

EXSEAL CATALOG

EXSEAL urethane gel series



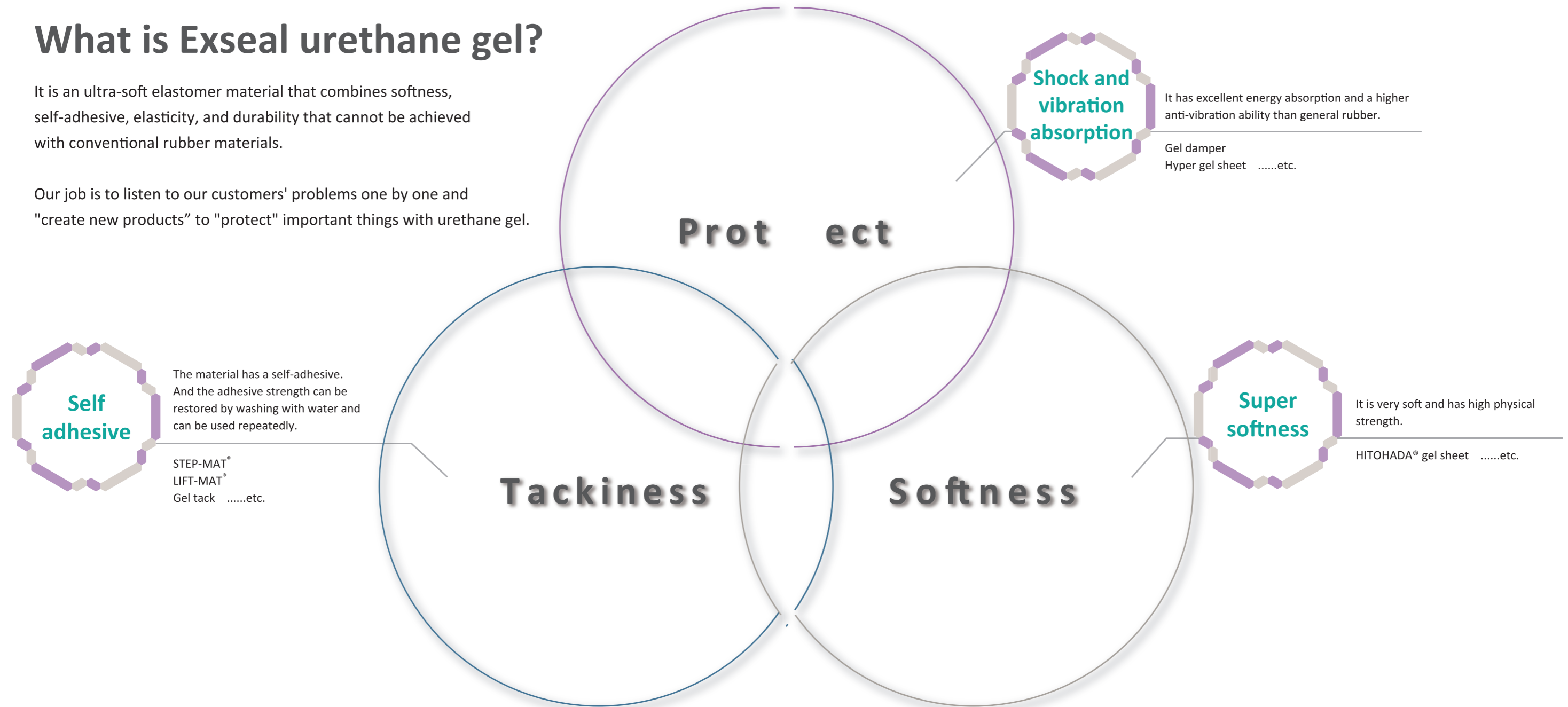
Protect your precious things



What is Exseal urethane gel?

It is an ultra-soft elastomer material that combines softness, self-adhesive, elasticity, and durability that cannot be achieved with conventional rubber materials.

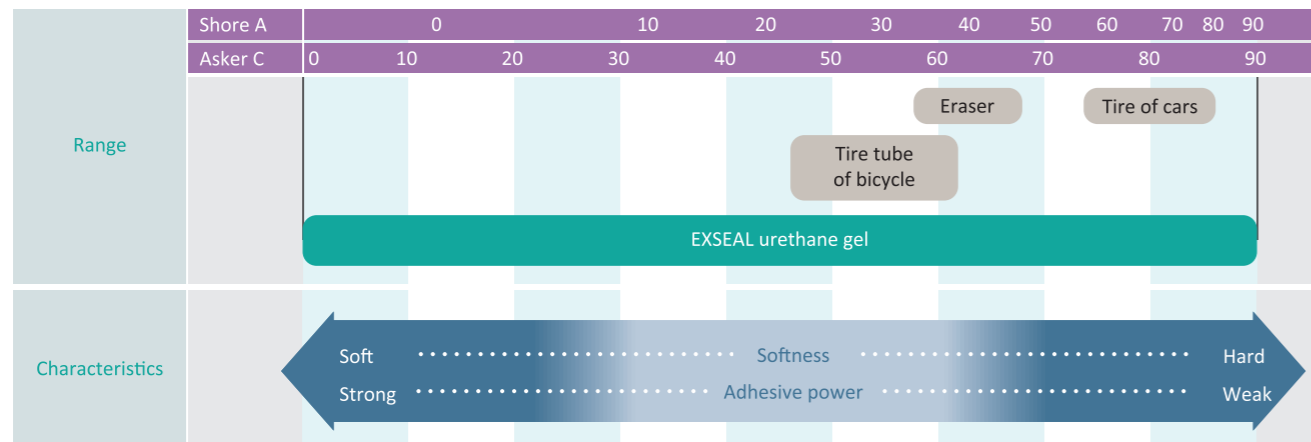
Our job is to listen to our customers' problems one by one and "create new products" to "protect" important things with urethane gel.



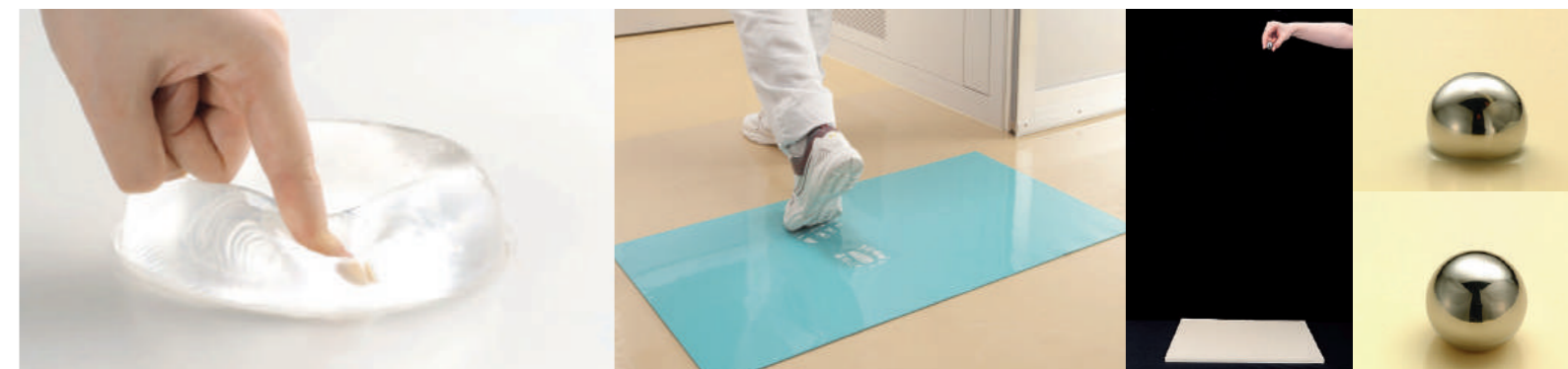
Hardness comparison table (Range of urethane gel)

The hardness of rubber is generally expressed as "Shore A".

The gel hardness of EXSEAL is indicated as "Asker C" because it is softer than the "Shore A" range.



*The hardness comparison table of Shore A and Asker C is based on actual measured value by our company.



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| Tip remover | P.19 | Haimen mat | P.20 |

| For conveyance of devices | | Temporary fixing sheet that helps preserve semiconductors and chips. | |
|---------------------------------------|------|----------------------------------------------------------------------|------|
| GEL-BASE® series NEW | P.21 | GEL-BASE® sheet series NEW | P.27 |

| Dust removal from devices | | A dust removal tool that removes foreign matter during the electronic component manufacturing process. | |
|-----------------------------------------|------|--------------------------------------------------------------------------------------------------------|------|
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| Fixation/Anti-slip supplies | | Temporary fixation/fall prevention supplies and anti-slip materials. | |
|-------------------------------------|------|----------------------------------------------------------------------|------|
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| Buffer/shock absorption | | Sheets and pads with high shock absorption properties. | |
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Soft resin for modeling Ultra-soft resin materials for modeling and related products.

| | | | |
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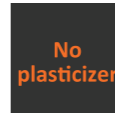



Medical sheets/models Medical-related sheets/models and healthcare support tools.

| | | | |
|-----------------------------------|------|---------------------------------------------|------|
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About icon

| | | | | | |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|  Antistatic | This product has the added effect of preventing static electricity by adding conductive material to the raw materials. |  Antibacterial Antifungal | Contains antibacterial and antifungal agents. *Not all antibacterial and antifungal effects have been confirmed. |  flame-retardant | Contains flame retardant. |
|  Non silicone | No silicone is used as a raw material. |  No plasticizer | Uses urethane gel that does not contain plasticizer. |  Food hygiene | It has passed the test of the Food Sanitation Act (container and packaging standards). |
|  No yellowing | This product is hard to yellowing caused by ultraviolet rays. |  Patch tested | This product uses urethane gel has passed a patch test. | | |

About product tolerance

Product tolerances are defined as follows.

| | | | | | |
|------------------|-----------------------------------------------------------------|-------------|--------|-----------------|----|
| thickness | 1mm thickness or less ...±0.1mm Over 1mm thickness ...±0.2mm | size | ±1.0mm | hardness | ±5 |
|------------------|-----------------------------------------------------------------|-------------|--------|-----------------|----|

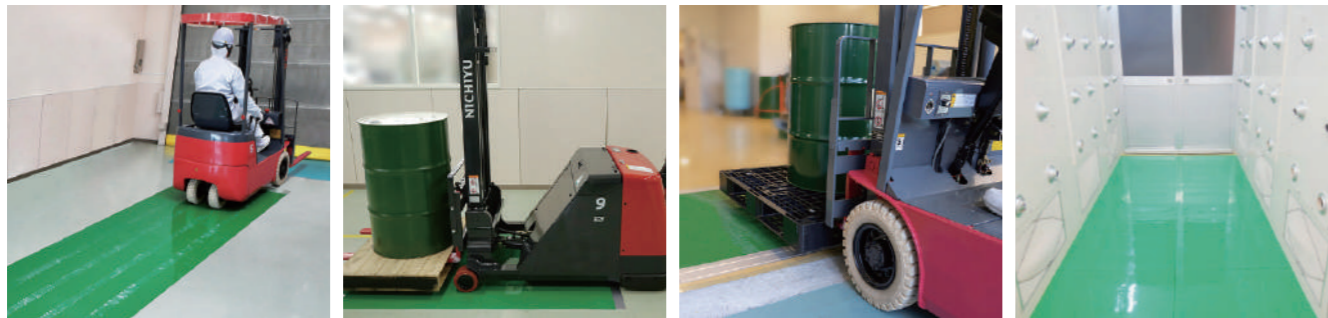
Adhesive mat for heavy vehicles.

LIFT-MAT® series

POINT

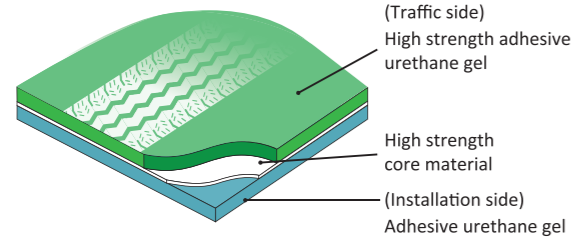
- 1 The adhesive mat for heavy vehicles that can be used repeatedly by wiping with water.
- 2 Correspond to forklifts up to a total weight of 3-4 t, AGV, and handlifts.
- 3 Simply by driving over only three rotations of tire, the mats remove the dirt of tires 90% or more.
- 4 It is economical because it can be used for a few years if you place it once.
- 5 Equivalent to flame retardant standard UL94 V-2.

Image for use



For indoor passage of heavy vehicles. Also handlifts be OK. For removing dust from the back of the pallet. For air shower / passage

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

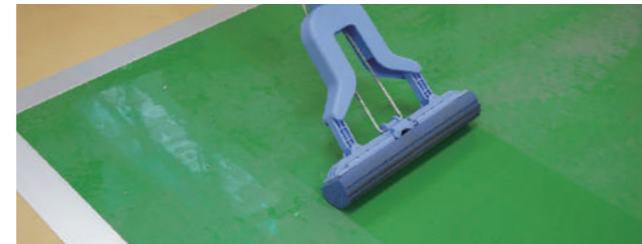


It is used high strength urethane gel. It has the strength to withstand the weight of heavy vehicles, and it is difficult to be torn and attached to a tire. In addition, it does not need double-sided tape to install, so it is possible to install as it is.

*If you install the mat to rough surface, please install stainless steel plate to the floor and then install the mat on it. Or use a "LIFT-MAT for rough surfaces (P.7)."

How to clean

Check the video ▶▶



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.

How to install → P.8

Test of removal rate

Check the details ▶▶



Adhesive gel fits the uneven surfaces of tires, and remove the fine dust. It is possible to remove dust and grime 90% or more after the forklifts run out on the mat only three rotations of tires. The removal rate almost unchanged after passing 1000 times.

! ATP (+AMP) Wipe inspection

| The number of passing | Removal rate of pollutant |
|-----------------------|---------------------------|
| First time | 90% or more |
| 1000 times | 90% or more |

*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.



Measure the remained dirt of forklifts that had run for a minute indoors. Then the same forklifts ran on the mats and measured a dirt again.

Caution

Precautions for use

- Not suitable for outdoor use nor at delivery entrances directly from outside as ultraviolet light and heat will damage the urethane material. We recommend indoor use.
- Do not pass by wet or oily tire because it is slippery when the floor and mat are not dried.
- Any objects such as pallets stuck to the mat or tires rotating on it may cause damage. Please also avoid parking or accelerating lifts on the mat.
- Please install a stainless steel plate to rough floor like a concrete because the mat is installed by adhesive of gel. Or use a "LIFT-MAT for rough surfaces (P.7)."
- It is suitable for coating or resin floors to install, but there is a case that it is difficult to install to flat floors depending on materials. Please check with a mat sample before installation. (*Please peel off the mat from corner and slowly because it may peel off the floor depending on material.)
- Avoid installing on floors containing a lot of soft PVC or plasticizer.
- If you care the step of the mat, please use Aluminum slope (P.11).

Required size and indication of use

The length in which the target tires can make three rotations of tire. It is possible to use for 1-2 years. (Depending on the operating environment and frequency of use.)



LIFT-MAT®

Remove fine dust and grimes of tires. It is possible to use repeatedly by wiping with water.

| Part Number | Size (mm) | Thickness (mm) | Color |
|--------------|-----------|----------------|-----------------------------------------------|
| LM01-10001 | 900×600 | 3.0 | Use side : Green Install side : Blue green |
| LM01-10002 | 1200×900 | | |
| LM01-10003 | 1800×1200 | | |
| LM01-10004 * | 2400×1200 | | |
| LM01-10005 * | 3600×1200 | | |

* indicates build-to-order products which require longer delivery time.

CHECK

Custom-sized are also available, please contact us.

*Maximum size : 5000×1200mm

Recommended for beginners

LIFT-MAT® 4 pieces set

The great deal set with the sponge mop and disinfectant cleaner (500ml) and aluminum slopes.

| Part Number | Size (mm) | Thickness (mm) | Details |
|-------------|-----------|----------------|----------------------------------------------------------------------------------|
| LM01-10006 | 900×600 | 3.0 | LIFT-MAT, Sponge mop, Disinfectant cleaner, and Aluminum slope (900×60mm) ×2pcs |
| LM01-10007 | 1200×900 | | LIFT-MAT, Sponge mop, Disinfectant cleaner, and Aluminum slope (1200×60mm) ×2pcs |
| LM01-10008 | 1800×1200 | | LIFT-MAT, Sponge mop, Disinfectant cleaner, and Aluminum slope (900×60mm) ×4pcs |



Related products

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



Check the video ▶▶



Adhesive mat for heavy vehicles.

LIFT-MAT® series

LIFT-MAT® for rough surfaces



POINT

- 1 It can be installed on floors with rough surfaces such as concrete.
- 2 Adhesive mat for heavy vehicles that can be washed with water and used repeatedly.

Image for use



For passages with rough surfaces of heavy goods vehicles.

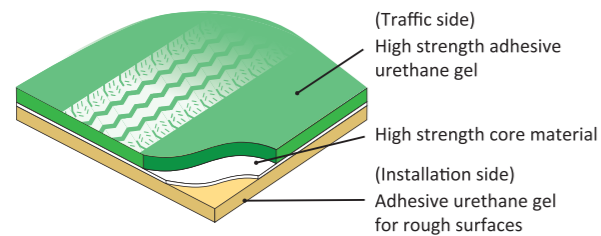
Caution

Precautions for use

LIFT-MAT for rough surfaces is intended for installation on floors with rough surfaces such as concrete. If installed on a painted floor, the paint may peel off when the mat is removed. Please wet it with water and remove it slowly. If you continue to put a load on the LIFT-MAT for rough surfaces, the gel on the floor may be pushed out and stuck out. Also, if the temperature is high, it will be even easier to stick out.

How to use → P.8

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



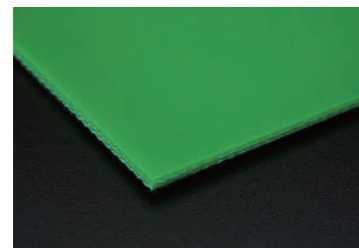
It is used high strength urethane gel. It has the strength to withstand the weight of heavy vehicles, and it is difficult to be torn and attached to a tire. In addition, it does not need double-sided tape to install, so it is possible to install as it is.

*Adhesive urethane gel for rough surfaces is conformed to the unevenness of the floor.

Physical properties

| Item | Adhesive urethane gel for rough surfaces | Remarks (JIS No.) |
|-----------------------------|------------------------------------------|-----------------------------------------|
| Adhesive (180° Peel N/25mm) | 2.01 | Z0237 SUS304 5 minutes after pasting |
| Holding force (sec) | 928 | Z0237 1kg, 24h SUS304, □25mm |
| Ball tack (No.) | 20 | Z0237 30° |

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



LIFT-MAT® for rough surfaces

An adhesive mat that removes fine dirt and dust from tires. It can be installed on rough surfaces.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------|-----------|----------------|----------------------|
| LM01-10009 | 900×600 | 3.0 | Use side : Green |
| LM01-10010 | 1200×900 | | Install side : Amber |
| LM01-10011 | 1800×1200 | | |

*Please contact us if you are considering using a slope for the LIFT-MAT for rough surfaces.

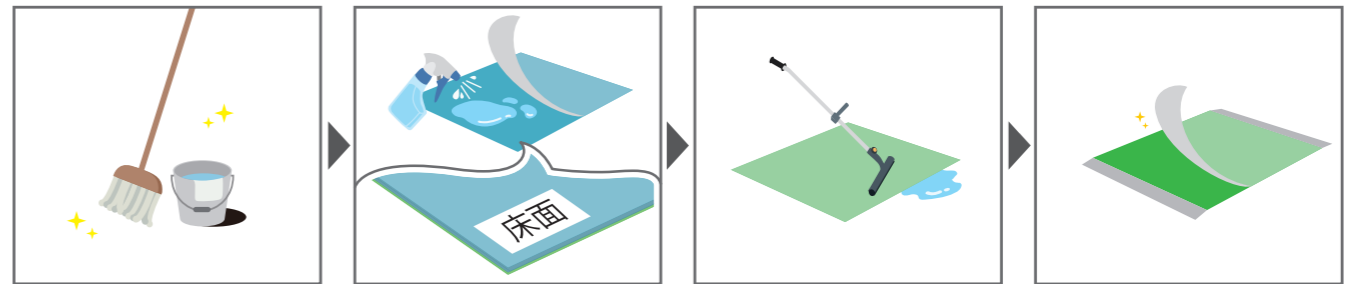
CHECK

Custom-sized are also available, please contact us.

***Maximum size : 5000×1200mm**

How to install of LIFT-MAT / STEP-MAT

How to install of LIFT-MAT / STEP-MAT



Clean the installation floor.

Peel the film the side that pasted a sticker of "床面", and wet the surface with spray.

*Do not peel off the other side film that is not pasted a sticker of "床面".

Spread the mat, and force out the air and water with a pressure roller from on the film. Then wipe off moisture.

*Please spread the wet side down.

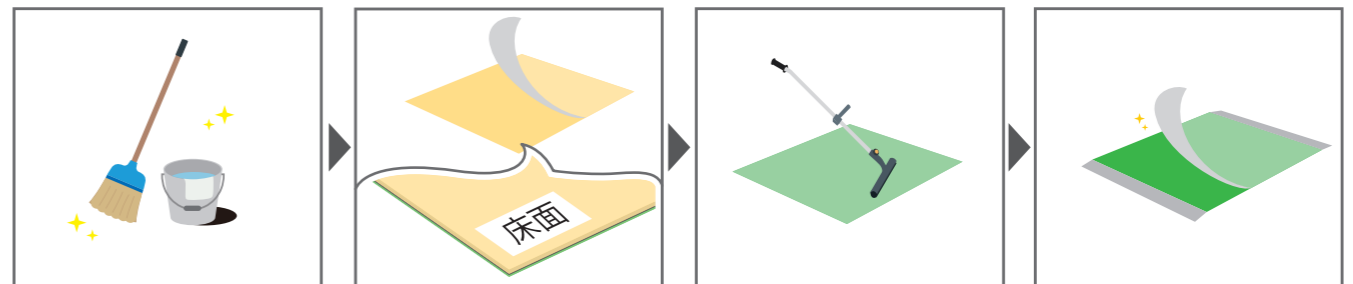
Peel off the surface film, and install Aluminum slope at both ends. It is possible to use after the mat and floor dry.

*Indication: One night (10-12 hours)

- ⚠ **Not to be used on uneven surfaces** such as concrete floors. It is suitable for coating or resin floors. When installing on uneven floors such as concrete floors, install a stainless steel plate in advance before installing the mat.
- ⚠ Please **clean installation place** before installed the mat. Double-sided tape is not needed because the mat have a self-adhesive.

- *There are protective films on both sides of the mat.
- *It is possible to make fine adjustment of position and force out the air under the mat by wetting the floor before installation.
- *Paste the side with the "床面" sticker on the floor.
- *Please do not peel the film that is not pasted a sticker of "床面" until the installation completed. It may damage the surface if you peel off before installation.
- *To enter air between floor and mat is the cause of damage like tearing and peeling.
- *Do not pass by wet or oily tire because it is slippery when the floor and mat are not dried.
- *Please peel off the mat of from corner and slowly because it may peel off the floor depending on material.

How to install of LIFT-MAT for rough surfaces



Clean the installation floor.

Peel the film the side that pasted a sticker of "床面".

*Do not peel off the other side film that is not pasted a sticker of "床面".

Spread the mat, and force out the air with a pressure roller from on the film so that the mat stick to the floor.

Peel off the surface film. *We recommend to install Aluminum slopes at both ends.

- ⚠ LIFT-MAT for rough surface adheres firmly to unevenness of floors and adheres strongly. After installing it on the floor, it cannot be re-installed if it is crimped. The floor may be damaged or the paint on the floor may be removed during peeling off. When removing the mat, wet it with water and remove it slowly.
- ⚠ Remove as much dust and fine sand as possible from the installation surface before installing. If you install it with dirt, sand, etc. remaining, it may come off immediately.
- ⚠ It adheres to rough surfaces by crimping the mat against the floor. If the temperature is low, the gel on the floor get to hard, so apply pressure firmly when installing.

- *There are protective films on both sides of the mat.
- *Paste the side with the "床面" sticker on the floor.
- *Please do not peel the film that is not pasted a sticker of "床面" until the installation completed. It may damage the surface if you peel off before installation.
- *To enter air between floor and mat is the cause of damage like tearing and peeling.
- *Please note that we are not responsible for any damage to the floor or paint problems that occur when the mat is removed.



Check the installation / cleaning method in video ▶▶▶



Adhesive mat for soles of shoes and hand trucks.

STEP-MAT® series

POINT

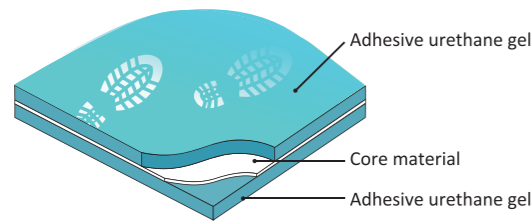
- 1 The adhesive mat for soles of shoes that can be used repeatedly by wiping with water.
- 2 Remove contaminants of soles of shoes 90% or more. (When stepping three times on the mat.)
- 3 Antibacterial and antifungal agents were mixed and the mats prevent breeding of bacteria.
- 4 Equivalent to flame retardant standard UL94 V-2.

Image for use



In front and behind of clean room. Also hand truck under 100kg be OK. Soft gel fits the soles of shoes, and catch the dusts. For wash basin / air shower / dressing room

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



The thick and soft gel fits the uneven surface of the soles of shoes, and remove fine dusts firmly. In addition, it does not need 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.

Test of removal rate [Check the details](#)

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 can remove 90% or more.

| ! ATP (+AMP) Wipe inspection | |
|------------------------------|---------------------|
| STEP-MAT | 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.

How to clean [Check the video](#)



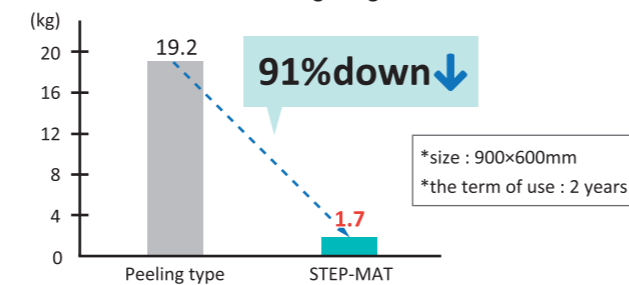
Please clean the mats with water or our special detergent when the adhesive becomes weak. Then adhesive force will return to normal after cleaning and can be used repeatedly.

*We recommend to increase the number of cleaning or area of mats if traffic is a lot. Then the effect persists.

■ How to install → P.8

Comparison of trial calculations of waste volume

It is an environmentally friendly product as the sheet that is turned over does not become garbage.



*STEP-MAT is used repeatedly for 2 years. The peeling type is purchased the same product for 2 years after using.
*It is referenced only the weight of the product itself. The weight is an actual measured value and not a guaranteed value.

Caution

■ Precautions for use ■

- Not suitable for outdoor use nor at delivery entrances directly from outside as ultraviolet light and heat will damage the urethane material. We recommend indoor use.
- Do not pass by wet or oily tire because it is slippery when the floor and mat are not dried.
- When hand trucks pass, any objects such as pallets stuck to the mat or tires rotate on it may cause damage.
- Please install a stainless steel plate to rough floor like a concrete because the mat is installed by self-adhesive of gel.
- It is suitable for coating or resin floors to install, but there is a case that it is difficult to install to flat floors depending on materials. Please check with a mat sample before installation. (*Please peel off the mat from corner and slowly because it may peel off the floor depending on material.)
- Avoid installing on floors containing a lot of soft PVC or plasticizer.
- If you care the step of the mat, please use Aluminum slope (P.11).

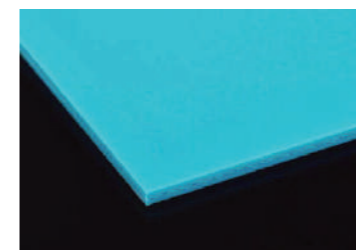
■ Required size and indication of use ■

It is possible to use for 2-3 years. (Depending on the operating environment and frequency of use.)

STEP-MAT®



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

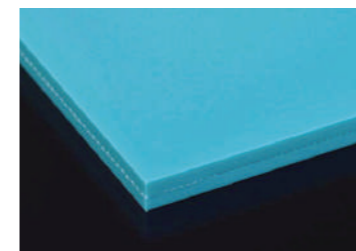


STEP-MAT® 3mm thick

Thin type for using in front of hinged door.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------|-----------|----------------|------------|
| SM01-11001 | 900×600 | 3.0 | Blue green |
| SM01-11002 | 1200×900 | | |
| SM01-11003 | 895×450 | | |

*SM01-11001 and SM01-11003 are compatible with Under-mat (P.11).



STEP-MAT® 6mm thick

Thicker type fits the uneven surface more.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------|-----------|----------------|------------|
| SM01-11004 | 900×600 | 6.0 | Blue green |
| SM01-11005 | 1200×900 | | |

CHECK

Custom-sized are also available, please contact us.

*Maximum size : 5000×1200mm



Recommended for beginners

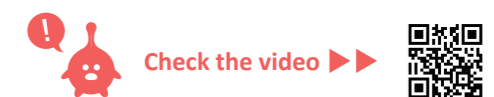
STEP-MAT® 3 pieces set

The great deal set with the sponge mop and disinfectant cleaner (500ml).

| Part Number | Size (mm) | Thickness (mm) | Details |
|-------------|-----------|----------------|--------------------------------------------|
| SM01-11006 | 900×600 | 3.0 | STEP-MAT, Sponge mop, Disinfectant cleaner |
| SM01-11007 | 1200×900 | | |
| SM01-11008 | 900×600 | 6.0 | |



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



Optional goods for clean mat

Aluminum slope

Prevent to get stuck to the end of the mat and reduce the risk of damage.

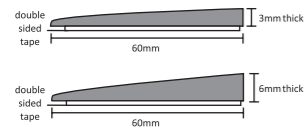
- POINT**
- 1 Made of aluminum that is not heavy and durable.
 - 2 Reduce the step of mats when the hand trucks pass.
 - 3 Prevent the damage of mats.
 - 4 It is sold from a piece. It is possible to install easily with double sided tape.



Aluminum slope 3mm type

It can be used with LIFT-MAT/STEP-MAT 3mm thick.

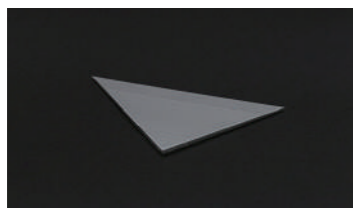
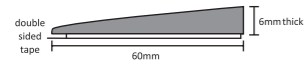
| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------|-----------|----------------|--------|
| CO00-40001 | 900×60 | 3.0 | Silver |
| CO00-40002 | 1000×60 | | |
| CO00-40003 | 1200×60 | | |



Aluminum slope 6mm type

It can be used with STEP-MAT 6mm thick.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------|-----------|----------------|--------|
| CO00-40004 | 900×60 | 6.0 | Silver |
| CO00-40005 | 1200×60 | | |



Aluminum slope corner 3mm type

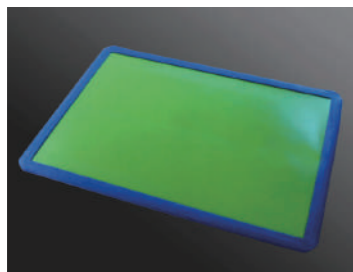
It is a slope that covers damage to the mat due to vehicles entering from an oblique direction.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------|--------------|----------------|--------|
| CO00-40006 | ▲ type 60×60 | 3.0 | Silver |

CHECK For sizes not listed above, we cut and provide standard products. Please feel free to contact us. (*Cutting fee will be charged separately.)

Under-mat

This is the under-mat to reduce the step. Put the STEP-MAT in the frame. It is possible to install with double sided tape.



| Part Number | Size (mm) | Thickness (mm) | Color | Compatible with |
|-------------|---------------------------|----------------|--------------|-----------------|
| CO00-40007 | 1000×550 (all dimensions) | 3.0 | Base : Green | SM01-11003 |
| CO00-40008 | 990×690 (all dimensions) | | Slope : Blue | SM01-11001 |

*STEP-MAT is sold separately.
*There is about 3mm concave at center.

Disinfectant cleaner



This is special detergent for mats and rollers. It has an effect of sterilization.

- POINT**
- 1 This is special detergent for LIFT-MAT / STEP-MAT / Adhesive roller to clean easily.
 - 2 It has an effect of sterilization.
 - 3 It is possible to use as soon as cleaning because it is dried easily.
 - 4 The mats and rollers get to be hard to damage.



Disinfectant cleaner Spray type

| Part Number | Volume | Details |
|-------------|--------|-------------------|
| CO00-40009 | 500mℓ | With spray bottle |



Disinfectant cleaner Refilled type

Attach the cock of accessory to refill your spray bottle.

| Part Number | Volume | Details |
|-------------|--------|-----------------------------|
| CO00-40010 | 10ℓ | 1 box *Without spray bottle |

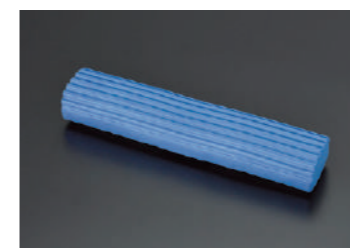
Sponge mop

It is possible to drain off water by lever at hand, and this mop is hard to go out dust.



| Part Number | Size (cm) |
|-------------|-------------------------------------------------------------|
| CO00-40011 | Length of mop : about 99-132cm Width of sponge : about 27cm |

*It is possible to control a length of handle. *Please use after a sponge gets to be soft well with wetting.
*There is a case that a part of sponge may be damage, so please return the lever completely before use.



Spare of Sponge mop

| Part Number | Size (cm) | Quantity |
|-------------|------------------------------|----------|
| CO00-40012 | Width of sponge : about 27cm | 1 |

Remove the dust and grime of clothes, gloves, and floor.

Adhesive roller series

POINT

- 1 It can be used repeatedly by washing with water, and it is not peeling type.
- 2 Remove a dust by self-adhesive of urethane.
- 3 Antibacterial and antifungal agents were mixed.
- 4 Silicone is not included in roller part. (*Excluding handle)

Image for use

Check the video ▶▶



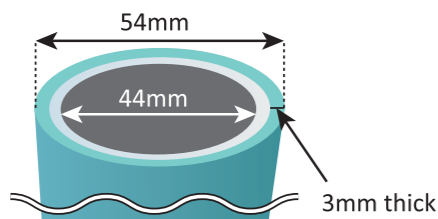
In front and behind of clean room.

Before entering workrooms.

To clean smooth floor.

To clean carpets.

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



It is used to hold in hands and roll on clothes, then remove the dirt of hands and clothes. The soft gel with thickness fits uneven surface of hand and clothes, and remove a dust firmly.

| | | | |
|-------|-------|------------------|-----|
| Outer | Φ54mm | Thickness of gel | 3mm |
| Inner | Φ44mm | | |

How to clean

Check the video ▶▶



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. Then it does not scatter dust because it does not peel unlike a conventional roller. It is possible to use longer and more clean with using our special detergent.

Test of removal rate

Check the details ▶▶



! ATP (+AMP) Wipe inspection

| | |
|--------------------|------------------------|
| EXSEAL's roller | 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 EXSEAL's roller can remove 90% or more.

Caution

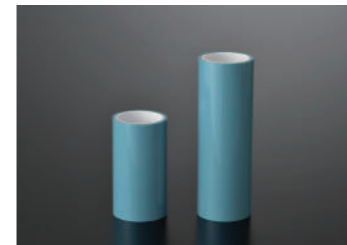
Required size and indication of use

It is possible to use for 1-2 years. (Depending on the operating environment and frequency of use.)

Hand-roller (For gloves)



It is for gloves, and used to hold in or roll on hands. There are two sizes.



| Part Number | Roller Size (mm) | Color |
|-------------|------------------|------------|
| HR01-12001 | Φ54×100 | Blue green |
| HR01-12002 | Φ54×160 | |

Body-roller (For body)



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 |
|-------------|---------------------------------------|------------|
| BR01-12003 | Φ54×160 (all dimensions : about 35cm) | Blue green |
| BR01-12004 | 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.

Roller cap



For Body-roller and Body-roller semiconductor type (P.30). Bearings are used.



| Part Number | Size (mm) | Quantity |
|-------------|-----------|----------|
| CO00-40013 | Inner Φ44 | 2 |

Carpet-roller (For carpet)



It is long handle type with a removable grip to clean carpet conveniently.



| Part Number | Roller Size (mm) | Color |
|-------------|----------------------------------------|------------|
| CR01-12005 | Φ54×160 (all dimensions : about 106cm) | Blue green |
| CR01-12006 | Φ54×160 Spare of roller | |

*Please do not store while remaining in contact with wall or floor.

*It cannot be used to wooden floor because the adhesive power is strong.

*Two caps to attach handle are included spare of roller.

Floor-roller (For wooden floor)



It is long handle type with a removable grip to clean smooth floor conveniently.



| Part Number | Roller Size (mm) | Color |
|-------------|----------------------------------------|-------|
| FR01-12007 | Φ54×160 (all dimensions : about 106cm) | Green |
| FR01-12008 | 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

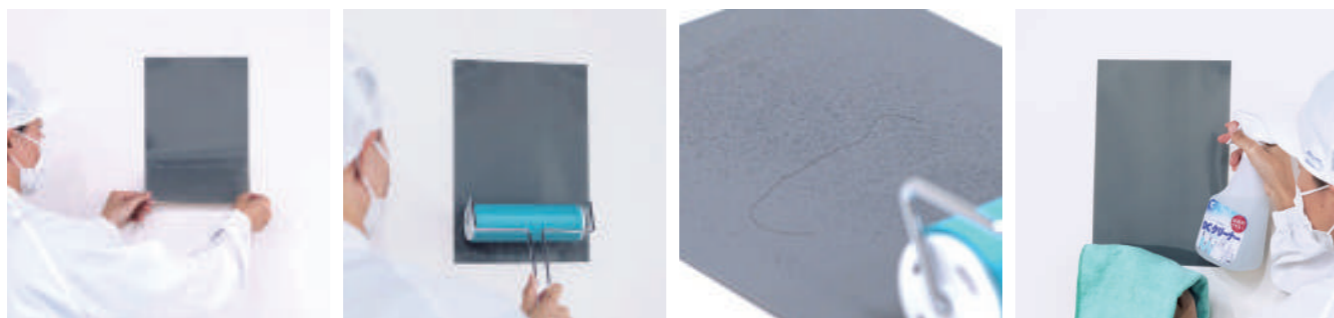
Custom-width are also available, please contact us.
(Inner Φ44mm / Outer Φ54mm)

***Maximum width : 500mm**

D-quick NEW

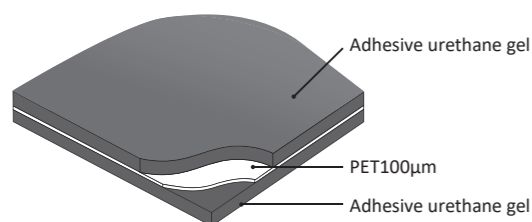
- POINT**
- 1 A transfer sheet that restores over 90% of the performance of adhesive rollers without washing with water.
 - 2 One transfer takes approximately 8 seconds. You can save a lot of time by eliminating the need to wash the rollers.
 - 3 The number of times you clean the rollers can be reduced, making daily maintenance of the rollers easier.

Image for use



Install the D-quick on the wall or workbench where the roller is installed. Roll the roller twice from the top to the bottom of the D-quick to transfer. Removes over 90% or more of hair and dust in 2 rotations. If it gets dirty, you can use it repeatedly by wiping it with a cleaner and microfiber cloth.

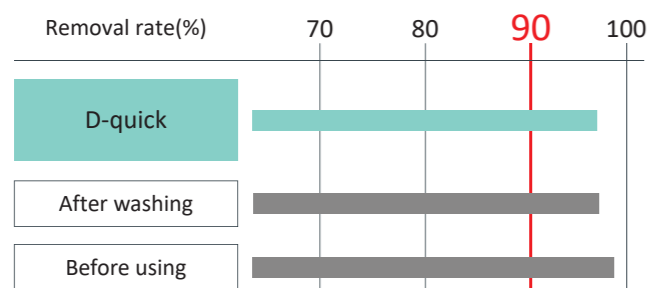
Structure (There are protective films on both sides of the product.)



Since it can be installed with urethane gel adhesive, double-sided tape is not required for installation, and it can be directly attached to the wall.

*D-quick has no front and back sides.

Result of performance test



By using D-quick, the same level of adhesive strength as the adhesive roller's performance after washing with water will be restored.

You can use the adhesive roller with confidence in the same way as before after washing with water.

How to clean



Spray water or our special detergent (DC cleaner) from 15cm apart the wall when you clean as it is on the wall. After that, wipe it off immediately with a cloth that has been dampened with water and wrung out.

Indication of cleaning

| Number of transfers (Number of people) | 1 (5 people) | 5 (25 people) | 10 (50 people) | 15 (75 people) | 18 (90 people) | 20 (100 people) |
|-------------------------------------------|-----------------|------------------|-------------------|-------------------|-------------------|--------------------|
| Removal rate(%) | 96 | 98 | 96 | 93 | 93 | 79 |

(Number of people: Number of people using rollers)

If you are wearing dustproof clothing, please clean the surface of the sheet once every 90 people.

*The above is a guideline when transferring to D-Quick once for every 5 people.
*The number of cleaning times depends on the degree of dirt.

- Caution**
- **Precautions for use** ■
 - Allow to dry completely before pasting. If you stick it on the wall with moisture remaining, it may cause mold.
 - If you fold the sheet when peeling it, it will leave a mark.
 - It may be changed color of surface if oil attach to the sheet.
 - There is a risk of damaging the installation surface when removing it.
 - **Precautions regarding the installation surface** ■
 - Avoid installing on floors containing a lot of soft PVC or plasticizer.
 - Please install it on a smooth wall. Due to the strong adhesive, please be careful where you install it. There is a possibility of damaging the other material of contact surface.
 - Depending on the material and the state of aging, the use of cleaners may affect the painted surface.
 - **Precautions for cleaning** ■
 - Do not use abrasive cleansers, bleach, or hard brushes as they may damage D-quick.
 - D-quick will deteriorate if you rub the surface with a dry cloth or rag. Be sure to use one that has been moistened with water.
 - Please wipe off any spilled cleaner thoroughly.
 - **Indication of cleaning** ■
 - If you are wearing dustproof clothing, please clean the surface once per 90 people.
 - *When transferred to D-quick once for every 5 people using it.
 - *The number of cleaning times depends on the degree of dirt.

D-quick

This is a sheet that transfers dirt attached to the adhesive roller.



| Part Number | Size (mm) | Thickness (mm) | Color | Quantity |
|-------------|-----------|----------------|-------|----------|
| CO01-40031 | 300x210 | 0.5 | Gray | 1 |
| CO01-40032 | | | | 5 |

*D-quick has no front and back sides.

Related products DC cleaner / DC cloth (P.18)



Adhesive sheet for wall in air shower.

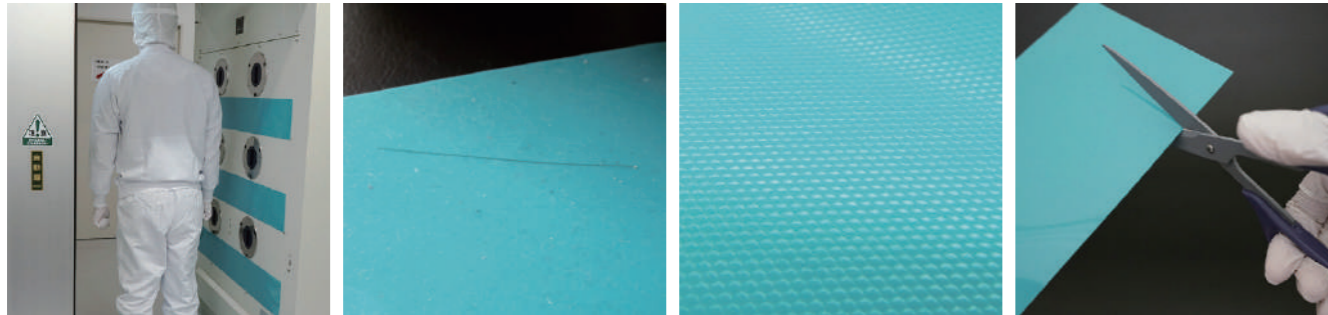
Dust catcher

POINT

- 1 Catch the dust and hair that are floating inside the air shower.
- 2 It is not used double-sided tape. Glue does not believe remnants, because of the self-adhesive.
- 3 Antibacterial and antifungal agents were mixed.
- 4 It is economical because it can be used for a few years if you place it once.

Image for use

Check the video ▶▶



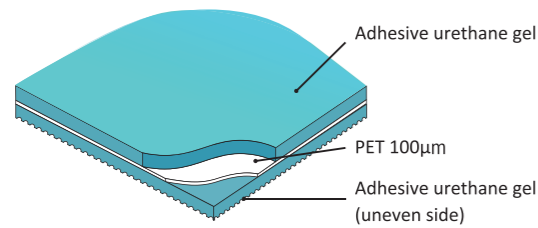
On the wall in air shower.

Catch the dust and hair.

Emboss processing for peel off easily.

Size is adjustable with scissors.

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



Adhesive urethane gel catch and remove dust and grime. The surface on the wall side is embossed, which allows air to escape easily and is easy to peel off. And it is possible to install to the wall of air shower without double-sided tape because the material has a self-adhesive.

How to clean

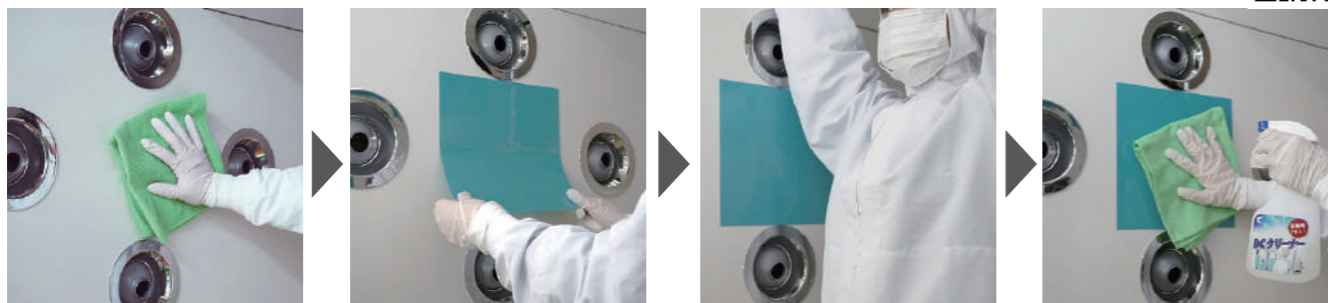


Spray water or our special detergent (DC cleaner) from 15cm apart the wall when you clean as it is on the wall. After that, wipe it off immediately with a cloth that has been dampened with water and wrung out.

*Fully washable. Please install again after dried well.

How to use

Check the video ▶▶



Clean the wall where you will install it.

Paste with the embossed surface facing the wall.

Adsorbs dust floating in the air shower with the power of gel.

If it gets dirty, it is possible to use repeatedly by wiping it with water and washing it.

Caution

Precautions for use

- Allow to dry completely before pasting. If you stick it on the wall with moisture remaining, it may cause mold.
- If you fold the sheet when peeling it, it will leave a mark.
- It may be changed color of surface if oil attach to the sheet.
- Avoid installing on floors containing a lot of soft PVC or plasticizer.

Required size and indication of use

- It is possible to use for 2-3 years. (Depending on the operating environment and frequency of use.)
- Please use 6-8 sheets (250x250mm or 500x125mm) for 1m².

Indication of cleaning

- Clean the surface once every 1-2 weeks.
- The number of cleaning is different by degree of dirt. The above is an approximate guideline.
- We recommend that you change the number of sheets and cleaning by the operating environment.
- It is possible to use longer and more clean with using our DC cleaner.

Dust catcher

This is an adhesive sheet for wall to remove the floated dusts in air shower.



| Part Number | Size (mm) | Thickness (mm) | Color | Quantity |
|-------------|-----------|----------------|------------|----------|
| DC01-13001 | 250x250 | 1.0 | Blue green | 8 |
| DC01-13002 | 500x125 | | | 8 |
| DC01-13003 | 1000x500 | | | 1 |

*DC01-13003 is free size. It is possible to cut to the size of your choice with scissors or roller cutters.



CHECK

Custom-sized are also available, please contact us.

Recommended for beginners

Dust catcher 3 pieces set

The great deal set with DC cleaner (500ml) and DC cloth (2pcs).

| Part Number | Size (mm) | Thickness (mm) | Details |
|-------------|-----------|----------------|-----------------------------------------------|
| DC01-13004 | 250x250 | 1.0 | Dust catcher (8 sheets), DC cleaner, DC cloth |
| DC01-13005 | 500x125 | | |



DC cleaner

This is special detergent for Dust catcher. It has an effect to keep clean.



| Part Number | Volume | Details |
|-------------|--------|-----------------------------|
| CO00-40014 | 500mℓ | With spray bottle |
| CO00-40015 | 10ℓ | 1 box *Without spray bottle |

DC cloth

This cloth made by microfiber to get off dust and dirt adhering to Dust catcher.



| Part Number | Size (mm) | Color | Quantity |
|-------------|-----------|-------|----------|
| CO00-40016 | 400x400 | Green | 2 |

*Please wring firmly after wetting.



Tip remover

POINT

- 1 The adhesive gel for fingertips that can be used repeatedly by washing with water.
- 2 The gel fits fingers firmly because of hollow inside.
- 3 Silicone and plasticizer are not included.
- 4 It is possible to install at desk by self-adhesive of gel.

Image for use



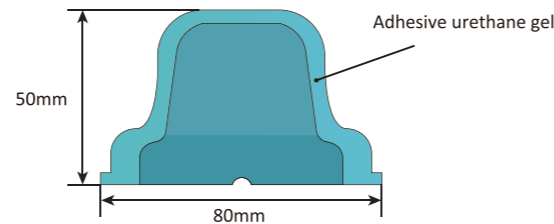
To remove fine dust of fingers. Soft gel fits fingers. It is easy to hold because of hollow inside. Can be installed on the wall or top side.

How to clean

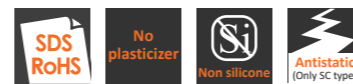


Dirt can be removed by softly rubbing it with the palm of your hand while running water, and the adhesive force will be restored when it dries. By using a disinfectant cleaner, you can use it cleanly for a longer time.

Structure



Due to its hollow structure, the soft gel fits well on your fingers and removes dirt. The shape is easy to hold in your hand.



Tip remover

This adhesive gel for fingertips to remove fine dust of gloves and sebum.

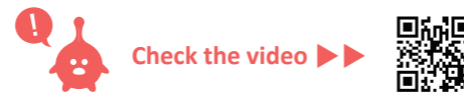


| Part Number | Hardness | Size (mm) | Color |
|-------------|-----------|----------------------------|------------|
| TR00-14001 | Asker C30 | Bottom : Φ80 x Height : 50 | Blue green |



Tip remover semiconductive type

| Part Number | Hardness | Size (mm) | Color | Surface resistance (Ω) |
|-------------|-----------|----------------------------|-------|------------------------|
| TR01-14002 | Asker C30 | Bottom : Φ80 x Height : 50 | Black | 10 ⁹ |



Haimen mat

POINT

- 1 The soft adhesive sheet and mat fit in the deep unevenness of the back.
- 2 It can be washed with water and used repeatedly, making it easy to clean.
- 3 The mat can be attached and removed according to the situation, and the position can be adjusted freely.
- 4 Antibacterial and antifungal agents were mixed.

Image for use



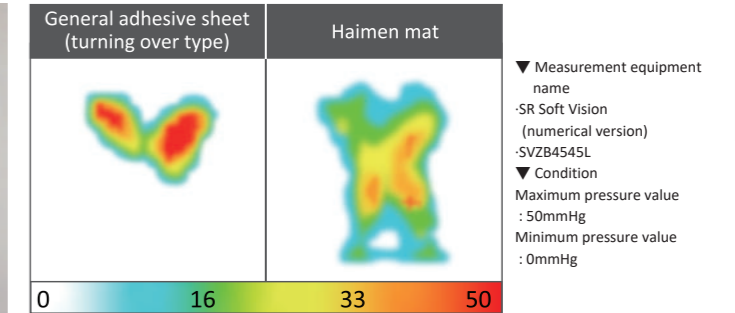
For finishing after cleaning with roller. It is easy to paste and peel off.

How to clean



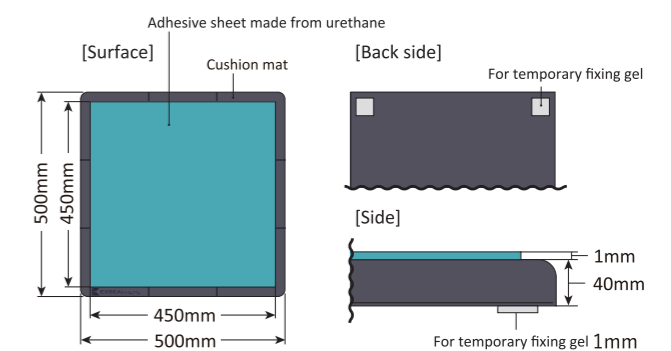
Spray water or our special detergent (DC cleaner) from 15cm apart the wall when you clean as it is on the wall. Then wipe with squeezed cloth immediately. *The adhesive sheet can be peeled off and washed. Please install again after dried well.

Comparison of contact area



The contact area is about 2.6 times* larger than a general adhesive sheet, and it firmly adsorbs dust. *Haimen mat results in 259 when the area of a general adhesive sheet is 100.

Structure



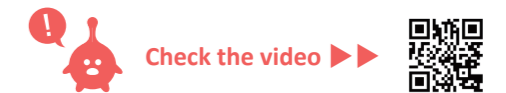
Haimen mat

An adhesive mat that removes hair and dust from the back.



| Part Number | Size (mm) | Thickness (mm) | Details |
|-------------|-----------|----------------|--------------------------------------------------------------------------------|
| BM01-15001 | 500x500 | approx.42 | Adhesive sheet 2pcs, Cushion mat (With adhesive gel for temporary fixing) ×1pc |
| BM01-15002 | 450x450 | 1.0 | For replacement adhesive sheet ×2pcs |

- *Depending on the material and condition of the wall, it may not be possible to install it with the included gel. In that case, please note that we cannot take any responsibility.
- *Please check the adhesive strength of the gel in an inconspicuous place before sticking it onto the wall.
- *Avoid using fixing gel to install on soft PVC or materials containing a lot of plasticizer.
- *If it is difficult to paste, please use another method such as using double-sided tape.



The case for conveyance of precision devices.

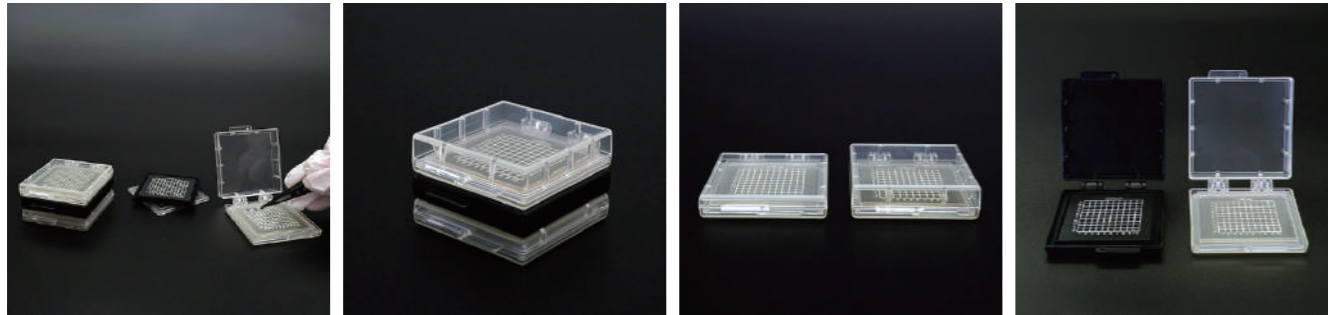
GEL-BASE® series NEW

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 have 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.

The height of case for 2-inch is two types. (Left) Type L / (Right) Type H

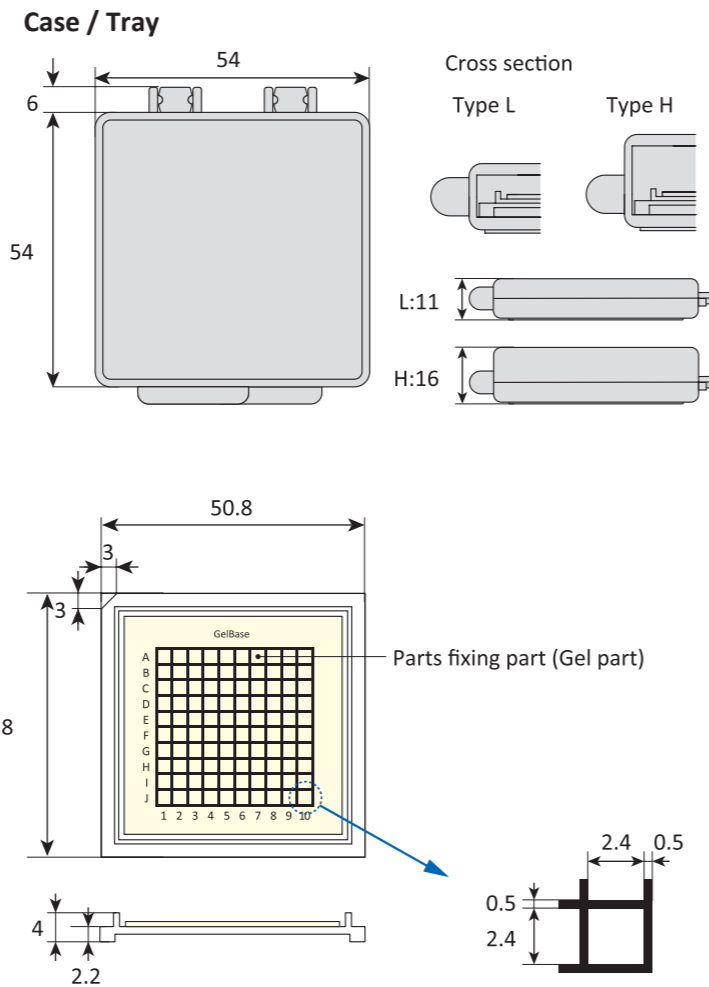
The colors of cases are black and clear.

Characteristics / Product dimensions

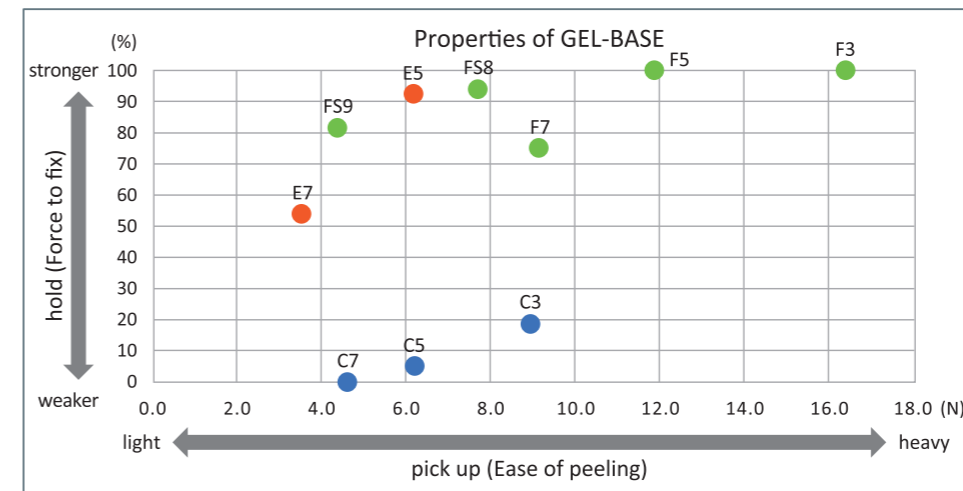
*We also hear to custom printing. (Special order) *Measured value is a reference, not guaranteed value.

GEL-BASE® 2-inch

| | Size (mm) | Color | Surface resistance (Ω) | Silicone | |
|------|-------------------|-------|------------------------|-----------------|-----------------|
| Case | Type L : 54×54×11 | Black | 10 ¹¹ | Non Silicone | |
| | Type H : 54×54×16 | Clear | 10 ¹³ | | |
| Tray | 50.8×50.8×4 | Black | 10 ¹¹ | | |
| | | Clear | 10 ¹³ | | |
| Gel | 42×42 | Amber | FS9 | | 10 ⁹ |
| | | | FS8 | | 10 ⁸ |
| | | | F7 | | 10 ⁹ |
| | | | F5 | | 10 ⁸ |
| | | | F3 | | 10 ⁷ |
| | | | C7 | | 10 ⁹ |
| | | | C5 | 10 ⁸ | |
| | | | C3 | 10 ⁸ | |
| | | | E7 | 10 ⁹ | |
| | | | E5 | 10 ⁸ | |
| | | | VS9 | 10 ⁸ | |
| | | | VS8 | 10 ⁸ | |



Adhesive properties of GEL-BASE



*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® 2-inch

A set of case and tray. It is possible to remove a tray. Please choice the height and color of case.



GEL-BASE® 2-inch Flat type

| Part Number | Black (Case / Tray) | Clear (Case / Tray) | Gel | Adhesive force (N/25mm) | Clearance |
|-------------|---------------------|---------------------|-----|-------------------------|-----------|
| GC00-16001 | GC00-16009 | GC00-16009 | FS9 | approx. 0.007 | 2.0mm |
| GC00-16060 | GC00-16061 | GC00-16061 | FS8 | approx. 0.04 | |
| GC00-16002 | GC00-16010 | GC00-16010 | F7 | approx. 0.24 | |
| GC00-16003 | GC00-16011 | GC00-16011 | F5 | approx. 1.23 | |
| GC00-16004 | GC00-16012 | GC00-16012 | F3 | approx. 1.51 | |
| GC00-16005 | GC00-16013 | GC00-16013 | FS9 | approx. 0.007 | 7.0mm |
| GC00-16062 | GC00-16063 | GC00-16063 | FS8 | approx. 0.04 | |
| GC00-16006 | GC00-16014 | GC00-16014 | F7 | approx. 0.24 | |
| GC00-16007 | GC00-16015 | GC00-16015 | F5 | approx. 1.23 | |
| GC00-16008 | GC00-16016 | GC00-16016 | F3 | approx. 1.51 | |

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



GEL-BASE® 2-inch Cloudy type

| Part Number | Black (Case / Tray) | Clear (Case / Tray) | Gel | Adhesive force (N/25mm) | Clearance |
|-------------|---------------------|---------------------|-----|-------------------------|-----------|
| GC00-16017 | GC00-16023 | GC00-16023 | C7 | approx. 0.04 | 2.0mm |
| GC00-16018 | GC00-16024 | GC00-16024 | C5 | approx. 0.14 | |
| GC00-16019 | GC00-16025 | GC00-16025 | C3 | approx. 0.74 | |
| GC00-16020 | GC00-16026 | GC00-16026 | C7 | approx. 0.04 | 7.0mm |
| GC00-16021 | GC00-16027 | GC00-16027 | C5 | approx. 0.14 | |
| GC00-16022 | GC00-16028 | GC00-16028 | C3 | approx. 0.74 | |

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



GEL-BASE® 2-inch Mesh type

| Part Number | Black (Case / Tray) | Clear (Case / Tray) | Gel | Adhesive force (N/25mm) | Clearance |
|-------------|---------------------|---------------------|-----|-------------------------|-----------|
| GC00-16029 | GC00-16033 | GC00-16033 | E7 | approx. 0.09 | 2.0mm |
| GC00-16030 | GC00-16034 | GC00-16034 | E5 | approx. 0.48 | |
| GC00-16031 | GC00-16035 | GC00-16035 | E7 | approx. 0.09 | 7.0mm |
| GC00-16032 | GC00-16036 | GC00-16036 | 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.

The case for conveyance of precision devices.

GEL-BASE® series NEW

GEL-BASE® No tray type



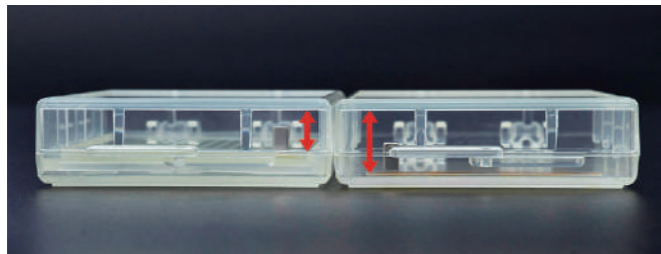
- POINT**
- 1 Clearance is larger than normal GEL-BASE 2-inch.
 - 2 Since the gel sheet is attached directly to the case, the number of parts is reduced, and making it easier to manage.
 - 3 Silicone is not used as material.

Image for use

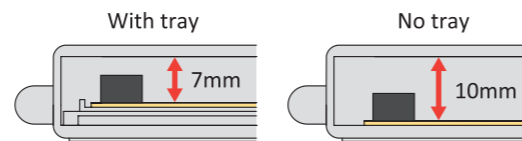


The tray of GEL-BASE 2-inch type is removed, and the gel sheet is attached directly to the case. Cases are stackable. Many parts can be placed regardless of squares. It is also possible to print the squares on the case. (*Special order available)

Comparison of clearance



Clearance is getting bigger because there is no tray. Higher parts can be stored and transported.



CHECK We also accept special orders for printing squares directly on the case. Please feel free to contact us.



GEL-BASE® 2-inch Flat type No tray

| Part Number | | Gel | Adhesive force (N/25mm) | Clearance |
|--------------|--------------|-----|-------------------------|-----------|
| Black (Case) | Clear (Case) | | | |
| GC00-16055 | GC00-16057 | F7 | approx. 0.24 | 10.0mm |
| GC00-16056 | GC00-16058 | F5 | approx. 1.23 | |

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

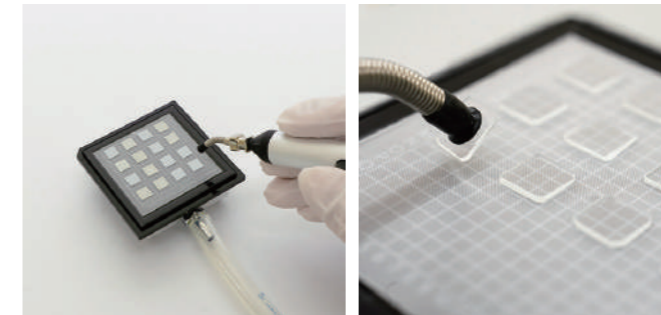
GEL-BASE® V type



- POINT**
- 1 This is a precision parts transport case with non-silicone that picks up parts using a vacuum device.
 - 2 It can firmly fix parts during transport, and also easily pick up parts during vacuuming.
 - 3 The adhesive strength does not change over time, keeping the lightness of the pick up.

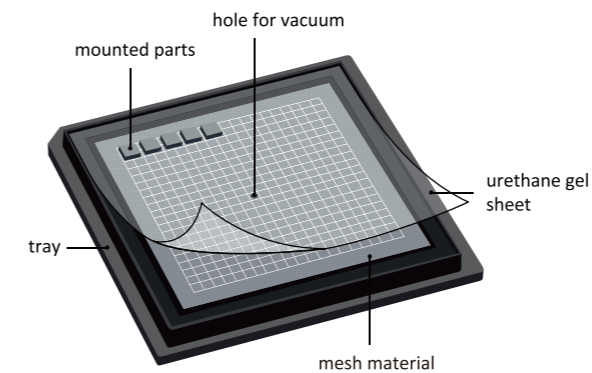
Image for use

Check the video



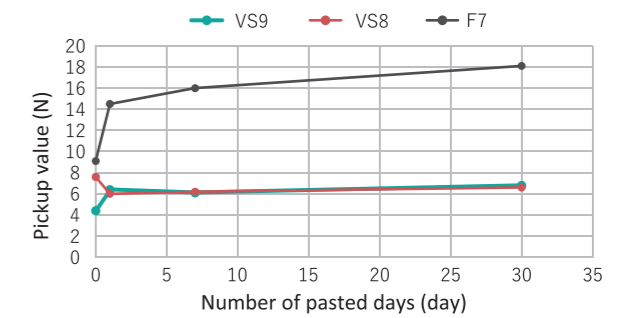
It can be easily picked up by vacuuming with a vacuum device. For storing and transporting parts such as glass, wafers, and ceramics.

Structure



The tray of GEL-BASE V type has a vacuum hole for a vacuum device on the back. By using a vacuum device during work such as pickup, the urethane gel sheet on the surface becomes a mesh.

Pickup value by device paste time

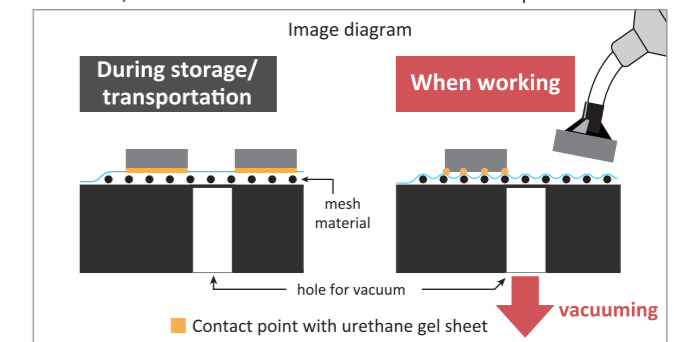


*Using a glass plate 0.5mmt (contact dimensions: 10×8mm) for the device. *Measured values are reference values, not guaranteed values.

Mechanism of vacuuming



As the urethane gel sheet get into the mesh material deeply when vacuumed, it can be seen that the contact area with the parts is smaller.



GEL-BASE® 2-inch V type

| Part Number | | Gel | Mesh size | Adhesive force (N/25mm) | Clearance |
|---------------------|--|-----|-----------|-------------------------|-----------|
| Black (Case / Tray) | | | | | |
| GC00-16059 | | VS9 | 200 | approx. 0.01 | 2.0mm |
| GC00-16066 | | VS9 | 34 | approx. 0.01 | |
| GC00-16067 | | VS8 | 200 | approx. 0.04 | |
| GC00-16068 | | VS8 | 34 | approx. 0.02 | |

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

CHECK We also accept custom mesh size. Please feel free to contact us.

The case for conveyance of precision devices.

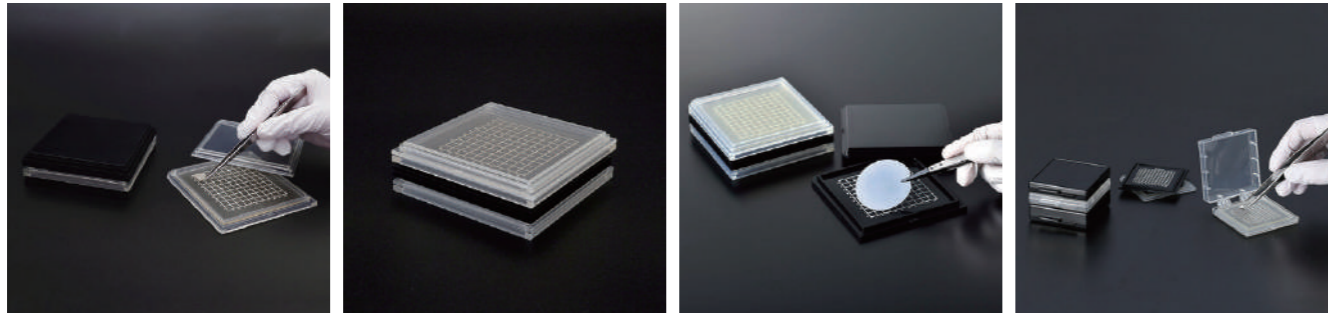
GEL-BASE® series NEW

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 is stackable.

For transporting electronic components. Also available 2-inch size.

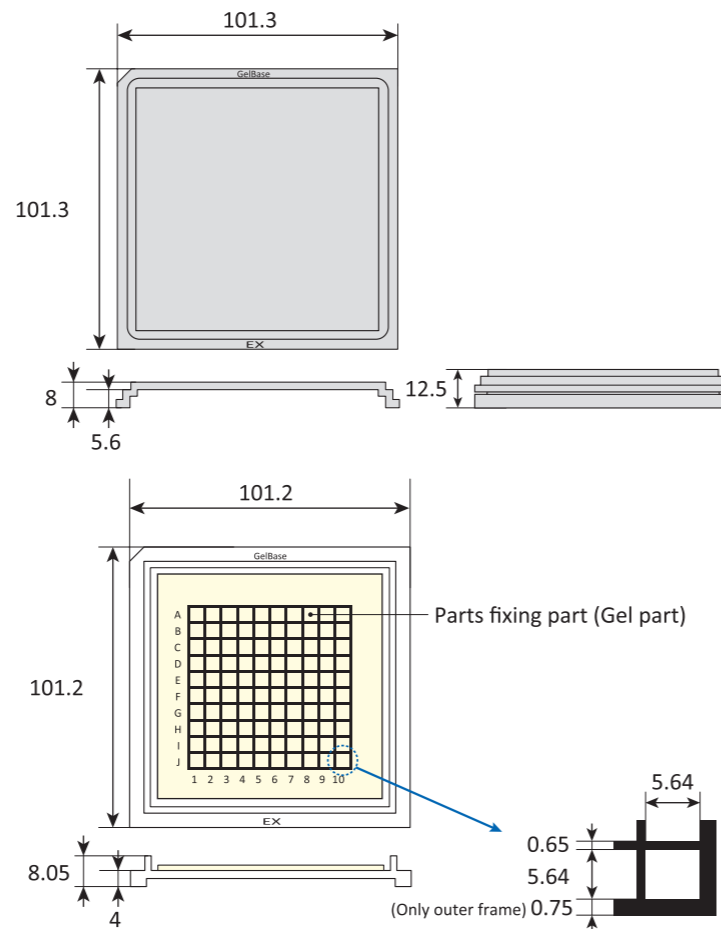
Characteristics / Product dimensions

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

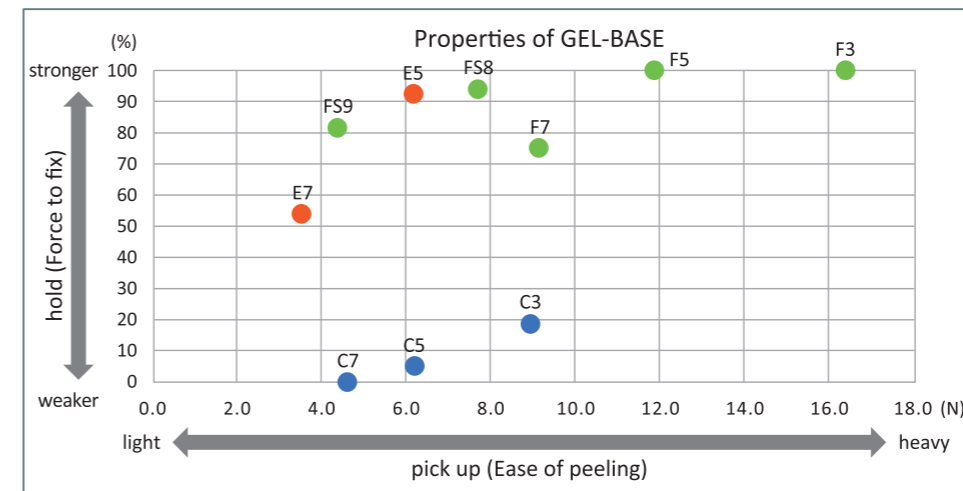
GEL-BASE® 4-inch

| | 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 | 85×85 | Amber | FS9 | | 10 ⁹ |
| | | | FS8 | | 10 ⁸ |
| | | | 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



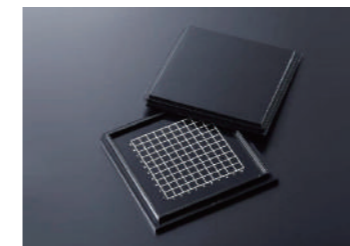
Adhesive properties of GEL-BASE



*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

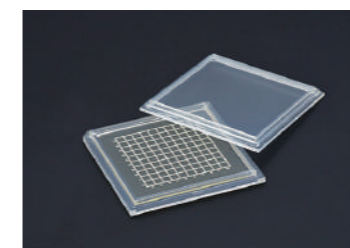
A set of body and lid. Please choice the color of case.



GEL-BASE® 4-inch Flat type

| Part Number | Black (Case) | Clear (Case) | Gel | Adhesive force (N/25mm) | Clearance |
|-------------|--------------|--------------|---------------|-------------------------|-----------|
| GC00-16037 | GC00-16041 | FS9 | approx. 0.007 | 4.5mm | |
| GC00-16064 | GC00-16065 | FS8 | approx. 0.04 | | |
| GC00-16038 | GC00-16042 | F7 | approx. 0.24 | | |
| GC00-16039 | GC00-16043 | F5 | approx. 1.23 | | |
| GC00-16040 | GC00-16044 | F3 | approx. 1.51 | | |

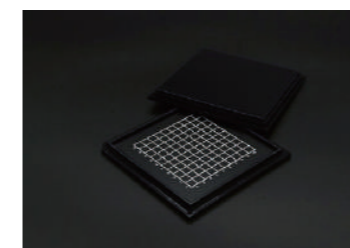
*Adhesive force (N/25mm) is a reference value.



GEL-BASE® 4-inch Cloudy type

| Part Number | Black (Case) | Clear (Case) | Gel | Adhesive force (N/25mm) | Clearance |
|-------------|--------------|--------------|--------------|-------------------------|-----------|
| GC00-16045 | GC00-16048 | C7 | approx. 0.04 | 4.5mm | |
| GC00-16046 | GC00-16049 | C5 | approx. 0.14 | | |
| GC00-16047 | GC00-16050 | C3 | approx. 0.74 | | |

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



GEL-BASE® 4-inch Mesh type

| Part Number | Black (Case) | Clear (Case) | Gel | Adhesive force (N/25mm) | Clearance |
|-------------|--------------|--------------|--------------|-------------------------|-----------|
| GC00-16051 | GC00-16053 | E7 | approx. 0.09 | 4.5mm | |
| GC00-16052 | GC00-16054 | 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.

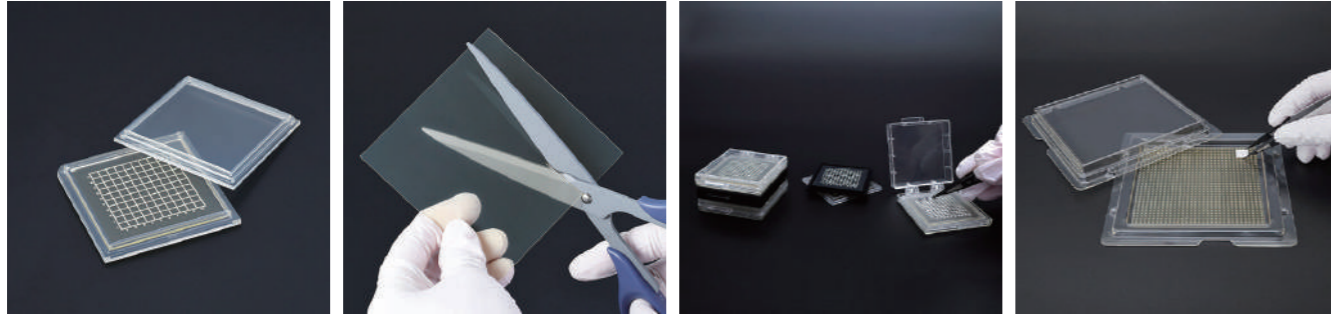
For temporary fixing sheet of precision device.

GEL-BASE® sheet series **NEW**

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.

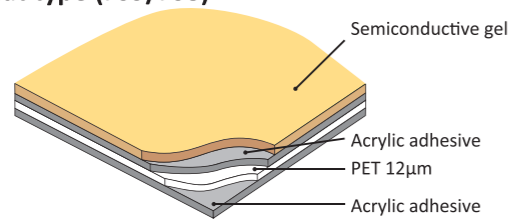
It can be cut with scissors.

Also sold with a case.

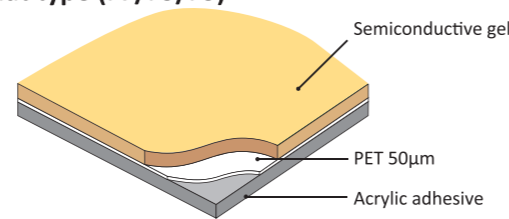
It is possible to use it by attaching the sheet to your existing tray.

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

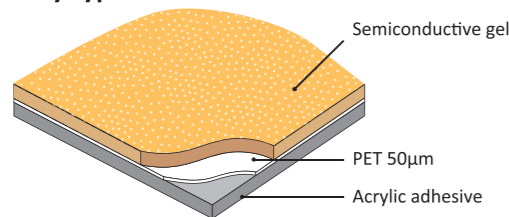
Flat type (FS9/FS8)



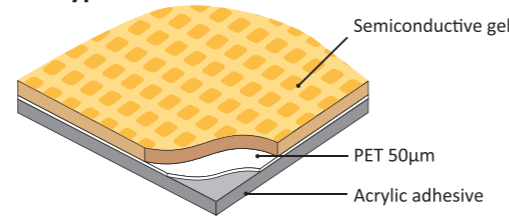
Flat type (F7/F5/F3)



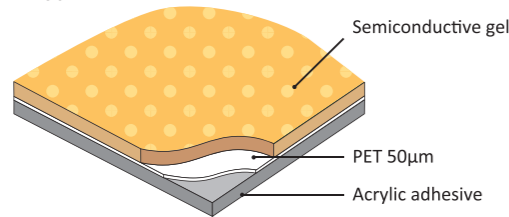
Cloudy type



Mesh type



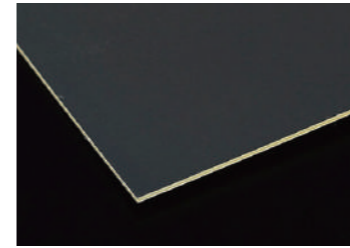
Dot type



GEL-BASE® sheet Flat type



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

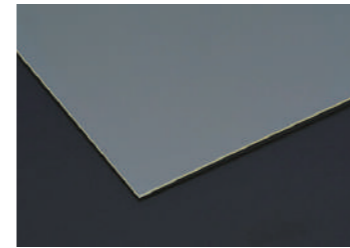


| Part Number | Shape | Size (mm) | Thickness (mm) | Color |
|-------------|----------|-----------|----------------|-------|
| GS00-17001 | Flat FS9 | 500×400 | 0.5 | Amber |
| GS00-17011 | Flat FS8 | | | |
| GS00-17002 | Flat F7 | | | |
| GS00-17003 | Flat F5 | | | |
| GS00-17004 | Flat F3 | | | |

GEL-BASE® sheet Cloudy type



Surface is fine unevenness shape, and it is easy to pick up. One side is adhesive.

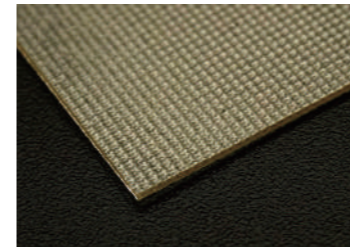


| Part Number | Shape | Size (mm) | Thickness (mm) | Color |
|-------------|-----------|-----------|----------------|-------|
| GS00-17005 | Cloudy C7 | 500×400 | 0.5 | Amber |
| GS00-17006 | Cloudy C5 | | | |
| GS00-17007 | Cloudy C3 | | | |

GEL-BASE® sheet Mesh type



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

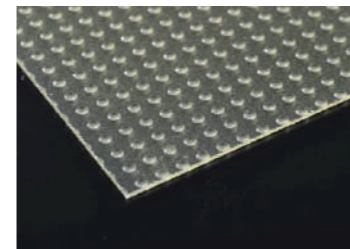


| Part Number | Shape | Size (mm) | Thickness (mm) | Color |
|-------------|---------|-----------|----------------|-------|
| GS00-17008 | Mesh E7 | 500×400 | 0.5 | Amber |
| GS00-17009 | Mesh E5 | | | |

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 |
|-------------|--------|-----------|----------------|-------|
| GS00-17010 | 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.

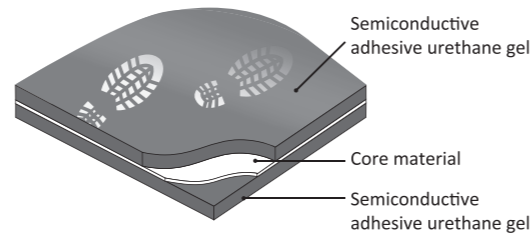
Image for use



Before entering the clean area.

For removing dirt of tire from hand trucks.

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



It does not need 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.

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.

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.

STEP-MAT® semiconductive type

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) |
|-------------|-----------|----------------|-------|---------------------------------|
| SM01-11009 | 900×600 | 3.0 | Gray | 10^9 |
| SM01-11010 | 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)

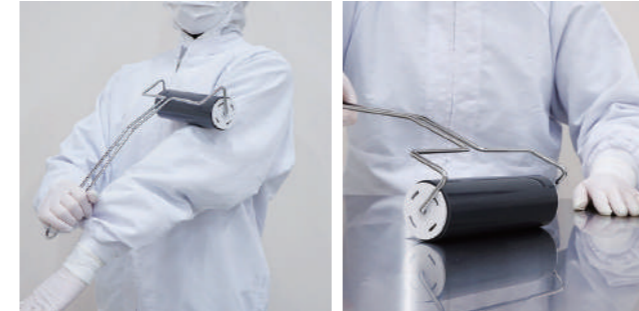
Remove the dust and grime of clothes and gloves.

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)

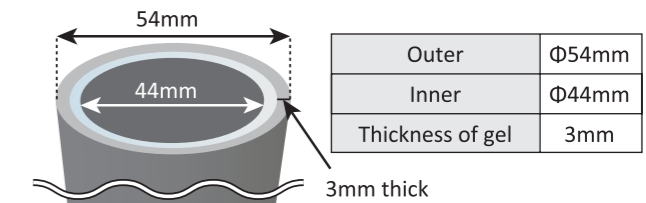
Image for use



Before entering workrooms.

For cleaning workbench in clean room.

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



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% |

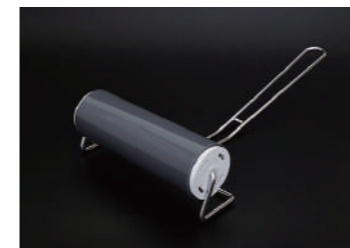
*Lumitester is made by Kikkoman.

*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

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) |
|-------------|---------------------------------------|-------|---------------------------------|
| BR01-12009 | Φ54×160 (all dimensions : about 35cm) | Gray | 10^9 |
| BR01-12010 | 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

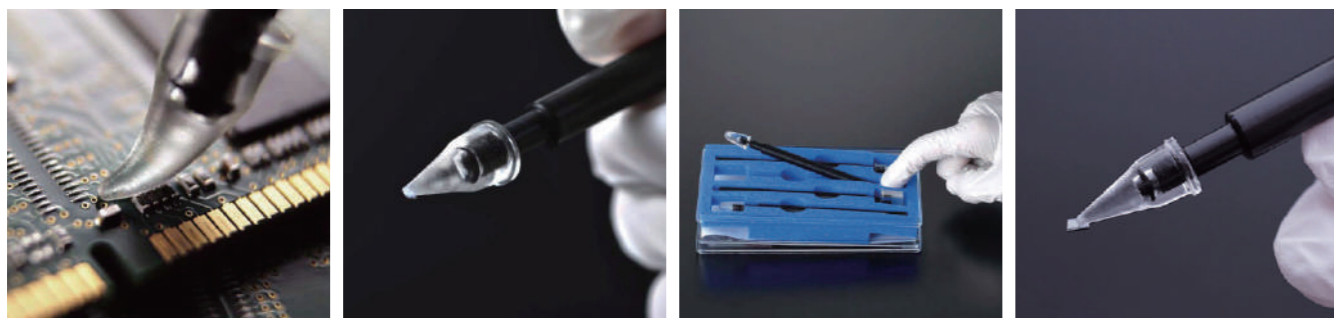
Custom-width are also available, please contact us. (Inner Φ44mm / Outer Φ54mm)

***Maximum width : 500mm**

Gel cleaner pen series

- POINT**
- 1 Glue does not believe remnants, because of self-adhesive of urethane.
 - 2 It does not damage to tip and devices because of soft materials.
 - 3 It is possible to use repeatedly by washing with water.

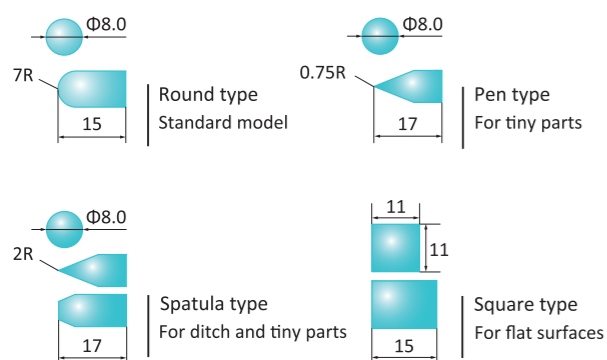
Image for use



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. For picking parts. (Gel cleaner pen 4 pieces set)

Structure

You can choice the shapes of nib according to use.



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 dragging. If you drag, the nib may shave.



Gel cleaner pen

Remove dusts and grime without glue.



| Part Number | Shape | Quantity |
|-------------|---------|----------|
| PN01-18001 | Round | 1 |
| PN01-18002 | Pen | |
| PN01-18003 | Spatula | |
| PN01-18004 | Square | |

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

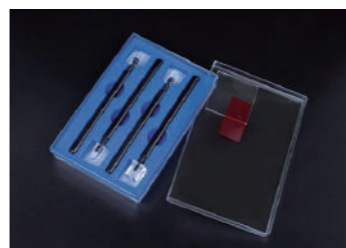


Gel cleaner pen spare

| Part Number | Shape | Quantity |
|-------------|---------|----------|
| PN01-18005 | Round | 1 |
| PN01-18006 | Pen | |
| PN01-18007 | Spatula | |
| PN01-18008 | 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 |
|-------------|------------------------------------------------------------------------|
| PN01-18009 | Gel cleaner pen (Round/Pen/Spatula/Square) each 1pc, Transferred sheet |

*It is possible to use Semiconductive gel sheet (P.33) 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 |
|-------------|-----------|----------------|-----------|
| PN01-18010 | 40x40 | 3.0 | With case |

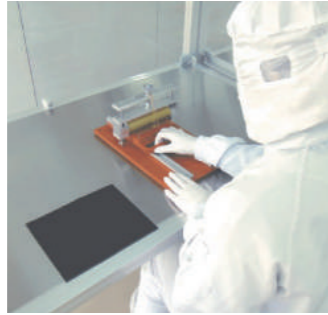
Semiconductive gel sheet

- 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.

Image for use



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



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

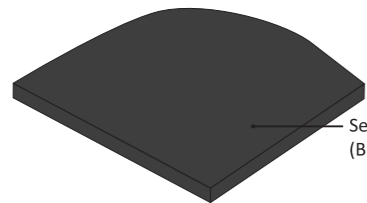


As transferred sheet of dirty Gel cleaner pen (P.31).



As transferred sheet of dirty Semiconductive gel roller (P.35).

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



Semiconductive gel sheet (Black)

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.

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.

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.



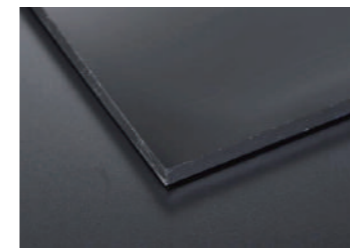
The adhesive power is restored by washing with water.

- Caution**
- Precautions for use ■
 - 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.

Semiconductive gel sheet



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 | | |
| ES00-19001 | ES00-19004 | ES00-19007 | 500×500 | 1.0 |
| ES00-19002 | ES00-19005 | ES00-19008 | | 2.0 |
| ES00-19003 | ES00-19006* | ES00-19009 | | 3.0 |

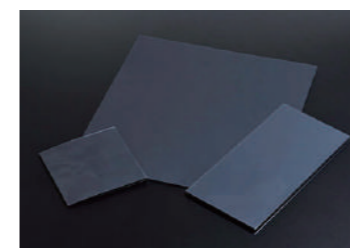
The mark of "*" is normal stock. All other products are made-to-order.

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

Semiconductive gel sheet cutting type



The sheets are cut to tabletop sizes for using easily. It is possible to use as transferred sheet of Gel cleaner pen (P.31).



| Part Number / Hardness | | | Size (mm) | Thickness (mm) |
|------------------------|-------------|------------|-----------|----------------|
| Asker C15 | Asker C30 | Asker C50 | | |
| ES00-19010 | ES00-19014* | ES00-19018 | 100×100 | 3.0 |
| ES00-19011 | ES00-19015* | ES00-19019 | 200×100 | |
| ES00-19012 | ES00-19016* | ES00-19020 | 250×250 | |
| ES00-19013 | ES00-19017* | ES00-19021 | 500×250 | |

The mark of "*" is normal stock. All other products are made-to-order.

Semiconductive adhesive roller for removal of foreign matters.

Semiconductive gel roller

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)

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.33).

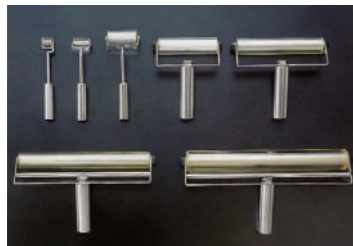
How to use

- 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.

Semiconductive gel roller



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/cm ²) | External dimensions (mm) Full length×Width×Height |
|-------------|----------------------|-------------------|-------------------------------------|------------------------------------------------------|
| ER00-20001 | Φ20 | 17.5 | approx.7 | 160×20×20 |
| ER00-20002 | Φ20 | 30 | | 154×36×38 |
| ER00-20003 | Φ30 | 55 | | 169×65×52 |
| ER00-20004 | Φ30 | 111 | | 150×132×63 |
| ER00-20005 | Φ30 | 160 | | 150×182×63 |
| ER00-20006 | Φ30 | 250 | | 150×272×63 |
| ER00-20007 | Φ40 | 300 | | 155×322×68 |

Related products

Semiconductive gel sheet (P.33)
It can be used as a transfer sheet for dust removed with a roller.

Soft, transparent, and anti-vibration washer

Urethane washer

POINT

- 1 Urethane washer punched from the Pit cushion sheet (P.43).
- 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.

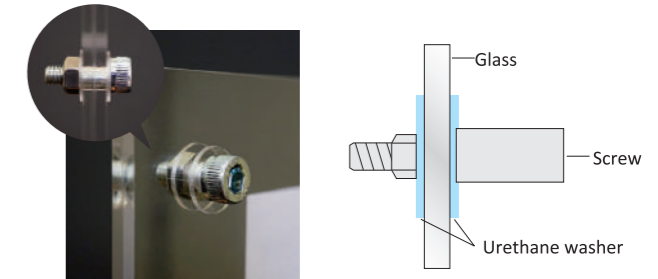
Image for use



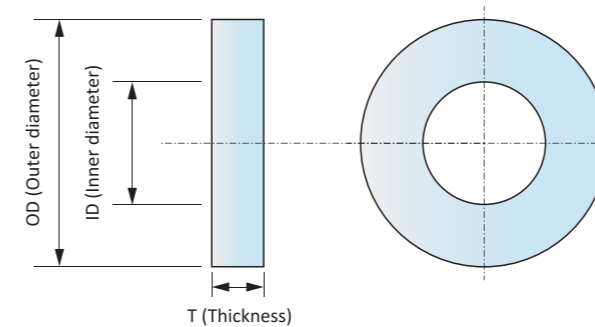
Transparent and soft Urethane washer. It is also easy to use at where you care an appearance such as glass or acrylic.

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.



Product size



Urethane washer

It is a transparent and soft Urethane washer.



| Part Number | Size (mm) | | | Hardness | Quantity |
|-------------|---------------------|---------------------|--------------|-----------|----------|
| | ID (Inner diameter) | OD (Outer diameter) | T(Thickness) | | |
| UW00-21001 | 3.5 | 8.0 | 1.0 | Asker C80 | 20 |
| UW00-21002 | 4.5 | 10.0 | | | |
| UW00-21003 | 5.5 | 12.0 | | | |
| UW00-21004 | 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.

Gel tack series

POINT

- 1 A powerful adhesive gel that improves the self-adhesiveness of urethane through an original formulation.
- 2 It can be pasted and peeled off, so there is no need to worry about glue transfer.
- 3 It does not contaminate a contact surface because of unincluding a plasticizer.
- 4 It is possible to use repeatedly by washing.

Image for use



Strong adhesive gel sheet for shock absorption.

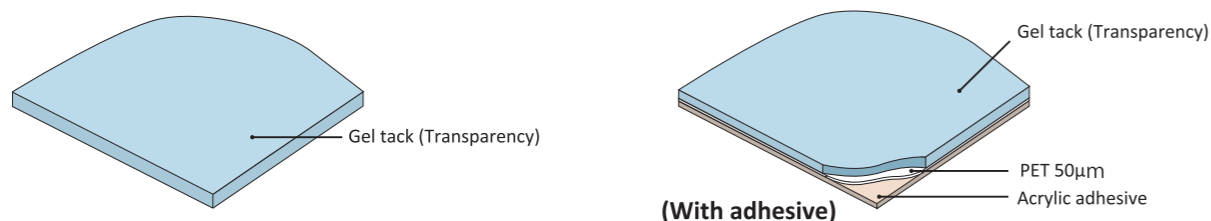
For fall prevention of cabinets, TV, and equipments.

It is possible to use as a suction cup.

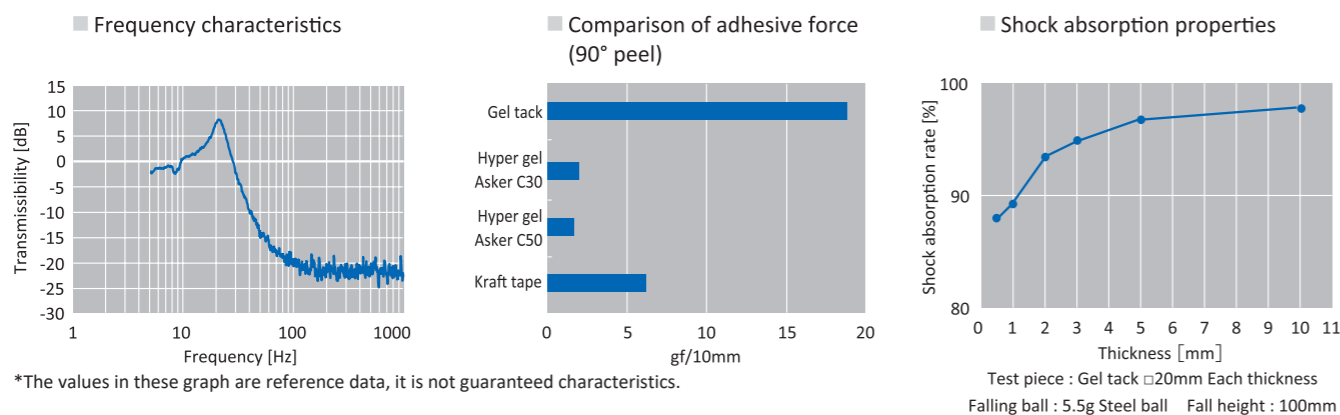
We also have products that already punched for using easily.

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

It is a strong adhesive gel with enhanced adhesiveness of urethane gel. It can be used for fall prevention, temporary fixing materials, and suction pads.



Test results



How to use

- It is possible to cut to the size your choice with scissors or roller cutter. *It is hard to cut anything thicker than 3mm.
- After removing the dirt on the surface to be pasted, peel off the protective film on one side and paste, then peel off the protective film on the other side and paste.

Caution

Precautions for use

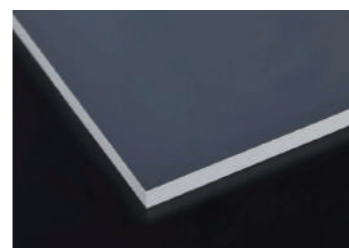
- Adhesion becomes weak when got the water on the gel. Avoid using it in places where it may get wet.
- When installing, place the gel so that the force is evenly applied to the four corners or several places on the bottom.
- Due to the characteristics of sticking and peeling off walls and vertical surfaces, it is easy to peel off.
- If you use it for a long time, it may become difficult to peel off.
- When removing the gel, if you pull it strongly, the paint on the installation surface may come off.
- Avoid using soft PVC or materials that contain a lot of plasticizer.
- Please use so that the bottom and installation surface are flat and the weight is applied to the entire gel surface.
- It cannot be used for water-repellent items.
- This product reduces the damage caused by earthquakes. We are not responsible for damage accidents or damage caused by using this product.
- Please use indoors without direct sunlight.
- This product is not edible.
- Keep this product out of reach of children.

How to peel off the gel

- When removing, pinch the edge of the gel and pull it out slowly.
- If it is difficult to remove, moisten a thin plastic card with water and slowly insert it between the gel and the mounting surface. Moisture will weaken the adhesive and make it easier to remove.
- After removal, there may be a difference between the installation location and the surroundings depending on the material.

Gel tack sheet

Gel tack is a strong adhesive gel sheet with vibration and shock absorption.



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| GT01-22001 | 500×500 | 1.0 | Asker C23 |
| GT01-22002 | | 2.0 | |
| GT01-22003 | | 3.0 | |
| GT01-22004 | | 5.0 | |

Gel tack sheet with adhesive

One side is pasted acrylic adhesive.

| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| GT01-22005 | 500×400 | 1.0 | Asker C23 |

CHECK

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

Gel tack sheet cutting type

The sheets are cut to small sizes for purchasing easily.



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| GT01-22006 | 100×100 | 2.0 | Asker C23 |
| GT01-22007 | 250×250 | | |
| GT01-22008 | 500×250 | 3.0 | |
| GT01-22009 | 100×100 | | |
| GT01-22010 | 250×250 | 5.0 | |
| GT01-22011 | 500×250 | | |
| GT01-22012 | 100×100 | 3.0 | |
| GT01-22013 | 250×250 | | |
| GT01-22014 | 500×250 | 5.0 | |

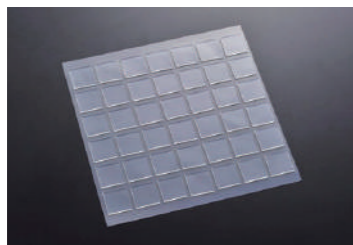
Gel tack series

Gel tack punching type



POINT

- 1 It is a Gel tack sheet punched into a size that is easy to use.
- 2 The half-cut finished makes it easy to remove.

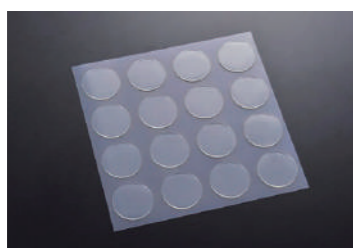


Gel tack square shape

It is a Gel tack sheet punched into a size that is easy to use.

| Part Number | Size (mm) | Thickness (mm) | Hardness | Proper load (per 1 pc) | Quantity per pack |
|-------------|-----------|----------------|-----------|------------------------|-------------------|
| GT01-22015 | 20×20 | 2.0 | Asker C23 | 2.5kg | 100 |
| GT01-22016 | 30×30 | | | 5.0kg | 42 |
| GT01-22017 | 40×40 | | | 9.0kg | 25 |
| GT01-22018 | 50×50 | | | 15.0kg | 16 |
| GT01-22019 | 60×60 | | | 21.0kg | 9 |
| GT01-22020 | 80×80 | | | 38.0kg | 4 |
| GT01-22021 | 20×20 | 5.0 | Asker C23 | 3.5 kg | 81 |
| GT01-22022 | 30×30 | | | 8.0 kg | 42 |
| GT01-22023 | 40×40 | | | 15.0kg | 25 |
| GT01-22024 | 50×50 | | | 22.5kg | 16 |
| GT01-22025 | 60×60 | | | 32.0kg | 9 |
| GT01-22026 | 80×80 | | | 57.0kg | 4 |

*Overall size of sheet is 250x250mm.



Gel tack round shape

It is a Gel tack sheet punched into a size that is easy to use.

| Part Number | Size (mm) | Thickness (mm) | Hardness | Proper load (per 1 pc) | Quantity per pack |
|-------------|-----------|----------------|-----------|------------------------|-------------------|
| GT01-22027 | Φ20 | 2.0 | Asker C23 | 2.0kg | 100 |
| GT01-22028 | Φ30 | | | 4.0kg | 49 |
| GT01-22029 | Φ40 | | | 7.0kg | 25 |
| GT01-22030 | Φ50 | | | 11.0kg | 16 |
| GT01-22031 | Φ60 | | | 17.0kg | 9 |
| GT01-22032 | Φ80 | | | 30.0kg | 5 |
| GT01-22033 | Φ100 | 5.0 | Asker C23 | 47.0kg | 4 |
| GT01-22034 | Φ20 | | | 3.0 kg | 81 |
| GT01-22035 | Φ30 | | | 6.0 kg | 36 |
| GT01-22036 | Φ40 | | | 11.0kg | 25 |
| GT01-22037 | Φ50 | | | 17.0kg | 16 |
| GT01-22038 | Φ60 | | | 25.0kg | 9 |
| GT01-22039 | Φ80 | 45.0kg | 5 | | |
| GT01-22040 | Φ100 | 70.0kg | 4 | | |

*Overall size of sheet is 250x250mm.

Gel tack packaging products



POINT

- 1 It is a Gel tack sheet punched into a size that is easy to use.
- 2 The half-cut finished makes it easy to remove. (except 100×100mm)



Fall prevention sheet

Strong adhesive gel sheet with anti-vibration and shock absorbing property.

| Part Number | Size (mm) | Thickness (mm) | Hardness | Proper load (per 1 pc) | Quantity per pack |
|-------------|-----------|----------------|-----------|------------------------|-------------------|
| GT01-22041 | 20×20 | 2.0 | Asker C23 | 2.5kg | 24 |
| GT01-22042 | 100×100 | | | 60.0kg | 1 |
| GT01-22043 | Φ40 | | | 7.0kg | 4 |
| GT01-22044 | 40×40 | 5.0 | Asker C23 | 15.0kg | 4 |
| GT01-22045 | 50×50 | | | 22.5kg | 4 |
| GT01-22046 | 100×100 | | | 90.0kg | 1 |

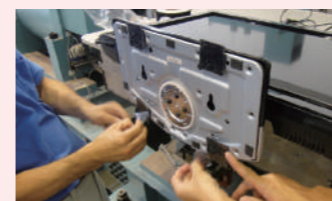
*The proper load is a reference value, not guaranteed value.

*The proper load is a load at 15% strain of maximum load.



Reproduction test of M9 seismic waves from the Great East Japan Earthquake

■ You can check the test of Gel tack sheet.



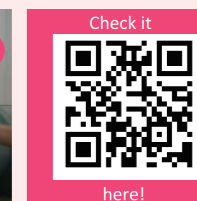
Install the fall prevention sheet to a 32 inch LCD TV.



Install to a vibration tester.



M9 seismic wave reproduction test conducted.



Since it has a base material, it is easy to use even if it is thin.

Clear tack sheet series

POINT

- 1 A thin urethane sheet that can be pasted and peeled off.
- 2 It is easy to handle even if thin because there is a base material.
- 3 The dirt on the surface can be cleaned by washing with water and can be used repeatedly.

Image for use



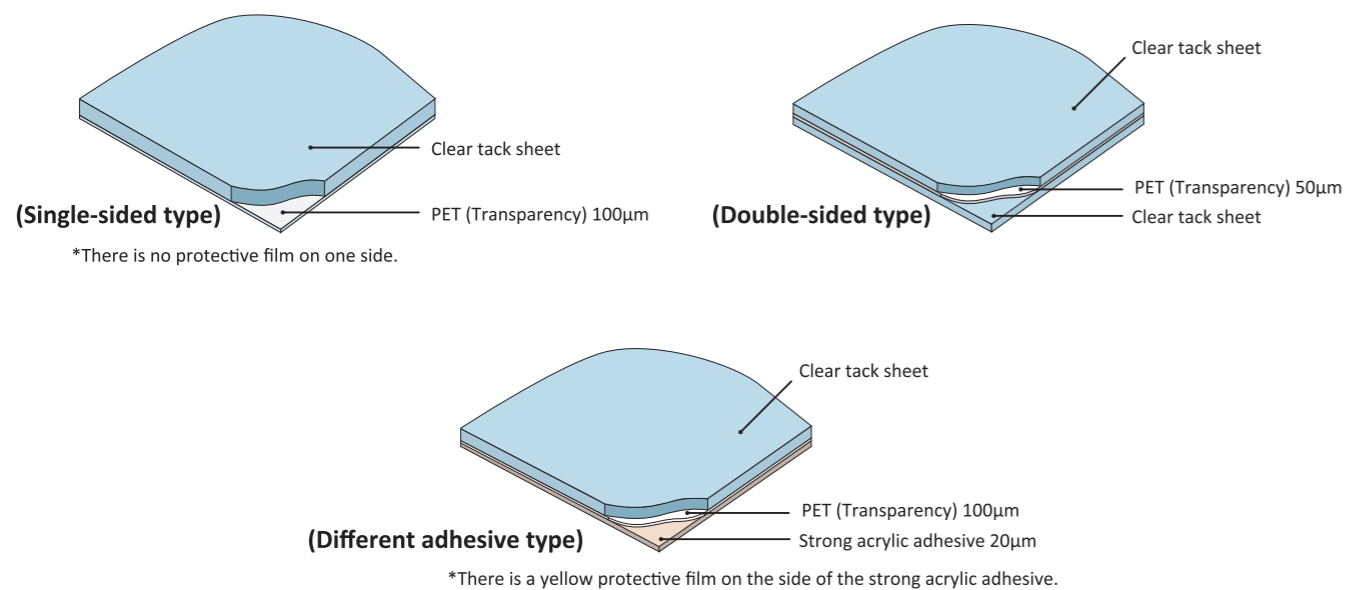
Since it has a base material, it is easy to use.

Dirt on the gel surface can be washed with water and reused.

For simple pasting such as pop.

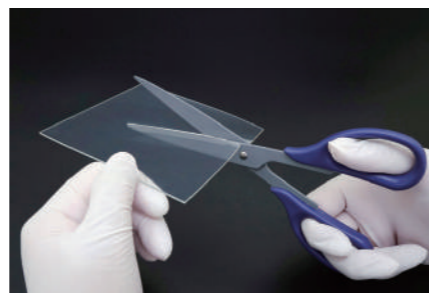
No sticky residue when peeled off.

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



How to use

- You can cut it to your desired size with scissors.
- Clean the surface to be attached, remove the protective film, and attach the Clear tack sheet.
- *It is easy to peel off on the wall or vertical surface because of characteristics that is able to paste and peel off.
- *Clear tack sheet series is for simple applications and is not durable.



Caution

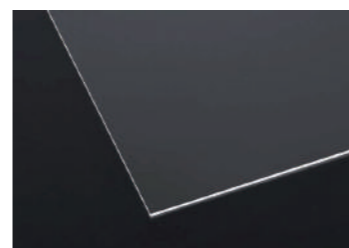
■ Precautions for use ■

- It may deteriorate or melt due to direct sunlight and temperature.
- It may be difficult to peel off depending on the object.
- Avoid using soft PVC or materials that contain a lot of plasticizer.



Clear tack sheet

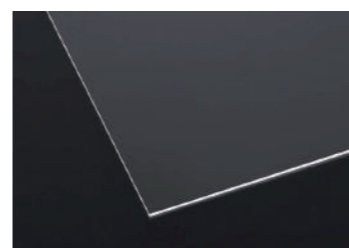
The urethane sheet with a slightly stronger adhesive force. It is easy to handle because it contains a base material.



Single-sided Clear tack

One side is PET and the other side is adhesive gel that can be pasted and peeled off.

| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| CT00-23001 | 500×500 | 0.3 | Asker C14 |
| CT00-23002 | | 0.5 | |
| CT00-23003 | | 1.0 | |



Double-sided Clear tack

Adhesive gel that can be pasted and peeled off on both sides.

| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| CT00-23004 | 500×500 | 0.5 | Asker C14 |
| CT00-23005 | | 1.0 | |



Different adhesive Clear tack

One side is adhesive gel and the other side is acrylic adhesive.

| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| CT00-23006 | 500×500 | 0.3 | Asker C14 |
| CT00-23007 | | 0.5 | |
| CT00-23008 | | 1.0 | |

CHECK

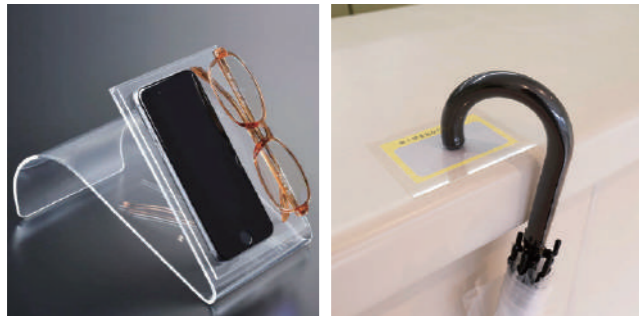
We also hear to cut to the size your choice, please contact us.

High transparency sheet to prevent slipping.

Pit cushion sheet series

- POINT**
- 1 Urethane sheet has an excellent elasticity and transparency.
 - 2 It does not change color by UV rays. (*The adhesive part may turn yellow.)
 - 3 There is a high effect to prevent slipping.

Image for use



It has excellent transparency and is hardly noticeable.

For anti-slip furniture and accessories.

How to use

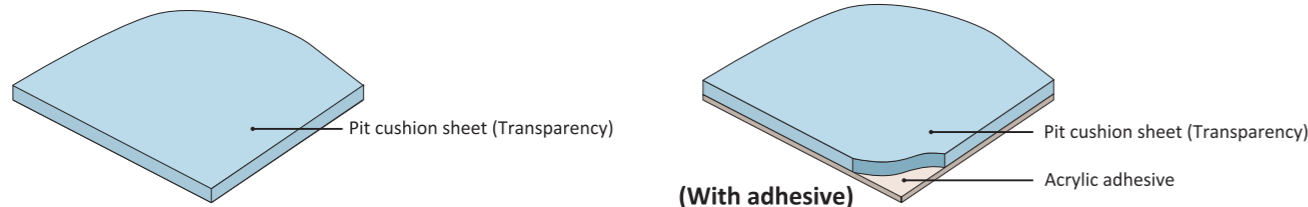
- You can cut it to your desired size with scissors.
- *It is hard to cut anything thicker than 1mm.
- Clean the surface to be attached, remove the protective film, and attach the Pit cushion sheet.
- *Avoid using soft PVC or materials that contain a lot of plasticizer.

Caution

- About discoloration ■**
- *It does not turn yellow under UV rays, but it may turn yellow due to heat.
 - *Prolonged exposure to UV rays may cause deterioration.

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

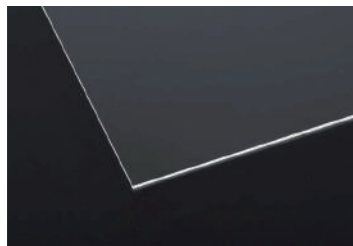
This gel sheet has an excellent elasticity and transparency. No plasticizer is used.



*There is a white protective paper on the side of the acrylic adhesive.

Pit cushion sheet

It is a gel sheet with high anti-slip performance.



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| PS00-24001 | 500×500 | 0.5 | Asker C80 |
| PS00-24002 | | 1.0 | |
| PS00-24003 | | 2.0 | |

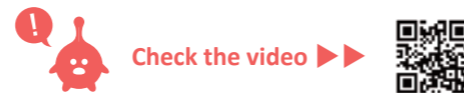
Pit cushion sheet with adhesive

One side is pasted acrylic adhesive.



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| PS00-24004 | 500×500 | 0.5 | Asker C80 |
| PS00-24005 | | 1.0 | |
| PS00-24006 | | 2.0 | |

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

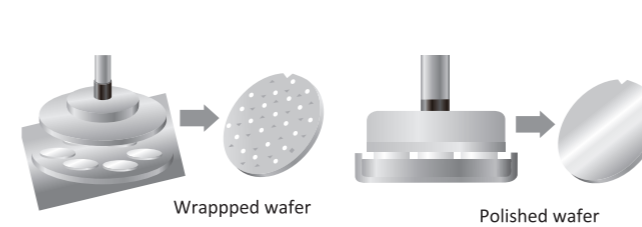


Temporary fixing sheet for polishing silicon wafers.

Soft cushion sheet series

- POINT**
- 1 Urethane sheet has an excellent elasticity, transparency and shock absorption.
 - 2 It does not change color by UV rays. (*The adhesive part may turn yellow.)
 - 3 It has high durability and anti-vibration effect.

Image for use



It can be used for temporary fixation of abrasives such as wrapping. It can also be used to buffer of equipment and desks, prevent scratches, and prevent slipping.

How to use

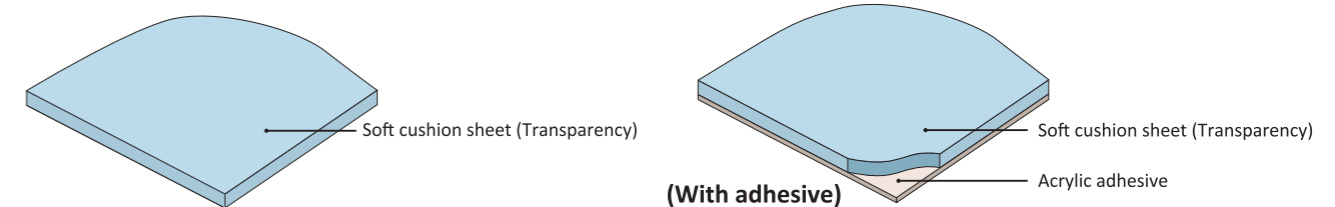
- You can cut it to your desired size with scissors.
- *It is hard to cut anything thicker than 1mm.
- Clean the surface to be attached, remove the protective film, and attach the Soft cushion sheet.
- *Avoid using soft PVC or materials that contain a lot of plasticizer.

Caution

- About discoloration ■**
- *It does not turn yellow under UV rays, but it may turn yellow due to heat.
 - *Prolonged exposure to UV rays may cause deterioration.

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

This gel sheet has an excellent elasticity and shock absorption. No plasticizer is used.



*There is a white protective paper on the side of the acrylic adhesive.

Soft cushion sheet

It is a gel sheet with excellent elasticity and shock absorption. The material is softer than the Pit cushion sheet (P.43).



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| SS01-25001 | 500×500 | 0.5 | Asker C67 |
| SS01-25002 | | 1.0 | |
| SS01-25003 | | 2.0 | |

Soft cushion sheet with adhesive

One side is pasted acrylic adhesive.



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| SS01-25004 | 500×500 | 0.5 | Asker C67 |
| SS01-25005 | | 1.0 | |
| SS01-25006 | | 2.0 | |

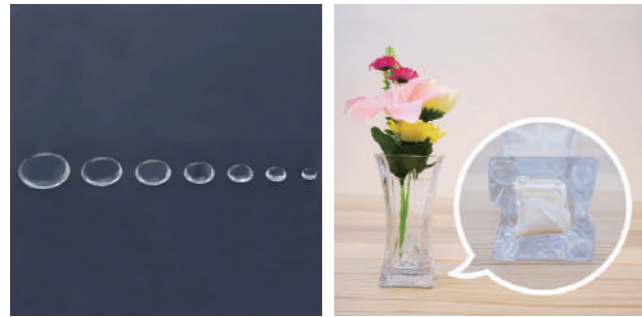
CHECK We also hear to cut to the size your choice, please contact us.

Buffering and soundproofing cushions for doors.

Pit cushion

- POINT**
- 1 Urethane cushion has an excellent anti-slip effect and transparency.
 - 2 It does not change color by UV rays. (*The adhesive part may turn yellow.)
 - 3 This is sticker type to paste easily.

Image for use



Anti-slip cushion with high transparency.

It does not damage glass, acrylic, etc.

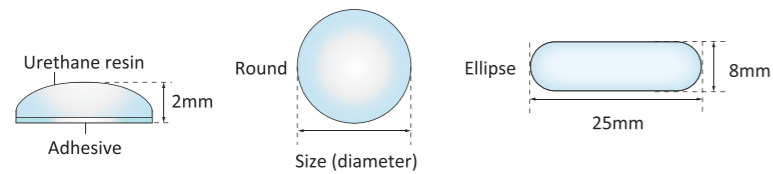
How to use

Remove any dirt from the surface to be pasted, remove each grain from the seal mount, and attach it.

Caution

- **About discoloration** ■
- *It does not turn yellow under UV rays, but it may turn yellow due to heat.
 - *Prolonged exposure to UV rays may cause deterioration.

Structure



■ Specifications / Characteristics

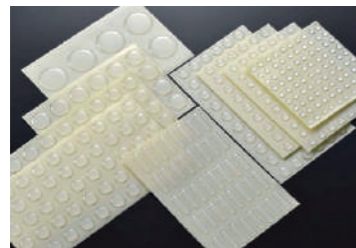
| | |
|-------------------|----------------------------|
| Material | Non yellowing polyurethane |
| Hardness | Asker C80 |
| Adhesive | Acrylic adhesive |
| Adhesive strength | 5.5N/10mm |

*Measured values are reference values, not guaranteed values.
*Specifications are subject to change without notice.



Pit cushion

Cushioning material with high anti-slip performance. This material is more transparent than Soft cushion (P.46).



| Part Number | Diameter (mm) | Thickness (mm) | Hardness | Quantity per sheet |
|-------------|---------------|----------------|-----------|--------------------|
| PC00-26001 | 6 | 2.0 | Asker C80 | 90 |
| PC00-26002 | 8 | | | 70 |
| PC00-26003 | 10 | | | 60 |
| PC00-26004 | 12 | | | 60 |
| PC00-26005 | 14 | | | 50 |
| PC00-26006 | 16 | | | 50 |
| PC00-26007 | 20 | | | 24 |
| PC00-26008 | 30 | 8 | | |
| PC00-26009 | 25x8 ellipse | 1.6 | | 40 |

*Size tolerance is ±0.2mm.

CHECK We also sell value packs of 1 case unit, please feel free to contact us.

Buffering and soundproofing cushions for doorways that are softer than Pit cushion.

Soft cushion

- POINT**
- 1 Urethane cushion has an excellent elasticity and shock absorption.
 - 2 It does not change color by UV rays. (*The adhesive part may turn yellow.)
 - 3 This is sticker type to paste easily.

Image for use



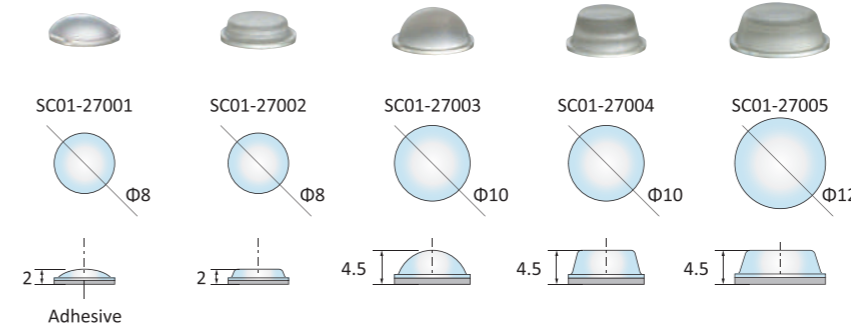
Cushioning material made of softer material than the Pit cushion (P.45).

For buffering of toilet lids. It's transparent, so hardly noticeable.

As a non-slip of acrylic board to prevent droplet infection.

For prevention of hit sound of drawer.

Structure



■ Specifications / Characteristics

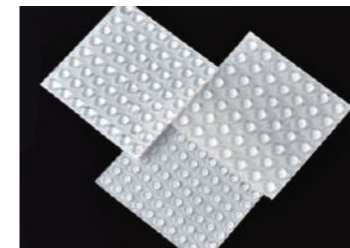
| | |
|-------------------|----------------------------|
| Material | Non yellowing polyurethane |
| Hardness | Asker C67 |
| Adhesive | Acrylic adhesive |
| Adhesive strength | 5.5N/10mm |

*Measured values are reference values, not guaranteed values.
*Specifications are subject to change without notice.



Soft cushion

Cushioning material with excellent elasticity and shock absorption. Clean the surface to be pasted, remove each grain from the seal mount, and attach it.



| Part Number | Diameter (mm) | Thickness (mm) | Hardness | Quantity per sheet |
|-------------|---------------|----------------|-----------|--------------------|
| SC01-27001 | 8 | 2.0 | Asker C67 | 100 |
| SC01-27002 | | | | |
| SC01-27003 | 10 | 4.5 | | 64 |
| SC01-27004 | | | | |
| SC01-27005 | | | | 12 |

Caution

- **About discoloration** ■
- *It does not turn yellow under UV rays, but it may turn yellow due to heat.
 - *Prolonged exposure to UV rays may cause deterioration.

CHECK We also sell value packs of 1 case unit, please feel free to contact us.

Flame retardant gel sheet for anti-slip.

Flame retardant non-slip sheet series

- POINT**
- 1 It has a high anti-slip effect.
 - 2 Excellent abrasion resistance.
 - 3 Equivalent to flame retardant standard UL94HB.

Image for use



For anti-slip under the charger.



For anti-slip of PC.

Caution

Precautions for use

- *The material of this product is polyurethane, and due to the nature of urethane, part of the contact surface may peel off.
- *Both the urethane surface and the acrylic adhesive surface may migrate or be contaminated depending on the material of the other surface.
- *We recommend that you verify in advance.

Specifications / Characteristics

| | | | |
|----------|-----------------------------------------------------|--------------------------------------|-----------|
| Material | Flame retardant polyurethane (equivalent to UL94HB) | Color | Dark gray |
| Hardness | Asker C70 | Tabor abrasion test | 350mg |
| Adhesive | Acrylic adhesive | Adhesive strength (Acrylic adhesive) | 7.2N/10mm |

*Measured values are reference values, not guaranteed values. *Specifications are subject to change without notice.

Flame retardant non-slip sheet

A flame retardant gel sheet that is hard to burn and has a high anti-slip effect.



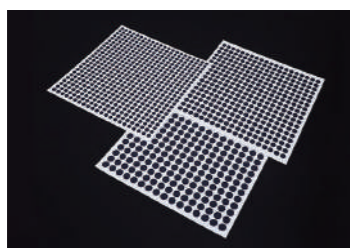
Flame retardant non-slip sheet

| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| RF00-28001 | 500×500 | 1.0 | Asker C70 |
| RF00-28002 | | 3.0 | |



Flame retardant non-slip sheet tape type

| Part Number | Size (mm) | Thickness (mm) | Hardness | Quantity |
|-------------|-----------|----------------|-----------|----------|
| RF00-28003 | 10×500 | 1.0 | Asker C70 | 2 |
| RF00-28004 | | 3.0 | | |



Flame retardant non-slip sheet cushion type

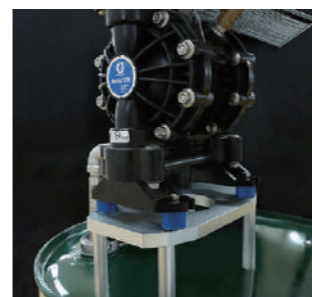
| Part Number | Size (mm) | Thickness (mm) | Hardness | Quantity per sheet |
|-------------|-----------|----------------|-----------|--------------------|
| RF00-28005 | Φ8 | 1.0 | Asker C70 | 528 |
| RF00-28006 | Φ10 | | | 360 |
| RF00-28007 | Φ12 | | | 272 |

For anti-vibration insulator

Urethane gel insulator

- POINT**
- 1 It is able to give an effect of anti-vibration from over 18.7Hz.
 - 2 Remove the vibration from equipment by installing to legs of equipment. Also prevent vibration from floors.
 - 3 It is a type that fixes the top and bottom with bolts.

Image for use



For anti-vibration of equipment.

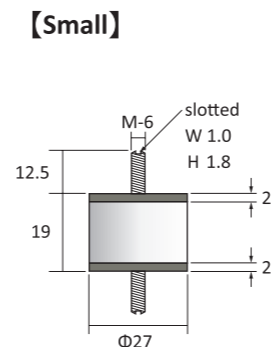
Environmental test results

| Item | Test name | Hardness:Asker C30 | Hardness:Asker C50 |
|-----------------------------------------------------|-------------------|--------------------|--------------------|
| 80°C heat resistance (500 hours) | Compressive shear | ○ | ○ |
| -40°C cold resistance (500 hours) | Compressive shear | ○ | ○ |
| Heat shock | Compressive shear | ○ | ○ |
| Cold cycle | Compressive shear | ○ | ○ |
| Cold and wet heat cycle | Compressive shear | ○ | ○ |
| Neutral salt spray test (96 hours continuous spray) | Compressive shear | ○ | ○ |

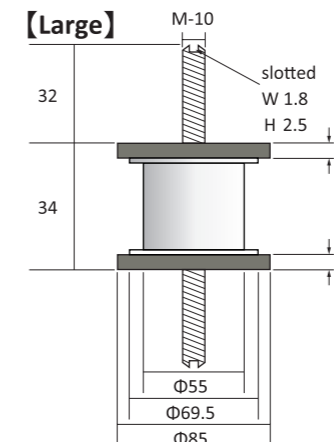
*○ indicates that there is no abnormality in comparison with the compressive shear test results of blank at room temperature.
*Measured values are reference values and not guaranteed values. Specifications subject to change without notice.

Structure

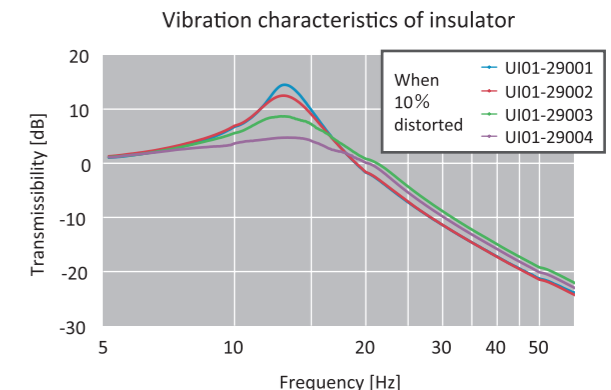
[Small]



[Large]



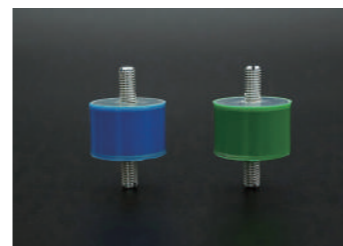
Vibration characteristics



*The value of graph is a reference value, not guaranteed characteristics.

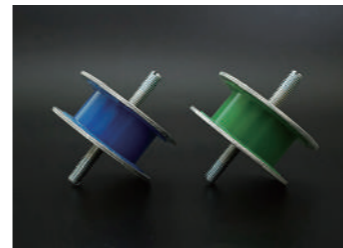
Urethane gel insulator

The soft urethane gel insulator that is fixed with bolts.



Urethane gel insulator small

| Part Number | Size (mm) | Hardness | Color | Proper load (per 4 pcs) | Recommended frequency (Hz) |
|-------------|-----------|-----------|-------|-------------------------|----------------------------|
| UI01-29001 | Φ27×44t | Asker C30 | Blue | 16-37kg | 18.7~ |
| UI01-29002 | | Asker C50 | Green | 41-93kg | 18.8~ |



Urethane gel insulator large

| Part Number | Size (mm) | Hardness | Color | Proper load (per 4 pcs) | Recommended frequency (Hz) |
|-------------|-----------|-----------|-------|-------------------------|----------------------------|
| UI01-29003 | Φ85×98t | Asker C30 | Blue | 90-160kg | 20.8~ |
| UI01-29004 | | Asker C50 | Green | 170-400kg | 19.9~ |

Hyper gel sheet series

POINT

- 1 It has a high energy absorbency and absorb the shock 90% or more.
- 2 The material does not generate dust, and keeps high anti-vibration even if the frequency and temperature change.
- 3 It can be used for buffer or gasket.
- 4 It is possible to use as the sheet which holds precision parts and assembly parts on a workbench.

Image for use



It is suitable for shock absorption and buffer material. As a washer or material for gasket.

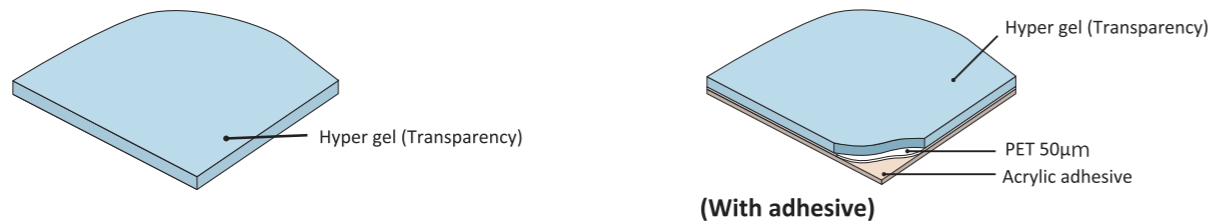
Specifications / Characteristics

| Product name | Hardness |
|--------------|-----------|
| Hyper gel 15 | Asker C15 |
| Hyper gel 30 | Asker C30 |
| Hyper gel 50 | Asker C50 |
| Hyper gel 70 | Asker C65 |

Structure

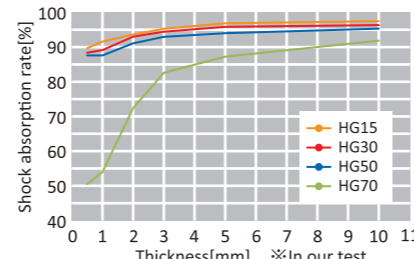
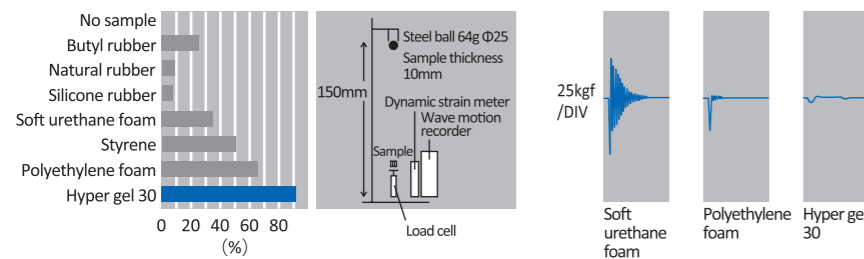
(There are protective films on both sides of the product.)

It is a buffer gel that utilizes the energy absorption of urethane gel. It can be used as anti-vibration, buffer and gasket.

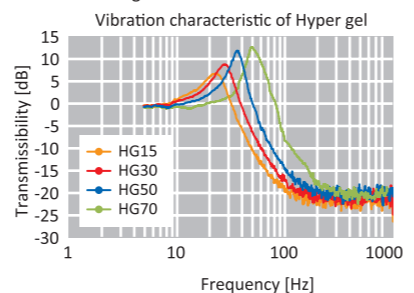
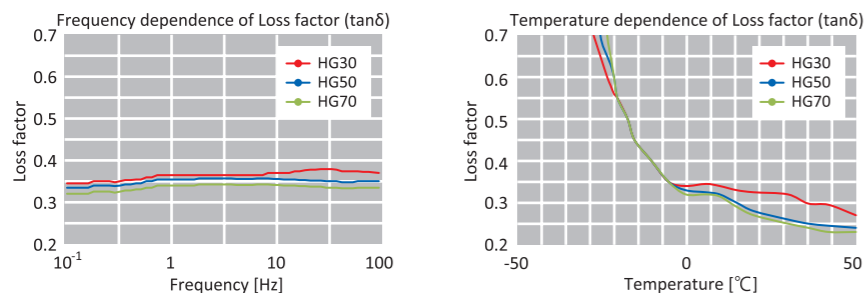


Test result

Shock absorption test



Anti-vibration test



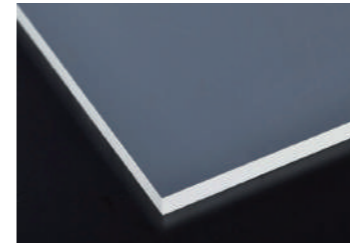
*The value of graph is a reference value, not guaranteed value.

Caution

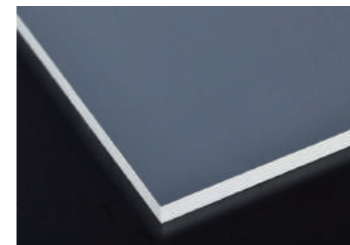
- Precautions for use ■
Avoid using to materials containing a lot of soft PVC or plasticizer.

Hyper gel sheet

The soft urethane sheet is superior for anti-vibration, buffer, and shock absorption.



| Product Name / Part Number | | | | Size (mm) | Thickness (mm) |
|----------------------------|--------------|--------------|--------------|-----------|----------------|
| Hyper gel 15 | Hyper gel 30 | Hyper gel 50 | Hyper gel 70 | | |
| HG01-30001 | HG01-30005 | HG01-30009 | HG01-30013 | 500×500 | 1.0 |
| HG01-30002 | HG01-30006 | HG01-30010 | HG01-30014 | | 2.0 |
| HG01-30003 | HG01-30007 | HG01-30011 | HG01-30015 | | 3.0 |
| HG01-30004 | HG01-30008 | HG01-30012 | HG01-30016 | | 5.0 |



Hyper gel sheet with adhesive

One side is pasted with an acrylic adhesive.

| Product Name / Part Number | | | | Size (mm) | Thickness (mm) |
|----------------------------|----------------------------|----------------------------|----------------------------|-----------|----------------|
| Hyper gel 15 with adhesive | Hyper gel 30 with adhesive | Hyper gel 50 with adhesive | Hyper gel 70 with adhesive | | |
| HG01-30017 | HG01-30022 | HG01-30027 | HG01-30032 | 500×400 | 0.5 |
| HG01-30018 | HG01-30023 | HG01-30028 | HG01-30033 | | 1.0 |
| HG01-30019 | HG01-30024 | HG01-30029 | HG01-30034 | | 2.0 |
| HG01-30020 | HG01-30025 | HG01-30030 | HG01-30035 | | 3.0 |
| HG01-30021 | HG01-30026 | HG01-30031 | HG01-30036 | | 5.0 |

CHECK

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



The substances that generate dusts are not included.

- The substances that generate dusts are not included.
Hyper gel is a product composed of gel alone, does not contain ingredients that may bloom (powder), and does not generate dust.
- It is clean material for environment because volatile component is not contained in the gel on purpose.
*Some protective film ingredients and detergent ingredients used in the process may be slightly detected.
When using in an environment where the management of contraindicated substances is severe, please test and investigate in advance.
- The material conforms to Food Sanitation Act and the standard of containers and packaging.
It can be used safely even when it comes into direct contact with food.



Check the video about anti-vibration effect of Hyper gel ▶▶▶

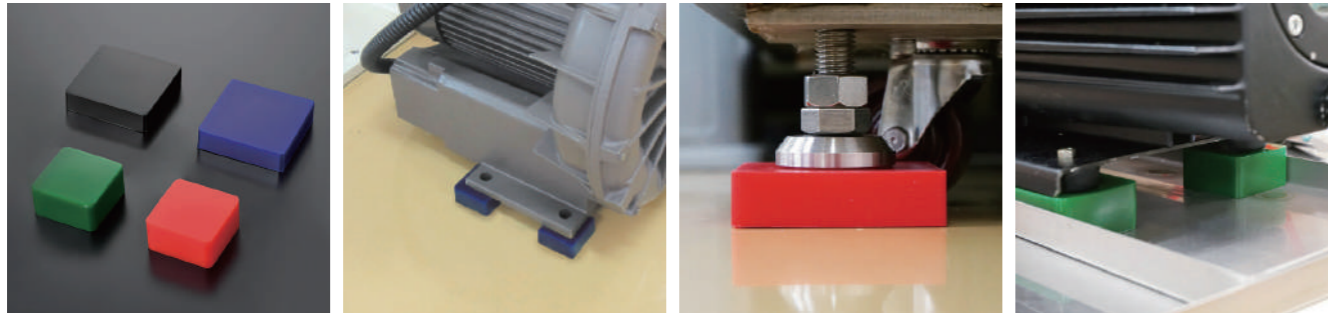


Gel damper

POINT

- 1 Gel damper is anti-vibration block made of Hyper gel and thicker than it.
- 2 Remove the vibration from equipment by installing to legs of equipment. Also prevent vibration from floors.
- 3 The gel don't have a directionality, so it has an equal effect both in a vertical and horizontal direction.
- 4 It is able to give an effect of anti-vibration from over 23.8Hz.

Image for use



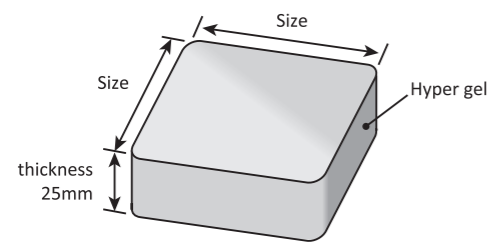
Remove the concerned vibration by shock absorption gel.

Install to legs of machines and measured equipment.

Remove vibrations from equipment and prevent vibrations from being transmitted to the floor.

You can choose from a total of 8 types depending on the weight of the device.

Structure



It is improved anti-vibration by molding Hyper gel thicker. It is possible to choice from 4 size and 4 hardness.

How to use



It is possible to reduce vibration by installing to legs of vibrated equipments, and laying under a precision equipment.

Caution

Precautions for use

- Gel damper protect a precision equipment from vibration of the floor. And does not transmit a vibration to floor from vibrating equipment.
- Please use at indoor because outdoor use degrades material.
- It cannot be used at where are heat over 60°C .
- Please install after cleaning installation floor.
- Avoid installing on floors containing a lot of soft PVC or plasticizer.
- If the installation floor is wet, the gel is slippery and dangerous, so please use it on a level and dry floor.
- The listed anti-vibration frequency is the value that is a maximum load of the proper load. Please use proper load because it has no effect of anti-vibration and vibration removal, caused damage and deterioration if use the other load.

Gel damper



Anti-vibration damper to absorb vibration of machines.



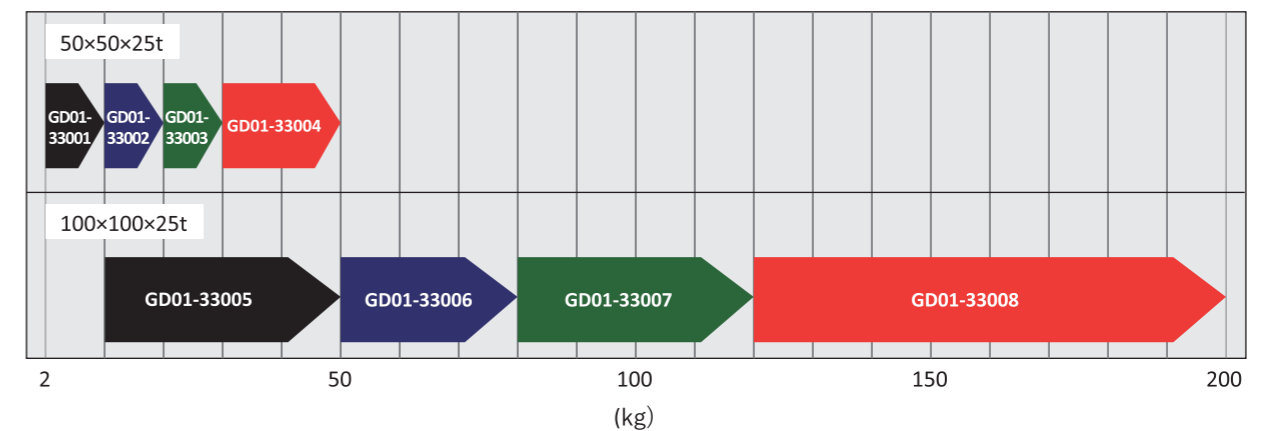
| Part Number | Size (mm) | Hardness / Color | Proper use load (per 1 pc) | Anti-vibration frequency (Hz) |
|-------------|-------------|-------------------|----------------------------|-------------------------------|
| GD01-33001 | 50×50×25t | Asker C15 / Black | 2-10kg | 26.4~ |
| GD01-33002 | | Asker C30 / Blue | 10-20kg | 24.4~ |
| GD01-33003 | | Asker C50 / Green | 20-30kg | 24.2~ |
| GD01-33004 | | Asker C65 / Red | 30-50kg | 23.8~ |
| GD01-33005 | 100×100×25t | Asker C15 / Black | 10-50kg | 26.4~ |
| GD01-33006 | | Asker C30 / Blue | 50-80kg | 24.4~ |
| GD01-33007 | | Asker C50 / Green | 80-120kg | 24.2~ |
| GD01-33008 | | Asker C65 / Red | 120-200kg | 23.8~ |

*The measured value is a reference value, not guaranteed value.
 *The proper load is a load at 15% strain of maximum load.
 *Lower limit of anti-vibration frequency is a measured value at maximum load.

CHECK

Different sizes (e.g. 120mm / 150mm square, etc.) and with metal plates are also available. (*Made-to-order) Please feel free to contact us.

Gel Damper Appropriate Usage Load Chart (per piece)



Vibration test of Gel damper

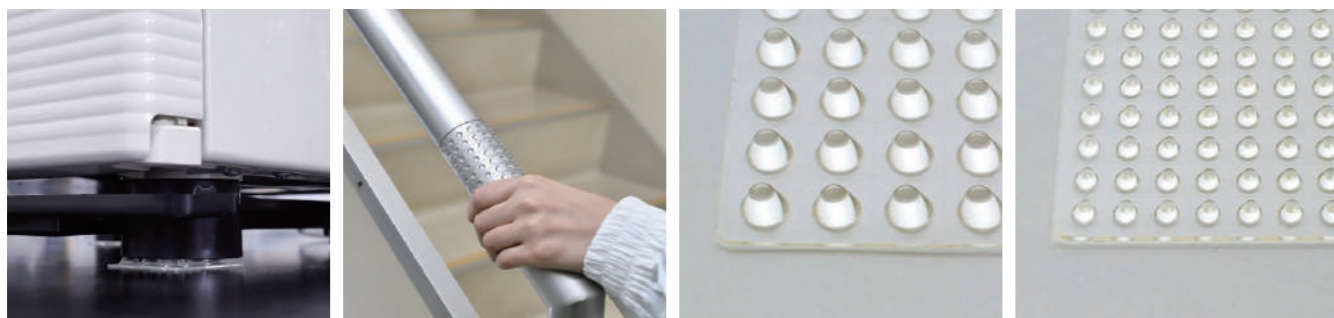
Had conducted an anti-vibration test with changing a frequency from 5Hz to 500Hz by a large vibration test machines.



Cushion pat

- POINT**
- 1 Cushion pat is made from Hyper gel, which has high energy absorption.
 - 2 It has an effect of anti-vibration just by laying it under the equipment.
 - 3 It can also be used as a grip for non-slip.

Image for use

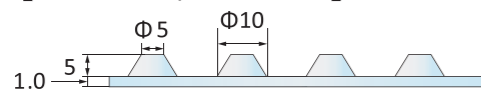


For anti-vibration pat of precision equipment. For anti-slip of handle or handrail. An enlarged photo of Cushion pat CP01-31003,CP01-31004. An enlarged photo of Cushion pat CP01-31001,CP01-31002.

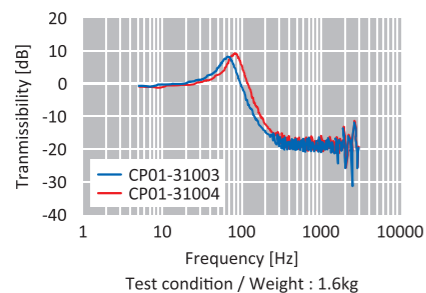
Structure (There are protective films on both sides of the product.)

It is a buffer gel that utilizes the energy absorption of urethane gel. It can be used as anti-slip and anti-vibration equipment.

[CP01-31003,CP01-31004]

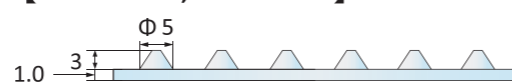


Vibration characteristics test

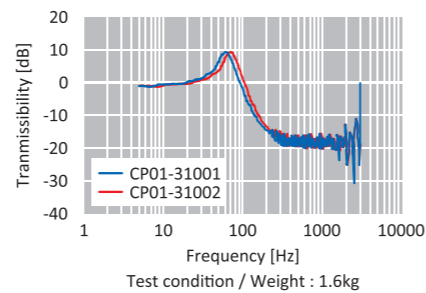


*The value of graph is a reference value, not guaranteed value.

[CP01-31001,CP01-31002]



Vibration characteristics test

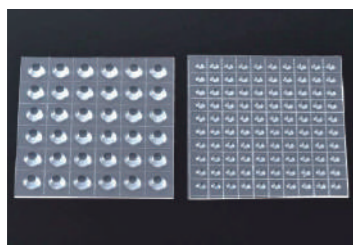


Test condition / Weight : 1.6kg



Cushion pat

A non-slip pad with excellent vibration and shock absorption.



| Part Number | Size (mm) | Thickness (mm) | Hardness | Proper load (per a fulcrum) | Number of fulcrum (pcs) |
|-------------|-----------|----------------|-----------|-----------------------------|-------------------------|
| CP01-31001 | 95x95 | 4.0 | Asker C30 | 25gf / a fulcrum | 100 |
| CP01-31002 | | | Asker C50 | 73gf / a fulcrum | |
| CP01-31003 | 95x95 | 6.0 | Asker C30 | 270gf / a fulcrum | 36 |
| CP01-31004 | | | Asker C50 | 370gf / a fulcrum | |

*The measured value is a reference value, not guaranteed value.
 *The proper load is a load at 15% strain of maximum load per a fulcrum.
 *Avoid using to materials containing a lot of soft PVC or plasticizer.

HITOHADA® gel sheet series

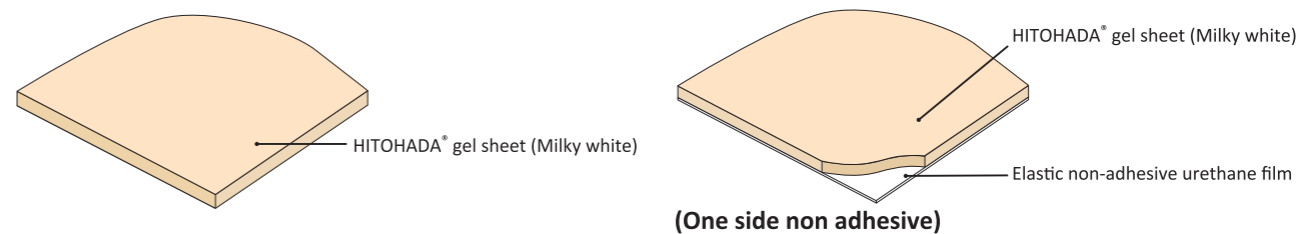
- POINT**
- 1 Super soft gel sheet with excellent conformability.
 - 2 Due to the self-adhesiveness of urethane, glue does not remain.
 - 3 Suitable for masking, gaskets and cushioning sheets.

Image for use



Super soft sheet that feels like human skin. As a temporary fixing and anti-vibration material for audio equipment. Soft and conformability. The type of one side non adhesive film is used as a dummy sheet for practice of injection.

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



HITOHADA® gel sheet

The soft gel sheet with excellent shock absorption and adhesiveness.



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|----------|
| HS01-32001 | 500x500 | 1.0 | Asker C0 |
| HS01-32002 | | 2.0 | |
| HS01-32003 | | 3.0 | |
| HS01-32004 | 400x400 | 5.0 | Asker C0 |
| HS01-32005 | | 10.0 | |
| HS01-32006 | 400x400 | 5.0 | Asker C7 |
| HS01-32007 | | 10.0 | |

*Avoid using to materials containing a lot of soft PVC or plasticizer.



HITOHADA® gel sheet One side non adhesive

Non-adhesive urethane film is pasted on one side.

| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|----------|
| HS01-32008 | 500x400 | 1.0 | Asker C0 |
| HS01-32009 | | 2.0 | |
| HS01-32010 | | 3.0 | |

*Avoid using to materials containing a lot of soft PVC or plasticizer.

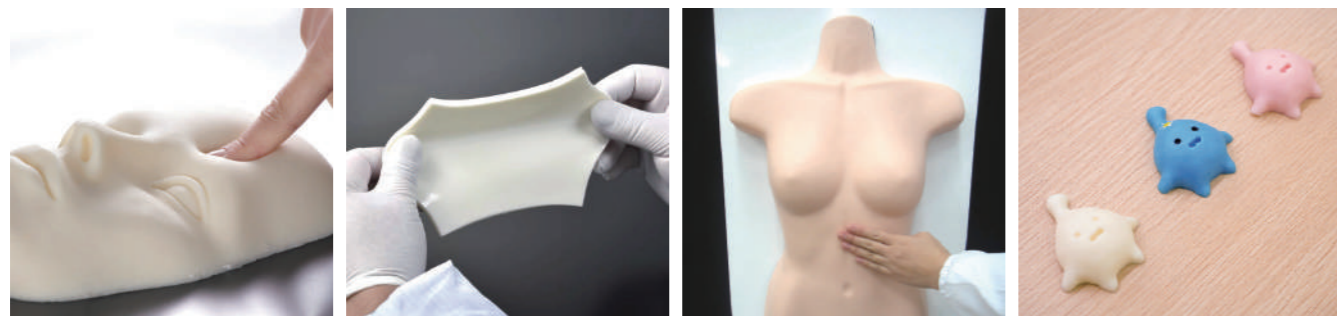
CHECK

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

HITOHADA®gel undiluted solution, Milky white

- POINT**
- 1 An ultra-soft modeling resin that expresses the softness of human skin.
 - 2 There are 3 types of hardness : Asker C0 (soft), Asker C7 (normal), and Asker C15 (hard).
 - 3 It has sufficient strength even with low hardness.
 - 4 This is the best as a molding material for human models, figurines, protective pads, etc.

Image for use



Super soft resin like baby's skin.

It has sufficient strength even with low hardness.

For materials such as medical palpation models.

For original miscellaneous goods and materials of figurine.

Softness guideline



Asker C0 : Cheeks

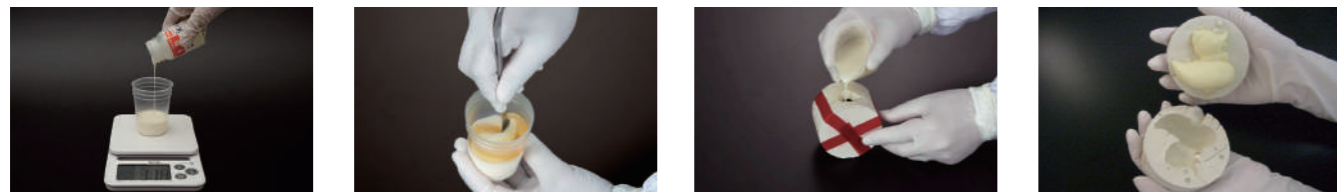
Asker C7 : Shoulder

Asker C15 : Heel

*The example of hardness is only our understanding. Not measured values.

How to make

The environmental conditions for curing are room temperature and liquid temperature of 20°C or higher, and humidity of 80% or lower. Moisture may cause poor curing. Please use up within 1 week after opening, and use as soon as possible after purchase.



- 1 Mixing ratio (weight ratio)
=Main agent 3 : Curing agent 1
Add a hardener to the base compound.

*The error of the mixing ratio is within 1wt%.
*When coloring, add the pigment to the main agent in advance, and add then the curing agent to the mass of the mixed state.
*About pigments (sold separately)
If you add more than 1% of the main agent, it may not harden.

- 2 Mix the resin mixed in ① evenly and firmly.

- 3 Pour the mixed resin into the mold quietly. It hardens in 24 hours or more at room temperature (20°C or higher) and about 1 hour at 100°C. Curing time will vary depending on the environment.

*It can be used metal molds, FRP molds, silicone molds, and resin molds as mold materials. Silicone molds have adaptability. (P.61)

- 4 After confirming hardening, it is removed from the mold. HITOHADA gel has an adhesion. If the adhesive is a problem, we recommend coating with attached "talcum powder" or using "Surface coating agent" sold separately.



Check the video ▶▶

Caution

Precautions for make

- It will deteriorate even if it is unopened, so please use it up as soon as possible after purchasing.
- Do not use the whitish hardener because it has deteriorated.
- Because the undiluted resin reacts easily with moisture, it may cause poor curing due to humidity or moisture from the mold material.
- Metal molds, FRP molds, silicone molds, and resin molds are available. Wooden molds and gypsum molds cannot be used. Also, please use mold release agents for metal molds, FRP molds, and resin molds.
- Please use the special pigments sold separately when coloring, and the additive amount should be within 1% of the weight of the main agent.
- Please be careful that the hardened material contains plasticizer and may bleed out. Also, it may melt, turn yellow or discolor due to heat or UV rays, so please avoid direct sunlight and high temperatures when using and storing.
- Please read the enclosed user's manual carefully before using.

HITOHADA®gel undiluted solution, Milky white



This is super soft resin for molding that is as soft as human skin. A set of main agent, curing agent, and talcum powder.



100g set

| Part Number | Hardness | Color | Volume (g) |
|-------------|-------------------|-------------|------------|
| HM01-34001 | Asker C0 (Soft) | Milky white | 100 |
| HM01-34002 | Asker C7 (Normal) | | |
| HM01-34003 | Asker C15 (Hard) | | |



600g set

| Part Number | Hardness | Color | Volume (g) |
|-------------|-------------------|-------------|------------|
| HM01-34004 | Asker C0 (Soft) | Milky white | 600 |
| HM01-34005 | Asker C7 (Normal) | | |
| HM01-34006 | Asker C15 (Hard) | | |



1200g set

| Part Number | Hardness | Color | Volume (g) |
|-------------|-------------------|-------------|------------|
| HM01-34007 | Asker C0 (Soft) | Milky white | 1200 |
| HM01-34008 | Asker C7 (Normal) | | |
| HM01-34009 | Asker C15 (Hard) | | |



Surprisingly soft resin material for molding!



HITOHADA® gel is super soft urethane resin that has the softness and texture such as a human skin. It is possible to enjoy the texture and softness like a human skin, and the feeling that you will never get tired of touching it and you don't want to release it. We have prepared three types of softness on customer's requests. Please expand the possibilities of "HITOHADA® gel" for various purposes.



Check the video about coloring method ▶▶



Super soft and transparent urethane resin material for molding with good bubble removal

HITOHADA®gel undiluted solution, Transparent

- POINT**
- 1 An ultra-soft modeling resin transparent type that expresses the softness of human skin.
 - 2 There are 2 types of hardness : Asker C0 (soft), Asker C7 (normal).
 - 3 Good bubble removal and it finishes transparent.
 - 4 No special equipment is required because it cures at room temperature.

Image for use



It is a super soft transparent resin that is easy to handle because it hardens at room temperature.

For materials such as medical palpation models.

For original miscellaneous goods and materials of figurine.

Good bubble removal and it finishes transparent.

Softness guideline



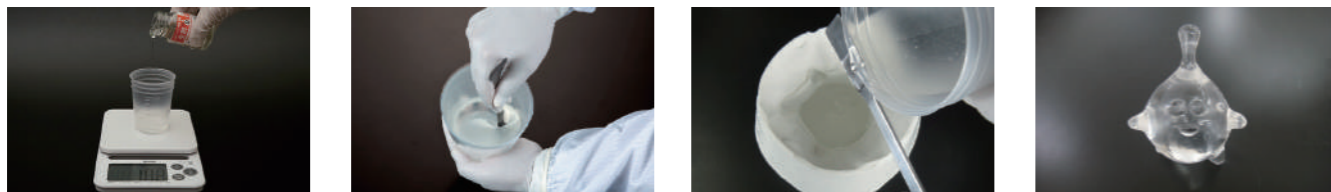
Asker C0 : Cheeks

Asker C7 : Shoulder

*The example of hardness is only our understanding. Not measured values.

How to make

The environmental conditions for curing are room temperature and liquid temperature of 20°C or higher, and humidity of 80% or lower. Moisture may cause poor curing. Please use up within 1 week after opening, and use as soon as possible after purchase.



1 Mixing ratio (weight ratio)
=Main agent 1 : Curing agent 1
Add a hardener to the base compound.

*The error of the mixing ratio is within 1wt%.
*When coloring, add the pigment to the main agent in advance, and add then the curing agent to the mass of the mixed state.

*About pigments (sold separately)
If you add more than 1% of the main agent, it may not harden.

2 Mix the resin mixed in (1) evenly and firmly.

3 Pour the mixed resin into the mold quietly. It hardens in 24 hours or more at room temperature (20°C or higher) and about 1 hour at 100°C. Curing time will vary depending on the environment.

*It can be used metal molds, FRP molds, silicone molds, and resin molds as mold materials. Silicone molds have adaptability. (P.61)

4 After confirming hardening, it is removed from the mold. HITOHADA gel has an adhesion. If the adhesive is a problem, we recommend coating with attached "talcum powder" or using "Surface coating agent" sold separately.

*When talcum powder is sprinkled, the transparency will be weak.



Check the video ▶▶

Caution

Precautions for make

- It will deteriorate even if it is unopened, so please use it up as soon as possible after purchasing.
- Do not use the whitish hardener because it has deteriorated.
- Because the undiluted resin reacts easily with moisture, it may cause poor curing due to humidity or moisture from the mold material.
- Metal molds, FRP molds, silicone molds, and resin molds are available. Wooden molds and gypsum molds cannot be used. Also, please use mold release agents for metal molds, FRP molds, and resin molds.
- Please use the special pigments sold separately when coloring, and the additive amount should be within 1% of the weight of the main agent.
- Please be careful that the hardened material contains plasticizer and may bleed out. Also, it may melt, turn yellow or discolor due to heat or UV rays, so please avoid direct sunlight and high temperatures when using and storing.
- Please read the enclosed user's manual carefully before using.

HITOHADA®gel undiluted solution, Transparent



It is a transparent resin for molding that is soft like human skin and hardens at room temperature without bubbles.



100g set

| Part Number | Hardness | Color | Volume (g) |
|-------------|-------------------|-------------|------------|
| HT01-35001 | Asker C0 (Soft) | Transparent | 100 |
| HT01-35002 | Asker C7 (Normal) | | |



600g set

| Part Number | Hardness | Color | Volume (g) |
|-------------|-------------------|-------------|------------|
| HT01-35003 | Asker C0 (Soft) | Transparent | 600 |
| HT01-35004 | Asker C7 (Normal) | | |



Power up! HITOHADA® gel transparent type

HITOHADA® gel transparent type is good bubble removals. It is possible to make transparent gels more easily without the need for special equipment or labor!



Check the video about coloring method ▶▶



Resin for molding that makes soft sponge foam

HITOHADA®gel undiluted solution, Foaming

- POINT**
- 1 It is a foam-type soft resin for molding that inflates and becomes like a sponge.
 - 2 It foams in a short time of 10-15 minutes.
 - 3 It inflates about 8 times. *Expansion ratio and softness vary depending on conditions.

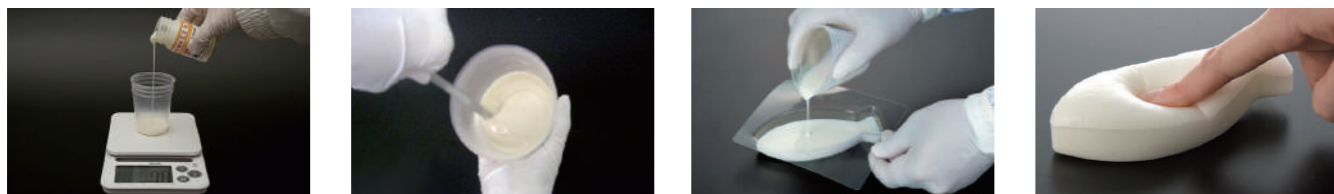
Image for use



It reacts and inflates about 8 times. It is a soft foam material that contains air. It is possible to color. For original miscellaneous goods and materials of figurine.

How to make

The environmental conditions for curing are room temperature and liquid temperature of 20°C or higher, and humidity of 80% or lower. Moisture may cause poor curing. Please use up within 1 week after opening, and use as soon as possible after purchase.



- 1 Mixing ratio (weight ratio)
=Main agent 64 : Curing agent 100
Add a hardener to the base compound.
- 2 Mix the resin mixed in (1) quickly.
- 3 Pour quickly into molds. It foams in 10-15 minutes fully.
- 4 After confirming hardening, it is removed from the mold. 160g set can be made about 3cm in B5 size.

*When coloring, add the pigment to the main agent in advance, and add then the curing agent to the mass of the mixed state.
*About pigments (sold separately)
If you add more than 1% of the main agent, it may not harden.

HITOHADA®gel undiluted solution, Foaming

It is an undiluted solution of molding resin that makes a soft sponge.



160g set

| Part Number | Color | Volume (g) |
|-------------|-------|------------|
| HF01-36001 | White | 160 |

*Please read the enclosed user's manual carefully before using.



1600g set

| Part Number | Color | Volume (g) |
|-------------|-------|------------|
| HF01-36002 | White | 1600 |

*Please read the enclosed user's manual carefully before using.

Optional goods for HITOHADA®gel

Surface coating agent



This coating agent is cured with a one-liquid that reduces surface adhesive.

| Part Number | Color | Volume (g) |
|-------------|-------------|------------|
| HO00-40017 | Transparent | 25 |
| HO00-40018 | | 100 |

HITOHADA® gel FAQ about Surface coating agent



Pigments for HITOHADA®gel



It is possible to mix colors in our pigments, and also be used for coloring after curing by dissolving it with a Surface coating agent.

| Part Number | Color | Volume (g) |
|-------------|--------------|------------|
| HO00-40019 | Red | 6 |
| HO00-40020 | Blue | |
| HO00-40021 | Lemon yellow | |
| HO00-40022 | Black | |
| HO00-40023 | White | |

HITOHADA® gel FAQ about Coloring



Mold release agent (Barrier coat NO.7)



Improves mold release.

| Part Number | Color | Volume (g) |
|-------------|-------------|------------|
| HO00-40024 | Transparent | 100 |

*Please use brushes for painting.

Disposable cup

Disposable container for mixing liquids.

| Part Number | Volume (ml) |
|-------------|-------------|
| HO00-40025 | 100 |
| HO00-40026 | 300 |
| HO00-40027 | 500 |
| HO00-40028 | 1000 |
| HO00-40029 | 2000 |



Check the video about coloring method



Notes of using HITOHADA® gel

What to prepare when making



Notes in making

- HITOHADA gel will not removed once it adheres to clothing. We recommend to wear clothes that can get dirty or an apron. And if it adheres to the skin, it may cause rough skin. Please wear gloves when making.
- When coloring, please use our special pigments (sold separately). Using other company's pigments may cause poor curing.
- It may not harden if more than 1% of the main agent is added pigments.
- Undiluted resin reacts easily with moisture, and moisture from mold materials and humidity may cause poor curing.
- The product may melt, turn yellow, or discolor due to heat or UV rays, so please avoid direct sunlight and high temperatures when using and storing.
- There is a risk of peeling off the paint on the contact surface because of the gel has adhesiveness. Also, please be careful that this product contains a plasticizer and may bleed out.

About the environment during production

Since the HITOHADA gel undiluted solution may not harden well depending on the environment. Please manufacture under the following environment.
*Please be careful in the winter when the room temperature tends to do down, and the rainy season when the humidity is high.

| | | |
|----------------------------------------------------------|----------------------|-----------------------|
| Room temperature / liquid temperature | 20°C or higher | |
| Room humidity | 80% or less | |
| Accuracy of mixing amount of base resin and curing agent | 1% or less by weight | |
| Pot life | Milky white | 20 minutes at 23°C |
| | Transparent | 40-60 minutes at 23°C |
| | Foaming | about 30 seconds |

HITOHADA® gel FAQ about using



Storage method

Store in a dry, cool, and dark place after sealing, and use up within 1 week after opened.

The resin deteriorates even if it is unopened. The deteriorated resin may cause poor curing, so please use it up as soon as possible after purchase.

Disposal method

Mix the main agent and hardener and dispose of it as non-burnable garbage in a hardened state.

If you want to discard a small amount of either resin, soak it in a cloth and dispose of it as combustible waste. For larger quantities, please contact us.

About conformity of mold material

Metal molds, FRP molds, silicone molds, and resin molds are available. It is not possible to use molds made of materials that contain moisture, such as wooden molds or gypsum molds. Also, please use mold release agents for metal molds, FRP molds, and resin molds.

| Mold material (Component / Product name) | Adaptability | Remarks |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------|
| Polystyrene (PS) / Polyethylene (PE) / Polypropylene (PP) | ○ | No release agent required |
| Silicone (Part Number: KE-12 / VM001 / OM-143, OM-142) *Please wait for about a week after manufacturing to remove the volatile components inside, and then wipe it off before use. | ○ | Recommend using a release agent |
| PET, Metal, Aluminum, FRP, Resin mold, Silicone (Product Name : NEW SUPER EX SILICONE) | △ | Release agent required |
| Wooden molds, Gypsum molds, PVC | × | |

*Silicon may not be compatible with some manufacturers. Other than the above, we recommend to use after checking.

*If you apply a release agent to the mold, dry it well before pouring HITOHADA gel.

*Example of mold release agent : Shin-Etsu Silicone Barrier Coat NO.7 (our part number H000-40024)

HITOHADA® gel Q&A about mold material



Urethane sheet with surface resistance value of $10^6\Omega$ and self-adhesiveness

Electrode gel

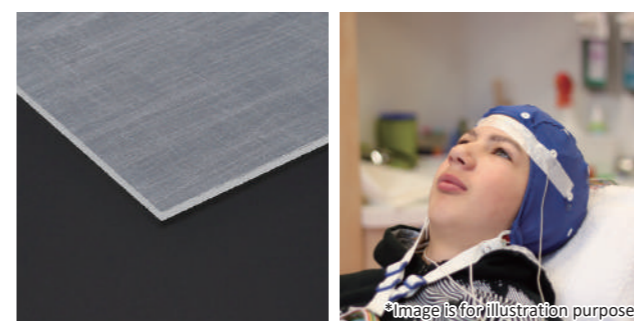
POINT

- 1 A urethane sheet that achieves both softness and reduced shape loss.
- 2 There are 2 types of adhesive strength, and the material that can be used for EEG measurement and the pad part of EMS.
- 3 It is a semi-conductive material with a surface resistance value of $10^6\Omega$.



Electrode gel weak adhesive type

Image for use

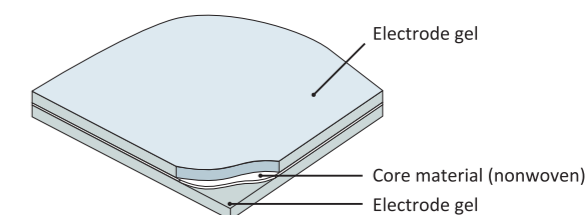


It is a material with higher conductivity than Semiconductive gel sheet (P.33).

A material that can be used to EEG measurement.

Structure

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



Specifications / Characteristics

Surface resistance value $10^6\Omega$

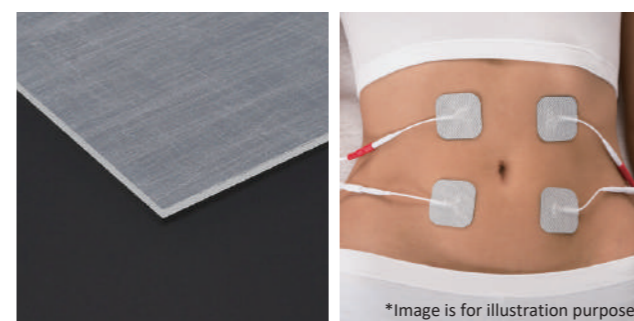
Weak adhesive type

The material that has a high affinity for human skin.

| Part Number | Size (mm) | Thickness (mm) |
|-------------|-----------|----------------|
| EG00-37001 | 500×450 | 1.5 |

Electrode gel strong adhesive type

Image for use

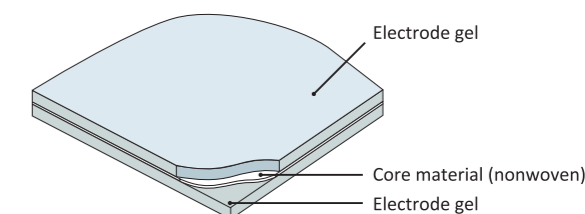


It is a material with higher conductivity than Semiconductive gel sheet (P.33).

For the pad part of EMS.

Structure

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



Specifications / Characteristics

Surface resistance value $10^6\Omega$

Strong adhesive type

The material has strong adhesive and is easy to stick to the skin.

| Part Number | Size (mm) | Thickness (mm) |
|-------------|-----------|----------------|
| EG00-37002 | 500×450 | 1.5 |

Urethane gel phantom

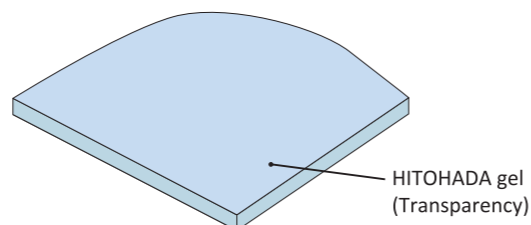
- POINT**
- 1 A plate-like phantom made of urethane gel material.
 - 2 It can be used for testing diagnostic equipment because the speed of ultrasonic wave propagation is extremely similar to the fat layer of human body.

Image for use



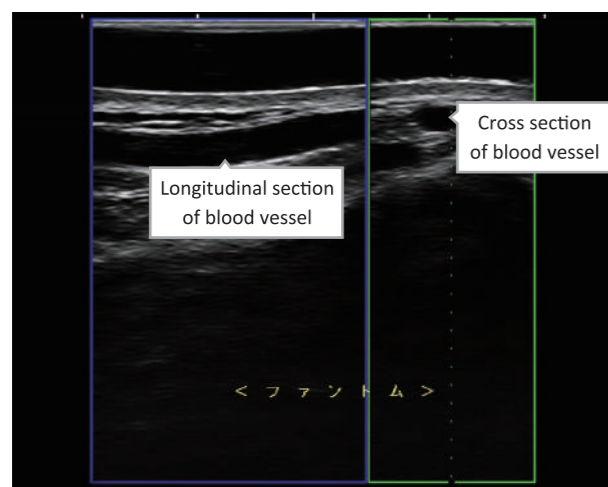
High transparent and ultra-soft plate-like phantom. It is possible to train different fat layers by changing the thickness.

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

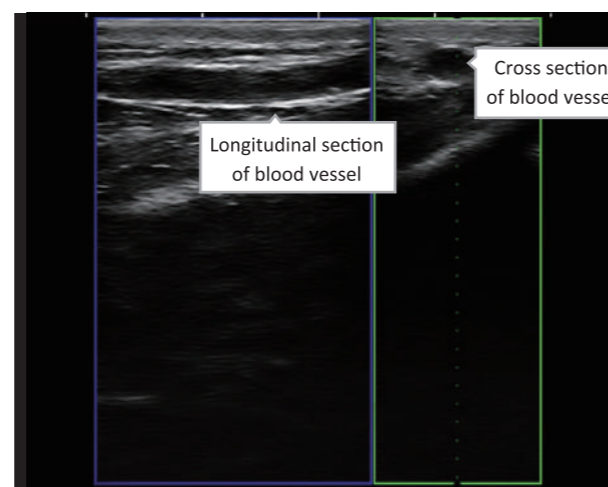


Ultrasound diagnostic echo photography

■ With Urethane gel phantom



■ No Urethane gel phantom



This is an image when diagnosed through a gel with using an ultrasonic diagnostic imaging equipment. It is possible to see the longitudinal/cross-section of blood vessel more clearly by using the Urethane gel phantom.

Urethane gel phantom

A transparent and soft Urethane gel phantom.



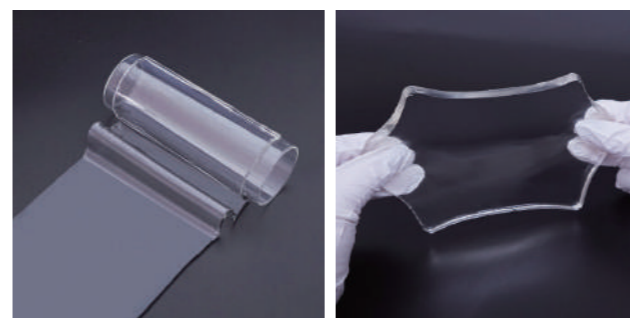
| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|----------|
| IP00-38001 | 250×250 | 5.0 | Asker C5 |
| IP00-38002 | | 10.0 | |
| IP00-38003 | | 20.0 | |
| IP00-38004 | | 30.0 | |

CHECK We also hear to manufacture the original shapes your choice, please feel free to contact us.

Non tack gel **NEW**

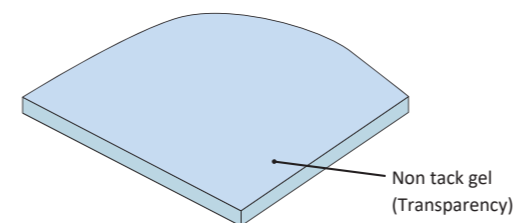
- POINT**
- 1 A urethane sheet has low adhesiveness even though that is soft.
 - 2 Ideal for those who don't need adhesive and just want softness.
 - 3 It can be used for cushioning materials, spacers, testing of ultrasound diagnostic equipment, etc.

Image for use



It is soft and superior for followingness. It has sufficient strength even at low hardness.

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



■ Precautions for use ■

- Avoid using to materials containing a lot of soft PVC or plasticizer.
- Depending on the material of the contact surface, it may be difficult to peel off. We recommend that you verify it in advance.

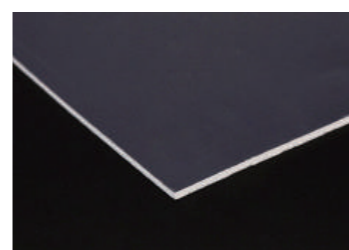
How to clean



If it gets dirty and weak adhesive strength, you can wash it with water to restore its adhesive strength and use it repeatedly.

Non tack gel

A urethane sheet has low adhesiveness even though that is soft.



| Part Number | Size (mm) | Thickness (mm) | Hardness |
|-------------|-----------|----------------|-----------|
| NT01-44001 | 500×500 | 1.0 | Asker C0 |
| NT01-44002 | | 2.0 | |
| NT01-44003 | | 3.0 | |
| NT01-44004 | | 5.0 | |
| NT01-44005 | | 1.0 | Asker C15 |
| NT01-44006 | | 2.0 | |
| NT01-44007 | | 3.0 | |
| NT01-44008 | | 5.0 | |

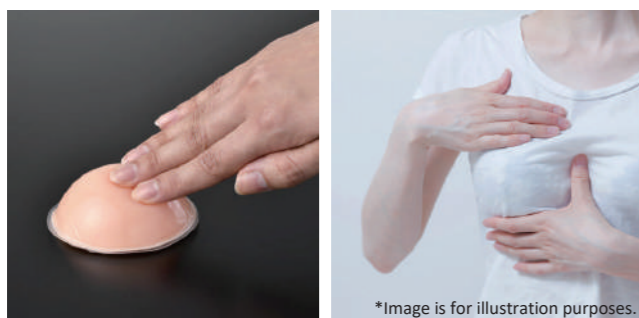
CHECK We also hear to cut to the size your choice and change the hardness, please contact us.

Breast cancer palpation model that allows you to touch and feel a lump yourself

Self check tool for breast cancer

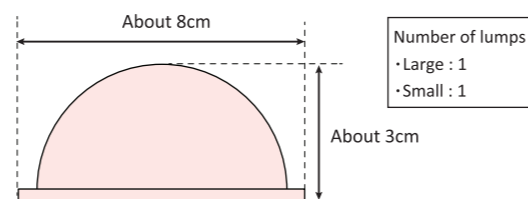
- POINT**
- 1 This is a palpation model that utilizes the softness of urethane gel.
 - 2 There are "lumps" of different shapes and sizes inside, useful for self-checking for breast cancer.
 - 3 It can be used as items to provide additional explanations and raise awareness at schools, facilities, clinics, etc.

Image for use



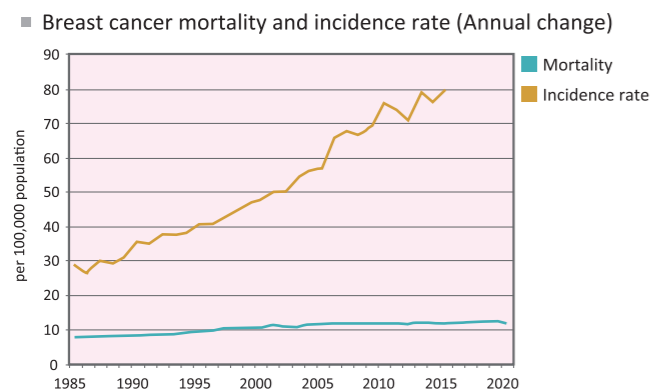
It is possible to feel the lump by touch. For self-check practice.

Structure



It is a simple type that wraps the parts imitated lumps with soft gel and film.

Breast cancer and early detection



The number of Japanese people who develop breast cancer is on the rise, and it is currently said to be 1 in 14 people. Breast cancer can be treated in more than 90% of cases if there is no metastasis and early detection. In addition, about half of breast cancer patients find something wrong with their breasts by themselves. Early detection saves lives and protects breasts from breast cancer.

Source : Center for Cancer Control and Information Services, National Cancer Center, Japan

Caution

■ Notes ■

- *Shikori checker is just a sample. When checking the actual breast, we recommend that you use it as a reference, and if you feel something wrong, please seek a medical attention.
- *If you find any lumps or abnormalities on your own, please consult "mammary gland surgery" or "surgery" with a mammary gland specialist there. (Please note that the examination is not an obstetrics and gynecology department.) Even if there is an abnormality in the self-check, it does not necessarily mean that it is breast cancer. As it may be a benign disease such as mastopathy or fibroadenoma, please do not judge yourself and seek medical attention promptly.

Shikori checker

A soft palpation model that supports self-checking for breast cancer.



| Part Number | Size (mm) |
|-------------|------------|
| LC01-39001 | approx.Φ80 |

*With case.

CHECK We also hear to manufacture the original shapes your choice, please feel free to contact us.

Contact information ▶ phone: +81-575-33-0872 | fax: +81-575-35-1590 | <https://www.exseal.co.jp/en/>
In order to improve product quality, specifications may change without notice. Please note.

Introduction of development examples

Please feel free to contact us with any concerns or suggestions you may have. Our products are made based on customer feedback.

CASE 1 Adhesive mat for heavy vehicles LIFT-MAT®



LIFT-MAT was developed as a product that can be used in clean environments such as in the food and pharmaceutical industries. Adhesive mats that are strong enough to withstand heavy loads have become a product that many customers can use.

We thought it would be possible to create a mat that could remove dirt from forklift tires by applying the adhesive mat "STEP-MAT" that we had been manufacturing for shoe soles.

We have created a prototype and started test sales.

We conducted durability tests such as passing a forklift over the mat 1000 times, and devised ways to increase the strength of the mat so that it can be used on heavy vehicles.

As the industry's first product, it has become a highly recommended product that attracts attention from various industries that use forklifts.

CASE 2 DNA collection kit Microorganism-catcher®



Microorganism-catcher used as a DNA collection kit by police station all over the country. The ability of urethane gel to stick to fine dust and not let go has attracted attention in the police, and we were able to commercialize it.

We received an inquiry from a police forensics department who purchased our company's "fall prevention sheet" and asked if DNA could be collected using the gel.

We had a meeting to find out your actual requirements, and decided on specifications such as the required characteristics of the material and shape.

After repeated discussions with the customer, we made improvements to the handle for ease of use, changes to the shape to protect the gel after collection, and measures to prevent DNA contamination from work clothes.

Although it was an unknown industry, the product we completed with the help of our customers has grown into a product used by police all over the country.

Flow of product development

- 1 Contact
- 2 Meeting
- 3 Prototype
- 4 Problem solving



We can handle these.

- Change the Adhesive strength**
Non-adhesive coating and film processing are also available.
- Change the Color**
It can be colored.
- Change the Thickness**
We also accept requests for different thicknesses.
- Change the Shape**
We also create complex shapes and human body models.
- Change the Blending of gel**
We can change the softness and adhesive strength of the material itself.

Please feel free to contact us and discuss!

0120-290872

<https://www.exseal.co.jp/en/inquiry/>



Physical Properties

| Item | LIFT-MAT | LIFT-MAT (for rough surfaces) | STEP-MAT | Hand/Body Carpet-roller *Gel part | Dust catcher | Floor-roller | |
|-----------------------------------|------------------------|-------------------------------------|----------|-----------------------------------------|-----------------|--------------|------|
| Specific gravity | 1.14 | 1.19 | 1.11 | 1.07 | | 1.08 | |
| Hardness | Shore A | 51 | 51 | 12 | 1 | 12 | |
| | Asker C | 70 | 70 | 33 | 15 | 33 | |
| Tensile strength | Strength | N/mm ² | 22.17 | 26.57 | 24.73 | 1.70 | 2.71 |
| | 100% elongation stress | N/mm ² | x | x | x | 0.16 | 0.30 |
| | 200% elongation stress | N/mm ² | x | x | x | 0.43 | 0.86 |
| | 300% elongation stress | N/mm ² | x | x | x | 0.93 | 1.97 |
| Tensile elongation | % | 35 | 41 | 90 | 390 | 340 | |
| Tear strength | N/mm | 61.8 | 62.7 | 27.4 | 1.4 | 8.1 | |
| Compressive Strength | 10% strain stress | N/mm ² | 0.33 | 0.33 | 0.05 | 0.03 | 0.05 |
| | 20% strain stress | N/mm ² | 0.75 | 0.75 | 0.12 | 0.08 | 0.12 |
| | 30% strain stress | N/mm ² | 1.29 | 1.29 | 0.23 | 0.15 | 0.23 |
| Compressive elasticity modulus | N/mm ² | 4.00 | 4.00 | 0.66 | 0.45 | 0.66 | |
| Water absorption rate | % | 2.3 | 1.2 | 3.1 | 4.1 | 4.3 | |
| Water resistance | Tensile strength | N/mm ² | 21.81 | 25.60 | 21.97 | 1.60 | 2.20 |
| | 100% elongation stress | N/mm ² | x | x | x | 0.17 | 0.33 |
| | Elongation | % | 34 | 37 | 87 | 350 | 290 |
| Oil resistance | Tensile strength | N/mm ² | 24.66 | 24.95 | 23.15 | 2.40 | 2.85 |
| | 100% elongation stress | N/mm ² | x | x | x | 0.17 | 0.32 |
| | Elongation | % | 36 | 35 | 88 | 440 | 330 |
| Acid resistance | Tensile strength | N/mm ² | 24.05 | 26.75 | 22.86 | 2.22 | 3.13 |
| | 100% elongation stress | N/mm ² | x | x | x | 0.17 | 0.30 |
| | Elongation | % | 37 | 38 | 87 | 400 | 360 |
| Alkali resistance | Tensile strength | N/mm ² | 26.52 | 25.68 | 22.29 | 1.91 | 3.05 |
| | 100% elongation stress | N/mm ² | x | x | x | 0.18 | 0.34 |
| | Elongation | % | 38 | 37 | 86 | 360 | 340 |
| Heat aging | Tensile strength | N/mm ² | 24.43 | 34.98 | 18.18 | 1.49 | 2.33 |
| | 100% elongation stress | N/mm ² | x | x | x | 0.19 | 0.40 |
| | Elongation | % | 35 | 45 | 82 | 330 | 260 |
| Compression set | 70°C, 24 h | % | 16 | 16 | 28 | 18 | 28 |
| | 72 h | % | 17 | 17 | 36 | 43 | 76 |
| Limit heat resistance temperature | °C | 60 | 60 | 60 | 60 | 60 | |
| Adhesive strength | 180° Peel | N/25mm | 0.15 | 0.15 | 0.08 | 0.06 | 0.08 |
| | Holding force | sec | 0mm | 0mm | 34 | 5 | 1128 |
| | Ball tack | No. | 2 | 2 | 2 | 2 | 2 |
| Visible light transmission | % | - | - | - | - | - | |
| Proper load | kgf/cm ² | - | - | - | - | - | |

Note 1) These measured values are reference values, not guaranteed values.

Note 2) These contents are subject to change without notice due to performance improvements, specification changes, etc.

Note 3) The holding force is displayed that the time (sec) for the material to completely peel off from the test plate, or the distance (mm) that it deviated in 24 hours.

Note 4) Regarding marks in the physical property table x: not detected -: not measured

| D-quick | Tip remover | Tip remover (semiconductive) | GEL-BASE *Gel part | | | | | STEP-MAT (semiconductive) | Body-roller (semiconductive) *Gel part | Remarks (JIS No.) |
|---------|----------------|---------------------------------|--------------------|------|------------|------------|------------|------------------------------|----------------------------------------------|-----------------------------------------------------|
| | | | 3 | 5 | 7 | S8 | S9 | | | |
| 1.13 | 1.05 | 1.05 | 1.13 | 1.14 | 1.14 | 1.10 | 1.11 | 1.08 | 1.05 | K6911 |
| 1 | 7 | 7 | 8 | 26 | 52 | 54 | 51 | 11 | 11 | K7312 |
| 18 | 30 | 30 | 30 | 50 | 70 | 75 | 72 | 33 | 33 | |
| 0.64 | 0.40 | 1.46 | 0.81 | 1.42 | 2.25 | 1.38 | 1.27 | 25.07 | 3.47 | K7312 |
| 0.04 | 0.17 | 0.18 | 0.31 | 0.80 | 2.10 | x | x | x | 0.56 | |
| 0.10 | 0.30 | 0.30 | 0.63 | x | x | x | x | x | 1.52 | |
| 0.19 | 0.44 | 0.44 | x | x | x | x | x | x | 2.99 | |
| 750 | 310 | 780 | 230 | 170 | 110 | 59 | 57 | 88 | 330 | K7312 |
| 2.8 | 3.0 | 7.7 | 4.1 | 7.6 | 9.7 | 8.7 | 4.5 | 28.9 | 7.5 | K7312 |
| 0.01 | 0.06 | 0.05 | 0.08 | 0.18 | 0.47 | 0.44 | 0.46 | 0.06 | 0.06 | K7312 |
| 0.02 | 0.15 | 0.12 | 0.18 | 0.40 | 1.03 | 1.04 | 1.05 | 0.14 | 0.14 | |
| 0.03 | 0.26 | 0.21 | 0.33 | 0.67 | x | x | x | 0.27 | 0.27 | |
| 0.09 | 0.76 | 0.63 | 0.94 | 2.02 | 5.38 | 5.68 | 5.63 | 0.73 | 0.73 | K7312 At 10-15% strain |
| 8.0 | 6.6 | 10.6 | 2.2 | 1.5 | 1.0 | 1.0 | 1.5 | 3.9 | 8.3 | K7209 23°C, 24 h |
| 0.56 | 0.76 | 1.96 | 0.73 | 1.06 | 2.02 | 1.49 | 1.61 | 20.1 | 2.95 | K7312 Purified water |
| 0.04 | 0.32 | 0.21 | 0.25 | 0.69 | x | x | x | x | 0.54 | 23°C, 48 h |
| 790 | 270 | 770 | 270 | 160 | 77 | 66 | 66 | 87 | 290 | |
| 0.55 | 0.57 | 1.71 | 0.71 | 1.27 | 2.15 | 1.7 | 1.58 | 24.94 | 3.08 | K7312 No.1 Oil |
| 0.04 | 0.31 | 0.21 | 0.33 | 1.00 | x | x | x | x | 0.54 | 23°C, 48 h |
| 800 | 210 | 727 | 200 | 140 | 84 | 77 | 65 | 89 | 310 | |
| 0.18 | 0.65 | 2.33 | 0.92 | 1.38 | 2.29 | 1.62 | 2.04 | 21.17 | 1.96 | K7312 10% HCl |
| 0.01 | 0.32 | 0.17 | 0.31 | 1.01 | x | x | 1.79 | x | 0.55 | 23°C, 48 h |
| 900 | 230 | 928 | 250 | 140 | 89 | 74 | 120 | 88 | 230 | |
| 0.69 | 0.58 | 1.90 | 0.85 | 1.37 | 2.07 | 1.73 | 1.51 | 20.57 | 3.29 | K7312 10% NaOH |
| 0.05 | 0.32 | 0.20 | 0.33 | 1.00 | x | x | x | x | 0.54 | 23°C, 48 h |
| 600 | 210 | 805 | 230 | 150 | 83 | 79 | 63 | 92 | 300 | |
| 3.58 | 0.40 | 1.26 | 0.78 | 1.10 | 2.18 | 1.55 | 1.58 | 27.65 | 3.15 | K7312 80°C, 48 h |
| 0.16 | 0.15 | 0.15 | 0.33 | 0.90 | x | x | x | x | 0.63 | |
| 660 | 280 | 840 | 230 | 120 | 97 | 70 | 63 | 90 | 270 | |
| 99 | 12 | 55 | 23 | 17 | 11 | 7 | 1 | 28 | 28 | K7312 |
| 99 | 68 | 95 | 49 | 39 | 24 | 7 | 1 | 41 | 81 | |
| 60 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 60 | 60 | - |
| 6.38 | 0.54 | 2.52 | 0.45 | 0.20 | 0.20 | x | x | 0.11 | 0.11 | Z0237 SUS304 |
| 0mm | 43 | 5810 | 160 | 1519 | 0mm | 73 | 1 | 33 | 33 | Z0237 1kg, 24h, SUS304, □25mm |
| 19 | 3 | 5 | 4 | 2 | Under No.2 | Under No.2 | Under No.2 | 2 | 2 | Z0237 30° |
| - | - | - | - | - | - | - | - | - | - | - 1mmt |
| - | - | - | - | - | - | - | - | - | - | When a 2mm thick sheet is compressed by 15% (Φ50mm) |

Physical Properties

| Item | Semiconductive gel | | | Gel tack | Clear tack | Pit cushion | Soft cushion | Flame retardant non-slip | |
|-----------------------------------|------------------------------------------|------|------|----------|------------|-------------|--------------|--------------------------|----------------|
| | 15 | 30 | 50 | | | | | | |
| Specific gravity | 1.13 | 1.13 | 1.13 | 1.04 | 1.08 | 1.13 | 1.13 | 1.09 | |
| Hardness | Shore A | 0 | 8 | 26 | 4 | - | 70 | 47 | 50 |
| | Asker C | 15 | 30 | 50 | 23 | 14 | 80 | 67 | 70 |
| Tensile strength | Strength N/mm ² | 0.36 | 0.78 | 1.62 | 0.75 | 0.66 | 21.78 | 7.52 | 9.89 |
| | 100% elongation stress N/mm ² | 0.05 | 0.24 | 0.79 | 0.10 | - | 5.01 | 0.78 | 4.26 |
| | 200% elongation stress N/mm ² | 0.07 | 0.51 | 1.54 | 0.16 | - | 13.55 | 1.31 | × |
| | 300% elongation stress N/mm ² | 0.10 | × | × | 0.23 | - | × | 2.10 | × |
| Tensile elongation | % | 660 | 270 | 210 | 790 | 480 | 260 | 630 | 180 |
| Tear strength | N/mm | 1.8 | 3.7 | 5.6 | 4.4 | 0.3 | 37.3 | 18.0 | 28.5 |
| Compressive Strength | 10% strain stress N/mm ² | 0.02 | 0.05 | 0.15 | 0.04 | - | 0.62 | 0.27 | 0.38 |
| | 20% strain stress N/mm ² | 0.05 | 0.14 | 0.36 | 0.08 | - | × | 0.55 | 0.89 |
| | 30% strain stress N/mm ² | 0.09 | 0.25 | 0.64 | 0.13 | - | × | 0.93 | 1.53 |
| Compressive elasticity modulus | N/mm ² | 0.27 | 0.82 | 1.94 | 0.37 | - | 8.37 | 2.70 | 4.77 |
| Water absorption rate | % | 4.0 | 1.6 | 1.6 | 7.7 | - | 2.5 | 1.2 | 1.9 |
| Water resistance | Tensile strength N/mm ² | 0.39 | 0.73 | 1.64 | 1.16 | - | 8.07 | 4.42 | 9.89 |
| | 100% elongation stress N/mm ² | 0.09 | 0.28 | 0.94 | 0.11 | - | 6.30 | 0.79 | 4.10 |
| | Elongation % | 310 | 240 | 170 | 1100 | - | 120 | 510 | 190 |
| Oil resistance | Tensile strength N/mm ² | 0.78 | 0.78 | 1.37 | 0.81 | - | 23.75 | 7.28 | 10.52 |
| | 100% elongation stress N/mm ² | 0.25 | 0.20 | 0.66 | 0.09 | - | 4.61 | 0.92 | 4.18 |
| | Elongation % | 260 | 330 | 200 | 1000 | - | 270 | 630 | 190 |
| Acid resistance | Tensile strength N/mm ² | 1.34 | 1.41 | 1.49 | 1.33 | - | 9.48 | 6.33 | 10.02 |
| | 100% elongation stress N/mm ² | 0.26 | 0.22 | 0.61 | 0.08 | - | 5.10 | 0.73 | 4.09 |
| | Elongation % | 350 | 430 | 210 | 1200 | - | 160 | 630 | 190 |
| Alkali resistance | Tensile strength N/mm ² | 0.82 | 0.80 | 1.23 | 1.02 | - | 12.86 | 4.04 | 7.38 |
| | 100% elongation stress N/mm ² | 0.22 | 0.17 | 0.63 | 0.10 | - | 4.77 | 0.73 | 4.21 |
| | Elongation % | 300 | 330 | 190 | 1100 | - | 190 | 510 | 150 |
| Heat aging | Tensile strength N/mm ² | 0.37 | 0.89 | 1.31 | 0.63 | - | 28.99 | 3.08 | 11.16 |
| | 100% elongation stress N/mm ² | 0.06 | 0.27 | 0.76 | 0.07 | - | 5.17 | 0.69 | 4.16 |
| | Elongation % | 390 | 300 | 170 | 1000 | - | 270 | 510 | 200 |
| Compression set | 70°C, 24 h % | 32 | 31 | 23 | 25 | - | 0 | 6 | 22 |
| | 72 h % | 56 | 47 | 41 | 42 | - | 14 | 14 | 33 |
| Limit heat resistance temperature | °C | 80 | 80 | 80 | 80 | - | 80 | 80 | 80 |
| Adhesive strength | 180° Peel N/25mm | 2.25 | 0.95 | 0.55 | 2.62 | 0.75 | 0.44 | 1.31 | 0.01(Gel side) |
| | Holding force sec | 68 | 336 | 283 | 3487 | 231 | 0mm | 0mm | 0mm |
| | Ball tack No. | 22 | 13 | 11 | 12 | 8 | Under No.2 | Under No.2 | Under No.2 |
| Visible light transmission | % | 86.9 | 83.2 | 80.5 | 94.6 | 89.5 | 92.3 | 94.4 | - |
| Proper load | kgf/cm ² | 3.14 | 4.51 | 4.94 | 3.27 | - | 5.10 | 3.41 | - |

Note 1) These measured values are reference values, not guaranteed values.

Note 2) These contents are subject to change without notice due to performance improvements, specification changes, etc.

Note 3) The holding force is displayed that the time (sec) for the material to completely peel off from the test plate, or the distance (mm) that it deviated in 24 hours.

Note 4) Regarding marks in the physical property table ×: not detected - : not measured

| Item | Hyper gel | | | | HITOHADA gel *Hardened material | | | | | Electrode gel | | Non tack gel | | Remarks (JIS No.) |
|--------------------|-----------|------|------|------|---------------------------------|-------|-------|---------|---------|---------------|--------|--------------|-------|-----------------------------------------------------|
| | 15 | 30 | 50 | 70 | 0 | 7 | 15 | Clear 0 | Clear 7 | Weak | Strong | 0 | 15 | |
| Specific gravity | 1.08 | 1.08 | 1.09 | 1.11 | 1.03 | 1.03 | 1.03 | 1.00 | 1.00 | 1.13 | 1.07 | 1.07 | 1.07 | K6911 |
| Hardness | 0 | 8 | 26 | 47 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | K7312 |
| | 15 | 30 | 50 | 65 | 0 | 7 | 15 | 0 | 7 | 4 | 0 | 0 | 15 | |
| Tensile strength | 1.55 | 3.06 | 2.24 | 2.77 | 0.68 | 1.21 | 1.99 | 0.03 | 0.09 | 0.35 | 0.36 | 0.21 | 0.67 | K7312 |
| | 0.05 | 0.19 | 0.44 | 1.11 | 0.03 | 0.07 | 0.11 | 0.01 | 0.04 | × | × | 0.009 | 0.06 | |
| | 0.08 | 0.30 | 0.66 | 1.70 | 0.06 | 0.17 | 0.27 | 0.02 | × | × | × | 0.015 | 0.10 | |
| | 0.10 | 0.42 | 0.91 | 2.56 | 0.12 | 0.31 | 0.52 | 0.03 | × | × | × | 0.023 | 0.15 | |
| Tensile elongation | 1400 | 1150 | 630 | 330 | 670 | 560 | 560 | 310 | 190 | 18 | 13 | 940 | 840 | K7312 |
| | 3.9 | 8.7 | 13.8 | 16.3 | 0.9 | 1.3 | 4.3 | 0.1 | 0.7 | 2.0 | 1.9 | 1.1 | 3.0 | K7312 |
| | 0.02 | 0.04 | 0.12 | 0.23 | 0.004 | 0.013 | 0.021 | 0.002 | 0.006 | - | - | 0.006 | 0.014 | K7312 |
| | 0.03 | 0.10 | 0.26 | 0.52 | 0.008 | 0.031 | 0.049 | 0.006 | 0.014 | - | - | 0.012 | 0.030 | |
| | 0.06 | 0.17 | 0.43 | 0.90 | 0.016 | 0.057 | 0.090 | 0.009 | 0.027 | - | - | 0.020 | 0.052 | |
| | 0.16 | 0.56 | 1.29 | 2.75 | 0.04 | 0.16 | 0.26 | 0.03 | 0.08 | - | - | 0.06 | 0.15 | K7312 At 10-15% strain |
| | 0.8 | 0.7 | 0.9 | 1.2 | 6.3 | 5.8 | 5.3 | 5.8 | 6.2 | 50.2 | 32.2 | 0.4 | 0.3 | K7209 23 °C, 24 h |
| | 1.06 | 1.98 | 2.09 | 2.77 | 0.60 | 1.10 | 1.09 | 0.10 | 0.14 | 0.54 | 0.53 | 0.24 | 0.44 | K7312 Purified water |
| | 0.05 | 0.13 | 0.44 | 0.79 | 0.02 | 0.07 | 0.16 | 0.01 | 0.05 | × | × | 0.01 | 0.07 | 23 °C, 48 h |
| | 1300 | 1200 | 610 | 420 | 660 | 540 | 350 | 600 | 280 | 20 | 15 | 960 | 570 | |
| | 2.18 | 2.09 | 2.72 | 3.29 | 0.74 | 1.18 | 1.90 | 0.06 | 0.09 | 0.47 | 0.46 | 0.31 | 2.21 | K7312 No.1 Oil |
| | 0.05 | 0.13 | 0.46 | 0.84 | 0.02 | 0.07 | 0.15 | 0.01 | 0.04 | × | × | 0.01 | 0.08 | 23 °C, 48 h |
| | 1600 | 1300 | 710 | 480 | 840 | 620 | 500 | 290 | 210 | 24 | 15 | 1000 | 1100 | |
| | 1.44 | 3.16 | 4.14 | 5.17 | 0.28 | 0.75 | 1.13 | 0.02 | 0.03 | 0.30 | 0.44 | 0.47 | 2.25 | K7312 10 % HCl |
| | 0.04 | 0.10 | 0.38 | 0.66 | 0.02 | 0.07 | 0.18 | 0.01 | × | × | × | 0.01 | 0.06 | 23 °C, 48 h |
| | 1400 | 1300 | 970 | 730 | 460 | 470 | 360 | 110 | 73 | 11 | 13 | 1200 | 1200 | |
| | 0.41 | 2.05 | 2.57 | 3.33 | 0.54 | 0.82 | 1.40 | 0.03 | 0.04 | 0.47 | 0.52 | 0.20 | 0.57 | K7312 10 % NaOH |
| | 0.05 | 0.14 | 0.45 | 0.85 | 0.02 | 0.07 | 0.18 | 0.01 | 0.02 | × | × | 0.01 | 0.07 | 23 °C, 48 h |
| | 810 | 1100 | 700 | 470 | 620 | 490 | 390 | 250 | 160 | 30 | 18 | 860 | 670 | |
| | 1.22 | 1.33 | 2.15 | 3.14 | 0.49 | 0.78 | 0.97 | 0.03 | 0.04 | 0.34 | 0.45 | 0.53 | 0.76 | K7312 80 °C, 48 h |
| | 0.08 | 0.24 | 0.70 | 1.26 | 0.02 | 0.07 | 0.22 | 0.01 | 0.03 | × | × | 0.03 | 0.17 | |
| | 1200 | 760 | 400 | 320 | 560 | 470 | 300 | 190 | 120 | 27 | 12 | 1000 | 460 | |
| | 68 | 52 | 55 | 41 | 33 | 24 | 18 | 6 | 0 | - | - | 94 | 89 | K7312 |
| | 90 | 85 | 81 | 66 | 56 | 42 | 40 | 22 | 5 | - | - | 94 | 91 | |
| | 80 | 80 | 80 | 80 | 60 | 60 | 60 | 60 | 60 | 30 | 30 | 80 | 80 | - |
| | 1.52 | 0.16 | 0.36 | 0.16 | 0.22 | 0.07 | 0.04 | 0.10 | 0.12 | 0.20 | 1.15 | 0.23 | 0.05 | Z0237 SUS304 |
| | 172 | 3743 | 0mm | 0mm | 2 | 3 | 13 | 2 | 3 | 6 | 21 | 6 | 3 | Z0237 1kg, 24h, SUS304, □25mm |
| | 15 | 8 | 3 | 2 | 9 | 5 | 2 | 8 | 7 | 3 | 9 | 8 | 4 | Z0237 30° |
| | 90.4 | 92.7 | 89.6 | 89.1 | 0.1 | 0.1 | 0.1 | 94.1 | 90.6 | - | - | 95.3 | 96.1 | - 1mmt |
| | 2.13 | 1.44 | 4.90 | 5.93 | 0.84 | 1.34 | 1.62 | 0.08 | 0.25 | - | - | 0.23 | 0.28 | When a 2mm thick sheet is compressed by 15% (Φ50mm) |

How to order

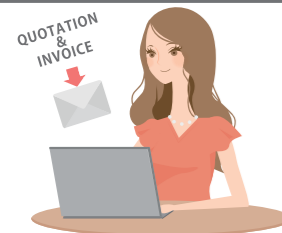
Inquiry



Please contact us by email.
And specify the part number, product name, quantity, and your information.

【 EMAIL : info-english@exseal.co.jp 】

Quotation & Invoice



We will estimate the total amount of your order.
The quotation is included product price, bank transfer fee and freight charge.

Payment



Payment in JPY by wire transfer is required.
All charges related to the remittance are to be paid by the customer. Please inquire at the bank for overseas remittance charges.
*Transfer charge between banks including all handling charges are to be covered by the customer.

Shipping



We will ship the product as soon as confirming your payment. And we will inform you of the shipment completion and tracking number for your reference.

Shipment method

- a) EMS *most recommendable
- b) FedEx *You need an account.
- c) DHL

We decide a way of shipment about delivery of dangerous substance in consultation.
(Surface coating agent, Barrier coat, etc.)

Arrival



It takes time to arrive depending on countries.
Please wait until products arrive.

Company information

Profile

| | |
|------------------------|----------------------------------------|
| Name | EXSEAL CO., LTD. |
| Address | 277-1, Oyada, Mino-city, Gifu 501-3771 |
| Foundation | February 1966 |
| Capital Stack | 30 million Japanese yen |
| CEO | Hideto Ebata |
| Financial Institutions | JUROKU Bank Mino Branch |

History

- 1963 Founded as a kimono tag manufacturer using MINO-WASHI paper.
- 1967 Established Daiko Shiko Co., Ltd.
- 1983 Started label and seal printing business.
- 1989 Changed the company name to EXSEAL CORPORATION.
- 1991 Relocated head factory to current location.
- 1993 Started transparent urethane processing (Crystal Dome).
- 1999 Clean up of crystal dome processing, and expanded head factory for business expansion.
- 2000 Established a development department.
- 2002 Installed manufacturing equipment to produce gel sheets.
- 2003 First publication of urethane gel product catalog and start of in-house mail-order sales via the internet.
- 2004 Started sales of "Fall Prevention Sheet", and it became a hit product.
- 2005 Installed manufacturing equipment to produce gel molding.
- 2009 Promoting cleanliness by introducing air shower equipment.
- 2011 Started sales of "STEP-MAT".
- 2014 Started sales of "LIFT-MAT".
- 2016 Started sales of "Dust catcher".
- 2017 Changed the company name to EXSEAL CO., LTD.
Became a member of ISO/TC272 National Deliberative Committee.
- 2021 New factory built, and clean room installed.

Business details

1. Joint development
Development support for new products for customers.
We can deal with from 1 prototype.
2. Mail order for Industrial materials
Planning, development, and sales of products using urethane gel.
3. Label/sticker printing, order processing of crystal domes.

