and soft Urethane washer.

Part Number	Size (mm)			Hardness	Quantity
	ID (Inner diameter)	OD (Outer diameter)	T (Thickness)		
NO.3-80-1	3.5	8.0	1.0	Asker C80	20
NO.4-80-1	4.5	10.0			
NO.5-80-1	5.5	12.0			
NO.6-80-1	6.5	13.0			

*Avoid using soft PVC or materials that contain a lot of plasticizer.

CHECK We also hear the custom-sized that changed thickness and softness, please contact us.

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