

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.

Caution

Notes

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

Image for use



It is suitable for shock absorption and buffer material.

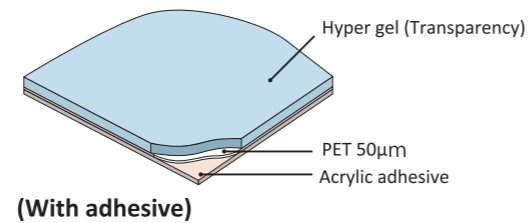
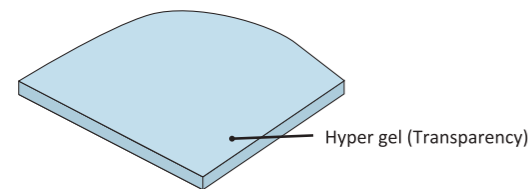
As a washer or material for gasket.

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

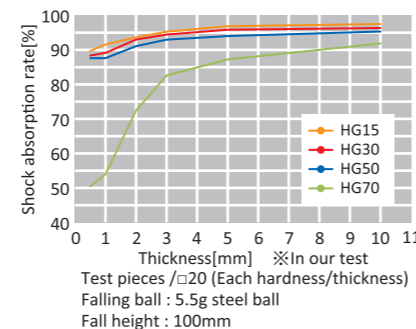
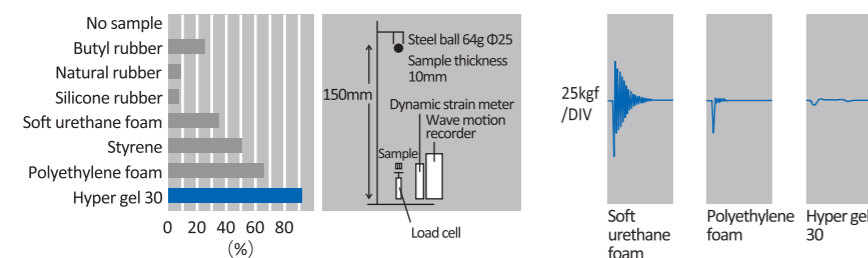
Structure (There are protective films on both sides of the product.)

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

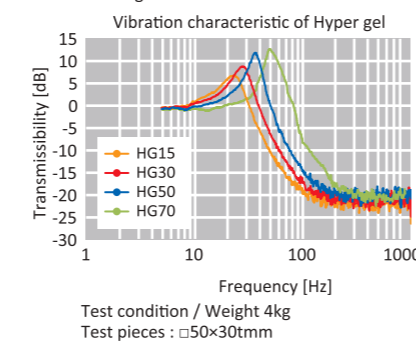
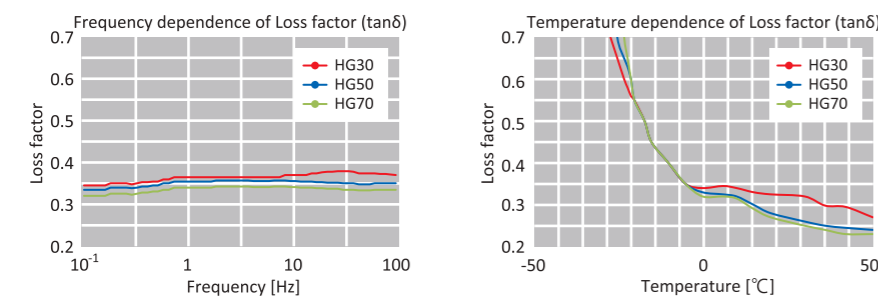


Test result

Shock absorption test



Anti-vibration test



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

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		
1510	3010	5010	7010	500×500	1.0
1520	3020	5020	7020		2.0
1530	3030	5030	7030		3.0
1550	3050	5050	7050		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		
1505T	3005T	5005T	7005T	500×400	0.5
1510T	3010T	5010T	7010T		1.0
1520T	3020T	5020T	7020T		2.0
1530T	3030T	5030T	7030T		3.0
1550T	3050T	5050T	7050T		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 ▶▶



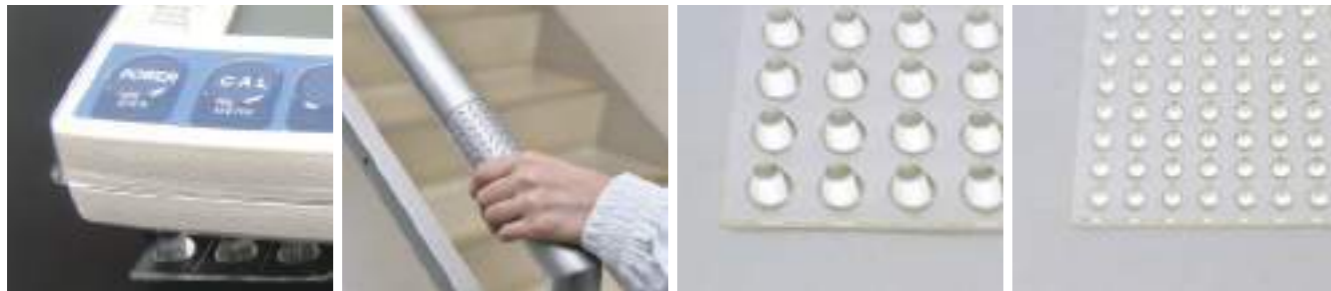
Anti-vibration and non-slip pat

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.

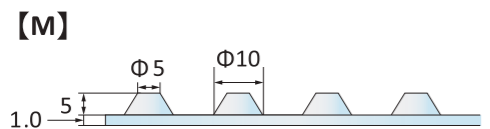
Image for use



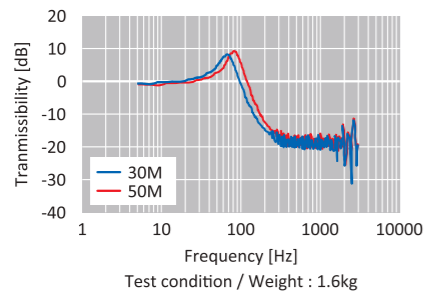
For anti-vibration pat of precision equipment. For anti-slip of handle or handrail. An enlarged photo of Cushion pat M. An enlarged photo of Cushion pat S.

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

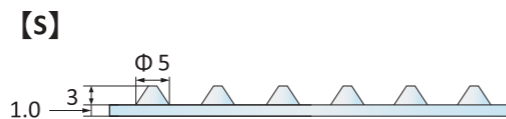
It is a buffer gel that utilizes the energy absorption of urethane gel. It can be used as anti-slip and anti-vibration equipment.



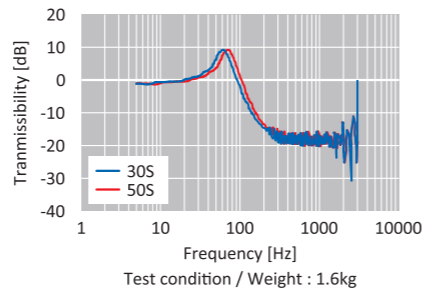
Vibration characteristics test of Cushion pat M



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



Vibration characteristics test of Cushion pat S



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)
30S	95×95	4.0	Asker C30	25gf / a fulcrum	100
50S			Asker C50	73gf / a fulcrum	
30M	95×95	6.0	Asker C30	270gf / a fulcrum	36
50M			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.



Super soft sheet for buffer

HITOHADA® gel sheet series

POINT

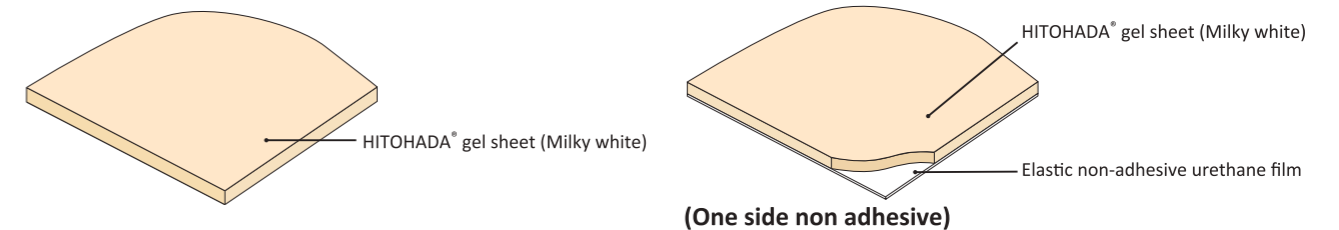
- 1 Super soft gel sheet with excellent conformability.
- 2 Due to the self-adhesiveness of urethane, glue does not remain.
- 3 Suitable for masking, gaskets and cushioning sheets.

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
H0-1	500×500	1.0	Asker C0
H0-2		2.0	
H0-3		3.0	
H0-5	400×400	5.0	
H0-10		10.0	
H5-5	400×400	5.0	
H5-10		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
H0-1K	500×400	1.0	Asker C0
H0-2K		2.0	
H0-3K		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.

Gel damper

POINT

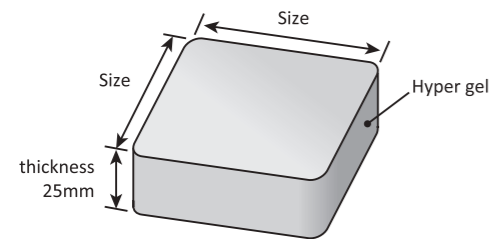
- ① Gel damper is anti-vibration block made of Hyper gel and thicker than it.
- ② Remove the vibration from equipment by installing to legs of equipment. Also prevent vibration from floors.
- ③ The gel don't have a directionality, so it has an equal effect both in a vertical and horizontal direction.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

Notes

- 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.



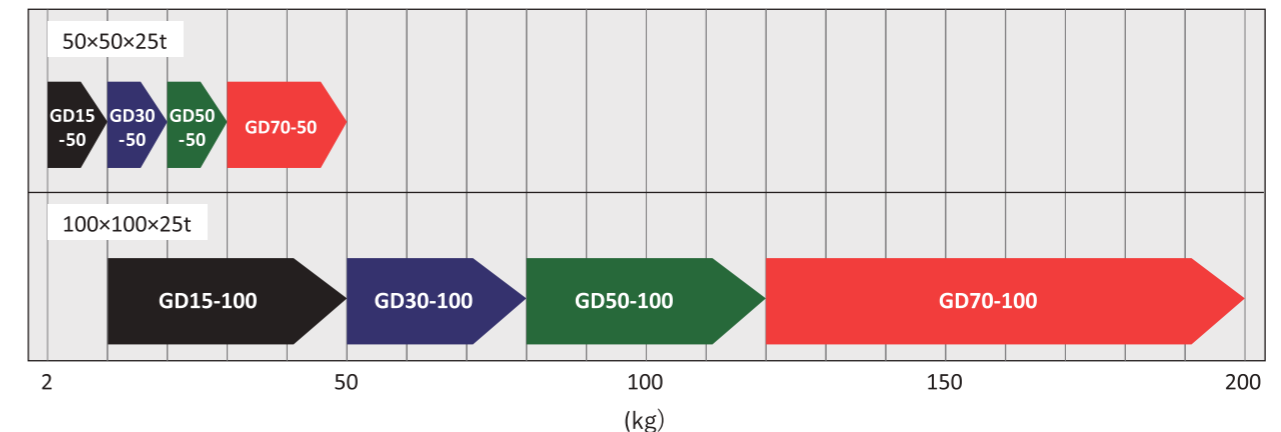
Part Number	Size (mm)	Hardness / Color	Proper use load (per 1 pc)	Anti-vibration frequency (Hz)
GD15-50	50×50×25t	Asker C15 / Black	2-10kg	26.4~
GD30-50		Asker C30 / Blue	10-20kg	24.4~
GD50-50		Asker C50 / Green	20-30kg	24.2~
GD70-50		Asker C65 / Red	30-50kg	23.8~
GD15-100	100×100×25t	Asker C15 / Black	10-50kg	26.4~
GD30-100		Asker C30 / Blue	50-80kg	24.4~
GD50-100		Asker C50 / Green	80-120kg	24.2~
GD70-100		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.



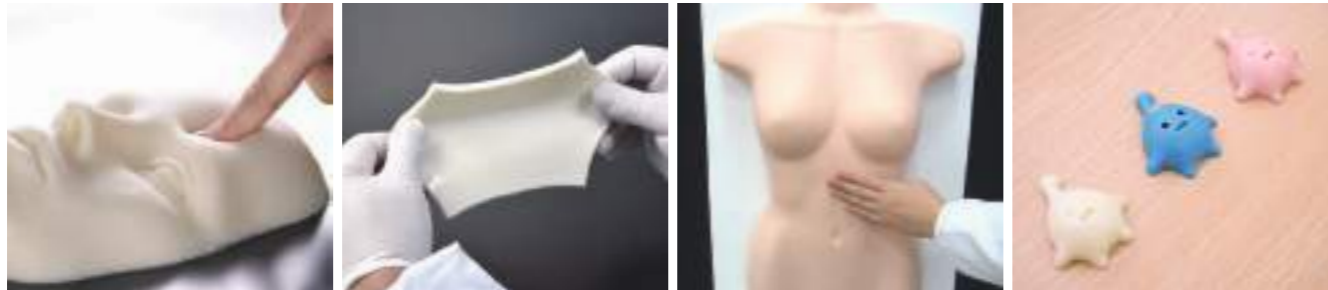
Super soft urethane resin material for molding

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 It is a 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

Check the video ▶▶



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.59)



- 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.

Caution

Notes

- 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)
H0-100	Asker C0 (Soft)	Milky white	100
H5-100	Asker C7 (Normal)		
H15-100	Asker C15 (Hard)		



600g set

Part Number	Hardness	Color	Volume (g)
0-600	Asker C0 (Soft)	Milky white	600
5-600	Asker C7 (Normal)		
15-600	Asker C15 (Hard)		



1200g set

Part Number	Hardness	Color	Volume (g)
0-1200	Asker C0 (Soft)	Milky white	1200
5-1200	Asker C7 (Normal)		
15-1200	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 ▶▶



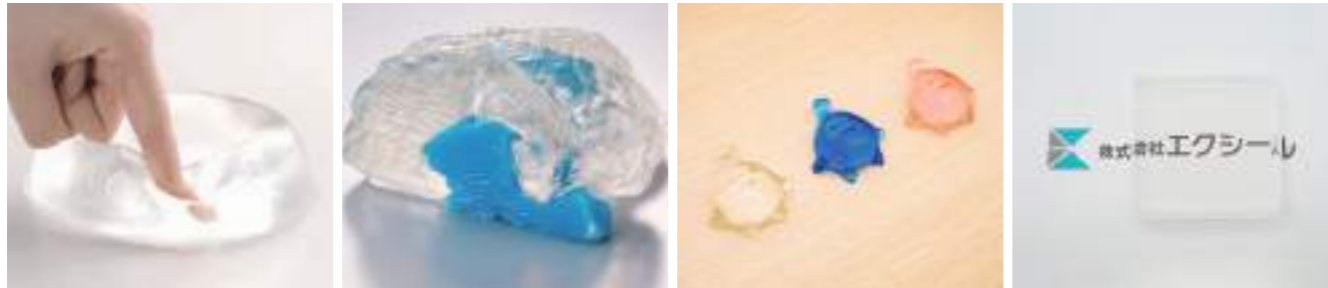
Super soft and transparent urethane resin material for molding with good bubble removal

HITOHADA® gel undiluted solution, Transparent

POINT

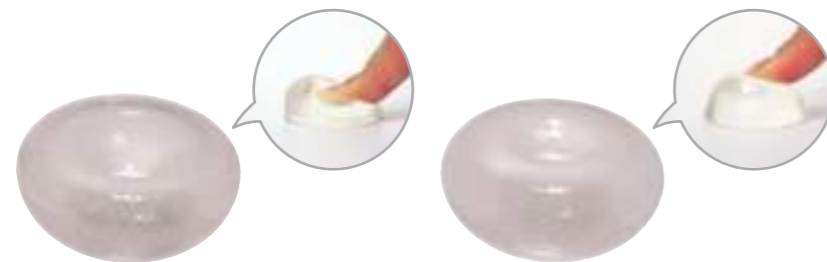
- 1 An ultra-soft modeling resin transparent type that expresses the softness of human skin.
- 2 There are 2 types of hardness : Asker C0 (soft), Asker C7 (normal).
- 3 Good bubble removal and it finishes transparent.
- 4 No special equipment is required because it cures at room temperature.

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

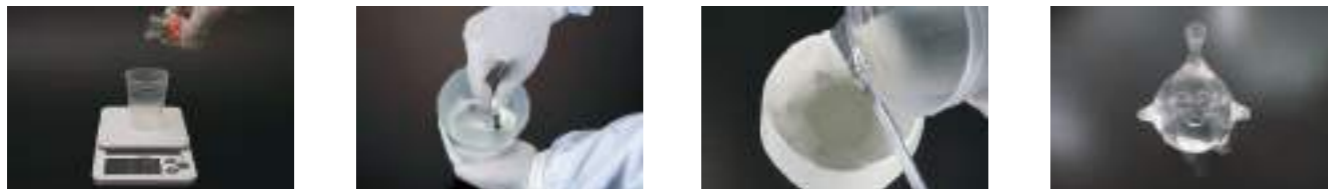
*The example of hardness is only our understanding. Not measured values.

How to make

Check the video ▶▶



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.59)

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.

Caution

Notes

- 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)
H00-100J	Asker C0 (Soft)	Transparent	100
H05-100J	Asker C7 (Normal)		



600g set

Part Number	Hardness	Color	Volume (g)
H00-600J	Asker C0 (Soft)	Transparent	600
H05-600J	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.

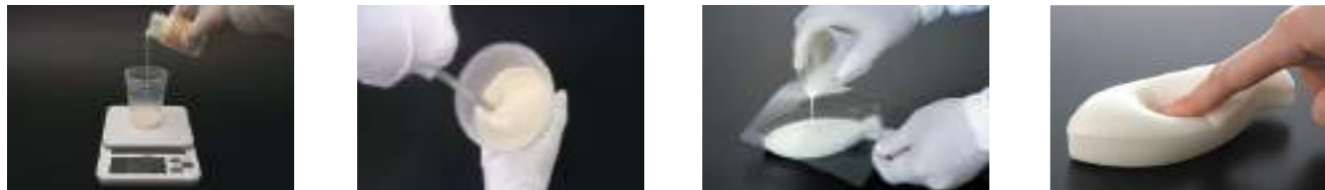
It is possible to color.

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.

Check the video ▶▶



1 Mixing ratio (weight ratio)
=Main agent 64 : Curing agent 100
Add a hardener to the base compound.

*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) quickly.

*If you mix too much, the bubbles are crushed and not inflated. After weighing the resin, pour it into the mold within 30 seconds.

3 Pour quickly into molds. It foams in 10-15 minutes fully.

*Curing is finished in about 12 hours after complete foaming. Please be careful that if you remove it from the mold before it is completely cured, it deflates.

4 After confirming hardening, it is removed from the mold. 160g set can be made about 3cm in B5 size.

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)
F-160	White	160

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



1600g set

Part Number	Color	Volume (g)
F-1600	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)
HC-25	Transparent	25
HC-100		100

HITOHADA[®] gel Q&A 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)
HG-R	Red	6
HG-B	Blue	
HG-L	Lemon yellow	
HG-K	Black	
HG-W	White	

HITOHADA[®] gel Q&A about Coloring



Mold release agent (Barrier coat NO.7)



Improves mold release.

Part Number	Color	Volume (g)
Ba-7	Transparent	100

*Please use brushes for painting.



Disposable cup

Disposable container for mixing liquids.

Part Number	Volume (ml)
CUP100	100
CUP300	300
CUP500	500
CUP1000	1000
CUP2000	2000



Check the video about coloring method ▶▶

