

**SHIP  
+ AiD<sup>®</sup>**

***Ready for any emergency***



***First aid kit for your ship***

**Anyone can easily and quickly repair ships!**

**SHIP + AiD<sup>®</sup>**

# 3 of the merit of SHiP+AiD

1. In a pinch, you can rush to the scene to take in hand the “SHiP+AiD” without hesitation. Every time, without having to look for a required repair materials, everything is OK, if you have a “SHiP+AiD” !
2. Superintendent, chief engineer & the crew can have the common recognition for the repair agent has been standing in your ship. In “right repair agent on the right spot”, anyone can be reliably repair!
3. The contents of “SHiP+AiD” always be kept constant quantity, it is possible to inventory management. The prevention of “Three No” : “No more” & “No longer available” when needed, are “No more”.



## SHiP + AiD®

(W32×L20×H20cm/1.9kg)

Based on the advice from superintendents of ship management company, we gathered the repair materials, which are needed for ship repair, in this one. When considering to introduce SHiP+AiD, please try the standard version for your ship at the first as trial.

※ Overseas shipment is available for this item.



## SHiP + AiD® Deluxe

(W41×L24×H20cm/2.3kg)

This is including a product lineup that also supports large diameter piping and “Red Epoxy” which can repair high pressure hydraulic piping. Heavy users who want to repair anything in your ship, please consider deluxe version by all means.

※ Overseas shipment with this set content is not possible, due to some dangerous goods are included, alternative products will be dispatched for overseas shipment.

## SHiP+AiD usage example

- Repair of various piping leaks (water, sea water, air & oil)
- Repair of aux. steam piping leaks
- Repair of exh. gas piping leaks
- Repair of hydraulic piping leaks
- As a reinforcing material to a thinned portion
- Repair of pump casing
- Alternative repair at areas that can not be welded
- Repair of expansion joint crack
- Repair piping under pressure

# Consult SHiP+AiD on Repair-Method



## User's Voice

There are many repair items on board, but I have no idea to use them.

It's difficult to determine which one will be most effective.

It has been used in the past, but because the application conditions and precautions were unclear, the repair was unsuccessful.

Although many crew members are aware that repair compounds exist, they have few opportunities to learn in detail how to choose and use them.



## Provide repair guidelines for any issues you have encountered on board.



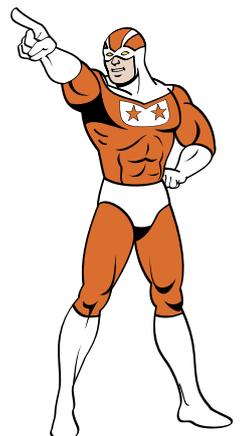
If a leakage occurs, please email details such as the fluid type, pressure, and temperature. Including photos or videos of the site that show the area around the damaged section will make the report even more effective.



Based on the information you send, we will suggest the most suitable repair item and application. To ensure anyone can follow the instructions with ease, we provide a range of resources—including tutorial videos and illustrated manuals—explaining how to use the repair materials.

## Original Poster

Also, we provide a quick-reference chart that lets you see at a glance which repair item is most suitable for frequent troubles such as water or oil leaks.



# E-Commerce from Ship Watatumi

## From order placement Through inventory management **Comprehensive control**

Watatumi carries the full range of Ship Aid repair compounds—including Red Epoxy, Aaron Tape, and every other formulation in the lineup.

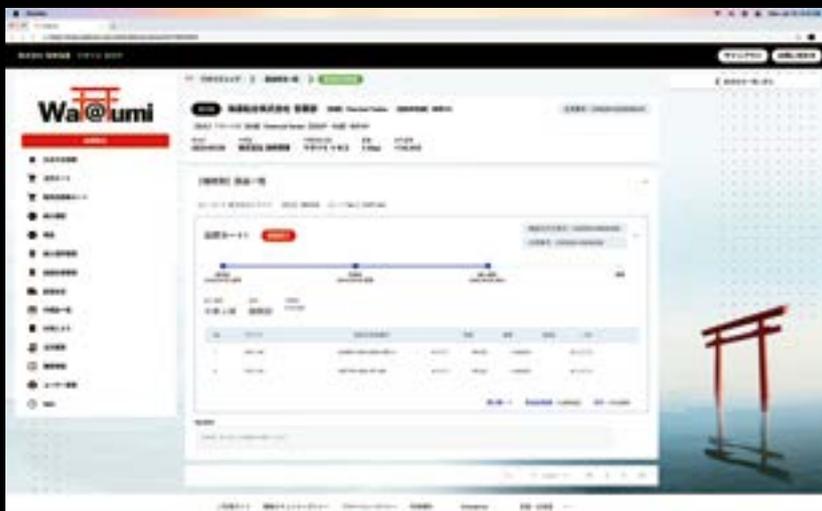
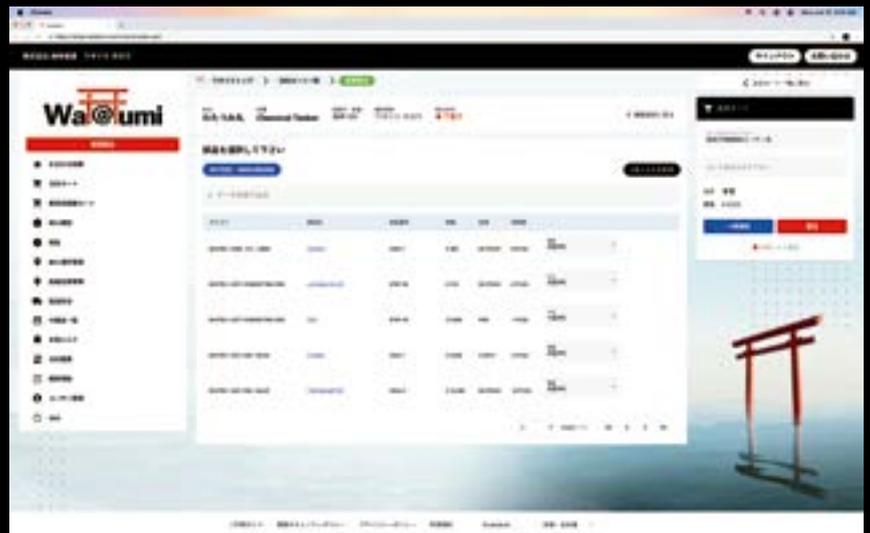


visit our web ([www.watatumi.com/en](http://www.watatumi.com/en))  
or scan the QR code.



## Place order Immediately

Prompt resolution of shipboard troubles is essential. Even a water leak can halt vessel or cargo-handling operations and result in significant losses. Watatumi eliminates the need for quotation requests and waiting time, allowing you to place orders immediately and receive the fastest possible delivery.



## Manage Purchase record

Watatumi consolidates information that is typically cumbersome to manage—such as historical pricing and order volumes—and provides end-to-end oversight of every purchasing task, from shipment tracking to post-delivery inventory control.

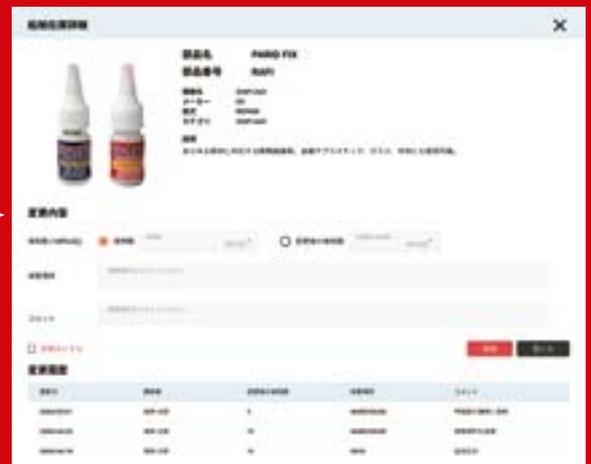
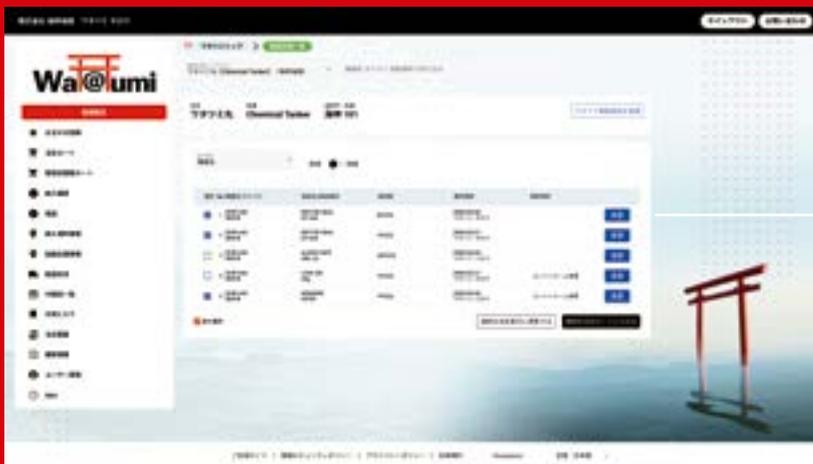
\*Images shown are from a development version and may differ from the actual screen.

**Make Stocking  
Repair Items  
a Habit.**



## **Ship inventory Management function**

Watatumi lets you manage, for each vessel, the purchase dates, current stock levels, and storage locations of all repair compounds and parts it supplies. Special after-sales features include inventory reminders and alerts when an item is nearing its expiry date. Vessel information must be registered to use these functions.



### **Create orders directly from inventory**

You can place orders for the required parts while monitoring on-board inventory levels and changes. Timely replenishment of repair compounds ensures you never face the situation of “no repair materials when they’re needed most.”

### **All changes are logged**

Whenever you update the current quantity or storage location, a history log is created. The identity of the person who made the change is also recorded, preventing unexplained inventory fluctuations. Parts purchased through Watatumi are automatically added to the records.



**Now Accepting Registrations!**

For details, please visit [www.watatumi.com/ja/contact/register-request](http://www.watatumi.com/ja/contact/register-request) or scan the QR code to contact us.

High adhesion & pressure repair agent

# RED EPOXY



Red Label



White Label

EXP: 2 YEARS FROM MANUFACTURING DATE

**NEW**

# RedEpoxy

READY IN MINUTES

DRINKING WATER LINE OK!

## For repairing & adhesion of any metals & resins !

Aluminum alloys, Cast irons, Copper & Copper alloys (Brass & Bronze), Magnesium and Magnesium allys, Carbon steels, Stainless steels, Galvanized surface, PVC, CPVC, ABS, Fiberglass, Black polypropylene, Kyner.



Red Label / Base Resin    White Label / Hardener

Epoxy Resin  
Content ea. 14.8ml

Approval of Food Sanitation Act No.370/595

**Wow!**

**VERY HIGH PRESSURE**

**21 MPa**

**VERY HIGH ADHESION**

※ It depends on the usage situation

### Features

- High adhesion & pressure
- Easy & Quick
- Chemical resistance
- Quick repair by heat curing (with heat gun)
- Temp. limit -40°C~176°C (Continuous use 148°C)

## Amazing adhesion which becomes a substitute for welding ! You can repair hydraulic piping with this !

### How to use ※Use Heat gun

1. Remove moisture and oil from repair area and coarsen the surface with sandpaper.
2. Mix the base resin and hardener from the container in the same amount and leave it for 10 minutes.
3. Warm up the repaired area and uniformly apply red epoxy.
4. If you heat the repaired area with a heat gun (140°C) for about 20 minutes, it turns from red to gold.
5. Curing is complete when it turns to gold. It is ready to use after return to normal temperature naturally.
6. If the heating temperature is high, it bubbled and burn up. In that case, please retry from the beginning.

### Excellent Chemical Resistance

CFC, Petroleum, Toluene, Xylene, Plant Oil, Animal Oil, Lubricant Oil, Hydraulic Fluid & more



Take the same amount of base resin and hardener.



Mix and leave for 10 minutes



Apply after warming up the repair area and turn to gold after 20 min heating.



Curing is completed after return to natural temperature naturally.



Heat Gun

(1500W / 100V / 60°C~550°C)

※We can arrange a heat gun, if you need it.



Usage is versatile

Watch the detailed usage of this product with the video.



<https://youtu.be/lqCjYhJVlqes>

EXP: 2 YEARS FROM  
MANUFACTURING DATE



Adhesive

Instant adhesion repair material

**RAPIDFIX**

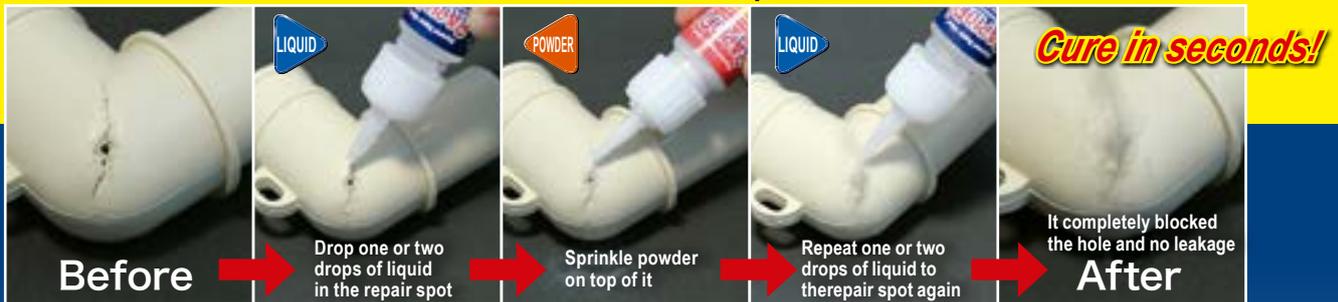
**VERY  
POPULAR**

**RAPIDFIX™**  
DUAL ADHESIVE SYSTEM

DRINKING  
WATER LINE  
**OK!**

**Instant repair of all materials !!**  
A new sense of repair agent that can be repaired to holes,  
cracks, chips, breakage by using liquid and powder.

※Even liquid alone can be used as an adhesive.



※When you want to increase strength, please repeat the above work.

※After hardening, rasping, holes and screw processing, painting are also possible.

Metal, PVC, Plastic, Rubber, Wood, Pottery, Glass, FRP, Leather, and any materials

**Surprising instant repair!**

**Liquid and powder,  
in either order OK**



10 sets carton

※ PP, PE, Styrene resin, Silicon, Paper  
Flourine are not applied.

LIQUID

PLUS

POWDER



One set Package

Super Strong

**PAPIDFIX**

Material	Adhesive : Ethyl cyanoacrylate (10ml) Welding powder : Oxide glass (10ml)
Curing time	A few seconds ~ several tens of seconds
Complete curing time	24 hours
Temperature	-55°C~95°C
Pressure	50~70kg/cm <sup>2</sup> (It depends on the repair condition.)
JAN code	4560361000416

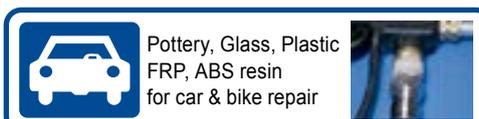
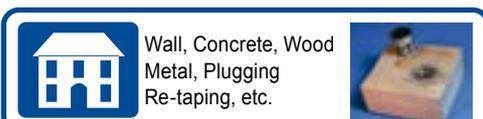
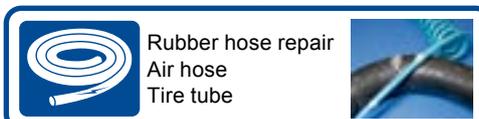
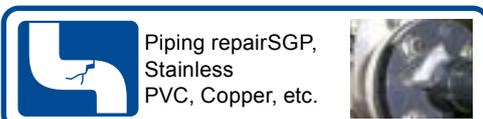
\*Please keep this product away from direct sunlight.  
Please do not put it in an excessively hot and cold place.  
Please do not refrigerated / forzen storage.

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Approval of ISO 10993-5

※ The liquid does not cure in the container.

It can be used for a wide range of applications  
and can respond quickly even in emergency case.



◆Chemical resistance

○=Conformity x=Non-Conformity

Ethanol	○
Acetone	x
Nitrite	○ (xConcentrated)
Gasoline	○
Benzin	○
Toluole	○
Xylole	○
Hydrochloric acid	○ (xConcentrated)
Sulfuric acid	○ (xConcentrated)
Phosphoric acid	○ (xConcentrated)
Sodium hydroxide	○ (xConcentrated)

Watch the detailed  
usage of this product  
with the video.



<https://youtu.be/H3IU07chhl>

# Epoxy Putty RECTOR SEAL

All-purpose putty

EXP: 3 YEARS FROM  
MANUFACTURING DATE

TEMP.  
-40~200°C

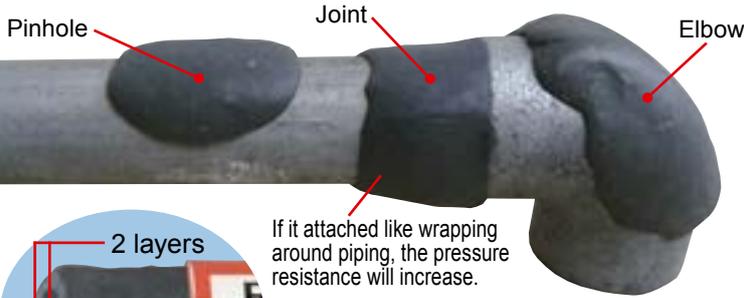
## Tough & Durable !

Harden like a metal in 15~20min after kneading.

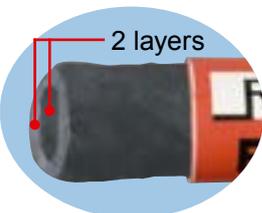
Just cut and knead it

Easy to use putty type everywhere

DRINKING  
WATER LINE  
OK!



Joint



If it attached like wrapping around piping, the pressure resistance will increase.

This product has layers of two components, combining by kneading and hardening.



EP-400



EP-200



EP-200W



EP-200(24pcs)

EP-400(12pcs)

Approval of Food Sanitation Act No.370/20



## RECTOR SEAL

	EP-400	EP-200	EP-200W
Contents	112g	56g	56g
Color	Gray	Gray	White
Material	Epoxy resin		
Hardness	Shore D85		
Temperature	-40~200°C		
Pressure	10kg/cm <sup>2</sup>		
Tensile strength	420kg/cm <sup>2</sup>		
Compressive strength	1,260kg/cm <sup>2</sup>		
Elastic coefficient	6×10 <sup>5</sup> PSI		
Shear strength	49kg/cm <sup>2</sup>		
Insulation properties	400Volts/mil 0.125in		
Volume resistance	5×1015Ω.cm		
JAN code	4560361000010	4560361000034	4560361000041

### ◆Chemical resistance

○=Conformity ×=Non-Conformity

10%Acetic acid	○
2%Nitric acid	○
10%Sulfuric acid	○
10%Hydracid	○
Acetone	○
Xylole	○
Gasoline	○
Methanol	○
Ethanol	○
10%Hydrochloric acid	○
Caustic soda	○

The use is diverse, such as repairing holes and cracks, reforming the surface.

- ◆ Piping (Stainless, Copper, Steel, PVC).
- ◆ Air conditioner (Duct, Unit, Fan)
- ◆ Electrical machinery (Housing motor, Shaft)
- ◆ Industry (Equipment, Pump casing).
- ◆ Industry (Equipment, Pump casing)
- ◆ Shipping (Hull, Piping, Pump casing)
- ◆ Agriculture (Tools, Machinery)
- ◆ DIY (Tile, Wall, Piping, Cabinet, Door)

Watch the detailed usage of this product with the video.

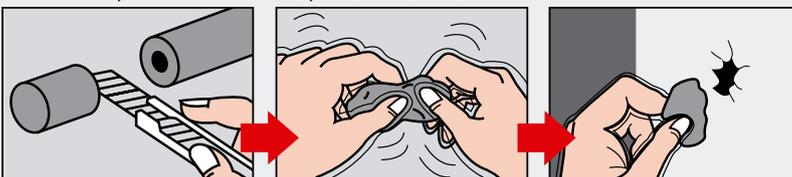


<https://youtu.be/8Agr0v1s8qM>



## How to use ※Release repair under non-pressure.

\*First of all, please remove dirt, paint, dust, rust, oil etc. on the adhesion surface.



① Remove the packaging film and cut it in the required amount.

② Knead it for 1~2mins until there is no color unevenness.

③ Embed and mold so as to press against the adhesive / filling spot.

- If you use a wet cloth or wet spatula, it will be beautiful finished.
- When the temperature is low, the time to complete hardening becomes longer. Please use at temperature above 5°C.
- Please be careful as excessive kneading and redoing of molding after adhesion will cause poor adhesion and poor hardening.
- Recommend to combine with Quick Tape and Arlon Tape for piping repair.
- Cover Rector Seal by Quick Tape for additional strength.
- Cover Arlon Tape by Rector Seal for protection.
- ④ Harden and adhere in 15~20mins. It can be done tapping, buffing, painting and etc. after completed hardening (1 hour)

EXP: 2 YEARS FROM  
MANUFACTURING DATE

**TEMP.**  
**-50~200°C**

Self fusing silicon tape  
**ARLON TAPE GRAY**  
**Not slippery in water !**

**It's available for Air, Water,  
Sea water, and Aux. steam.**

**DRINKING  
WATER LINE  
OK!**

**Just wind while  
pulling strongly !**

**You can stop leakage  
under pressrue !**



**Width 25mm / 38mm**  
**Please use according  
to the pipe diameter.**

**ARLON TAPE GRAY**

	Product size	Applicable dia.	Qty	JAN code
SRG-2	W25 x L2000mm	Under 50A	24	4560361000331
SRG-5	W25 x L5000mm	Under 50A	12	4560361000348
SRG-11	W25 x L11000mm	Under 50A	6	4560361000355
SRG-38	W38 x L6000mm	Under 100A	8	4560361000362

Watch the detailed usage  
of this product with the video.

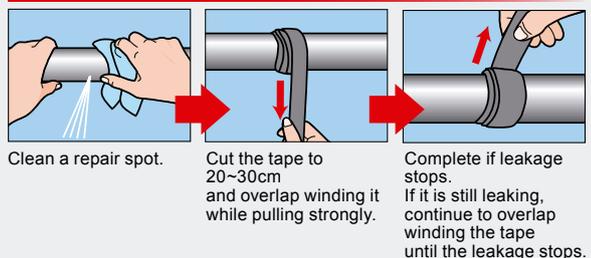


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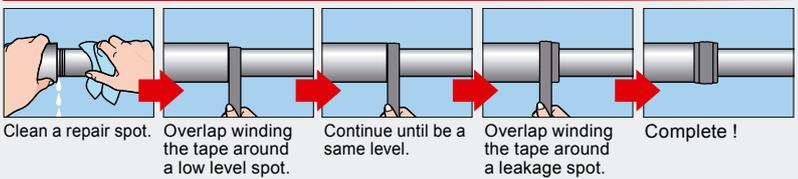
**ARLON TAPE GRAY repair example**

When pulling strongly while winding it, the tapes will self-fuse, and they will adhere to broken parts such as piping and hose leakage, bleeding, pinholes and gaps. Repeat to wind the tape until stop. Since it does not adhere to piping, any material can be repaired.

**Example of leakage repair of pinhole**



**Example of leakage repair of joint**



**◆Chemical resistance**  
○=Conformity x=Non-Conformity

Material	Silicone rubber	10%Acetic acid	○
Pressurw	1.0MPa	2%Nitric acid	△
Tensile strength	8.0MPa	10%Sulfuric acid	x
Temperature	-50~200°C	10%Hydracid	○
Elongation	600%	Acetone	x
		Xyltote	x
		Gasoline	x
		Methanol	○
		Ethanol	○
		Ammonia	△
		Antifreeze	○

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Approval of JIS K6353(Rubber for water)  
US military standard compliant goods (MIL-I-46852C)

- Press the end of the tape against it while pulling finally.
- Since it done not adhere to piping, the winded tapa can be easily removed with scissors.
- Recommend to combine it with Quick Tape or Rector Seal for protection after completion.
- It can be used in either direction on both sides.

Only wet and wind

# RECTOR HIGH TAPE

**Harden in 30mins**



**TEMP.**  
**-15~210°C**

EXP: 2 YEARS FROM  
MANUFACTURING DATE

## For pipe leakage and breakage

**It solidifies like a metal and  
can be repaired permanently.**

**DRINKING  
WATER LINE  
OK!**

**Strong Bond**

## Various uses

Please select the size according to location and purpose.

- ◆ Repair for water, air, aux. steam and oil piping in factories & plants.
- ◆ Repair for elevated tank, septic tank, toilet bowl and other tank.
- ◆ Repair for plastic molding machine, construction machine and oil feed pipe.
- ◆ Repair for ship equipments during long voyage.

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Approval of EPA601 / Approval of AS4020



Watch the detailed usage of this product with the video.



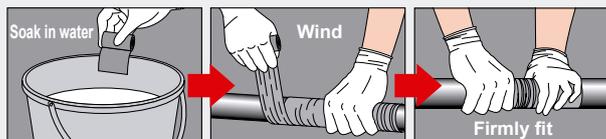
<https://youtu.be/5UQuvOAJfuE>

## Easy work just to wet & wind

Easy to handle, anyone can work quickly and easily. It is available for plastic, steel, lead, copper, stainless, concrete, ceramic, glass, PVC and etc. Ideal for piping repair of all materials.

### How to use \*Release repair under non-pressure.

- \* Close the root valve of the piping and hose before repair, and relieve pressure. Remove oil, rust and other dirt from the repair spot.
- Please be sure to wear the supplied gloves before work.



- ① Soak the tape in water (sea water/muddy water) for 20 ~ 30 seconds.
- ② Wind strongly while pulling the tape, and use up all the tape.
- ③ Fit in piping to squeeze the tape, and don't allow air to enter without gaps.

- ④ Bubbles come up from the tape after a while, keep making the tape fit in piping due to loose the tape during bubbling (about 10~15mins). It hardens in 30~40mins at outside temperature 21°C. Wipe by alcohol after completion if required surface finish. It can be sanded and painted also.

**Wet and Wind !**

### ◆Chemical resistance

○=Conformity x=Non-Conformity

20%Acetic acid	○
20%Nitric acid	○
75%Sulfric acid	○
20%Hydracid	○
Methyl alcohol	○
10%Ammonia	○
Gasoline	○
Kerosene	○
Toluene	○
37%Hydrochloric acid	○
Corn oil	○

## RECTOR HIGH TAPE

**Contents** ●Glass fiber tape (Aluminum packed)●Rubber gloves●Pat

	RH-1	RH-2	RH-3	RH-4	RH-5
Size	W25×L750mm	W50×L750mm	W50×L1500mm	W75×L2700mm	W100×L4500mm
Applicable dia.	Under 15A	Under 20A	Under40A	Under 80A	Under 150A
Material	Glass fiber cloth tape				
Num of turns	6~8 windings				
Hardness	Shore D53				
Temperature	-15~210°C				
Pressure	10kg/cm <sup>2</sup>				
JAN code	4560361000058	4560361000065	4560361000072	4560361000089	4560361000096

Usage : Repair and reinforce pipes and hoses for metals, plastics, PVC, FRP, ceramics, glass, rubber. Particularly suitable for piping using chemicals and oil.

●Cover Rector Seal by High Tape for additional strength.

●Cover Arlon Tape by High Tape for protection.

EXP: 2 YEARS FROM  
MANUFACTURING DATE

**TEMP.**  
**-15~210°C**

Only wet and wind  
**RECTOR QUICK TAPE**

**Harden in 3mins**

**Significant shortening of construction time for fast fixation!**



**It can be repaired permanently.**

Easy work that just wets and winds, repair and reinforcement of piping is completed at once.  
**Fixed in just 3 mins, hardened in 20 mins.**  
Greatly shortening your working time !

**It can be used for a wide range of materials such as any metal, ceramic PVC and etc.**

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Approval of EPA601 / Approval of AS4020



QT-1(12pcs)  
QT-2(8pcs)  
QT-3(6pcs)



**HARDEN in 3 mins !**

Watch the detailed usage of this product with the video.



<https://youtu.be/rXRCgKJS0S8>

**RECTOR QUICK TAPE**

**Contents** ●Glass fiber tape (Aluminum packed)●Rubber gloves●Pat

	QT-1	QT-2	QT-3
Size	W25×L600mm	W505×L1200mm	W75×L2400mm
Applicable dia.	Under 25A	Under 50A	Under 80A
Material	Glass fiber cloth tape		
Num of turns	6~8 windings		
Hardness	Shore D60		
Temperature	-15~200°C		
Pressure	12.6kg/cm <sup>2</sup> (ASTM D1599)		
JAN code	4560361000157	4560361000164	4560361000171

Usage : Repair and reinforce pipes and hoses for metals, plastics, PVC, FRP, ceramics, glass, rubber.  
Particularly suitable for piping using chemicals and oil.

**◆Chemical resistance**

○=Conformity ×=Non-Conformity

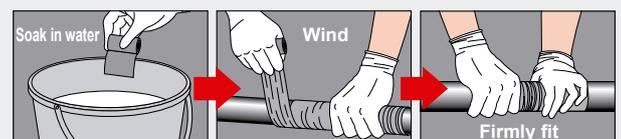
20%Acetic acid	○
20%Nitric acid	○
75%Sulfuric acid	○
20%Hydracid	○
Methyl alcohol	○
10%Ammonia	○
Gasoline	○
Kerosene	○
Toluene	○
37%Hydrochloric acid	○
Corn oil	○

**Easy work just to wet & wind**

Easy to handle, anyone can work quickly and easily.  
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\* Close the root valve of the piping and hose before repair, and relieve pressure.  
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Please be sure to wear the supplied gloves before work.



- ① Soak the tape in water (sea water/muddy water) for 20 ~ 30 seconds.
  - ② Wind strongly while pulling the tape, and use up all the tape.
  - ③ Fit in piping to squeeze the tape, and don't allow air to enter without gaps.
- ④ Bubbles come up from the tape after a while, keep making the tape fit in piping due to loose the tape during bubbling (about 10~15mins). It hardens in 30~40mins at outside temperature 21°C. Wipe by alcohol after completion if required surface finish. It can be sanded and painted also.

- Cover Rector Seal by High Tape for additional strength.
- Cover Arlon Tape by High Tape for protection.

# UV curing repair material RECTOR SUN SHEET

## FRP Sheet



EXP: 1 YEARS FROM  
MANUFACTURING DATE

# Just cut & paste it to the necessary size at the repair spot !

## Easy to use with a sense of sticker for various repair.

**15 mins hardening  
with sunlight  
(UV ray)**



**RIPPING**



**ROOF**



**TANK**



**OUT DOOR**



**SHIP**



**SLIDER**



### RECTOR SUN SHEET UV600

Material	Glass fiber UV curable epoxy acrylate resin
Size(mm)	W150×L220 Thickness 1.5mm
Temperature	-20~100°C
Tensile strength	115MPa Elastic modulus 8.8GPa
Bending strength	235MPa Elastic modulus 7.8GPa
Breaking extension	1.5% Impact strength 45KJ/m <sup>2</sup>
JAN code	4560361000140

Usage : Repair and reinforce damaged and corroded parts such as steel plate, steel piping, FRP, glass, ceramic, PVC, and hardened vinyl chloride.

*\*It may peel off for deformable materials.*

### Other Uses

- Piping repair
- Sewer pipe welding reinforcement
- Steel, copper, stainless
- Air conditioning equipment
- Emergency repair of ships
- Repair of outdoor equipment

#### \*Usage prohibited

- Polyethylene
- Polypropylene
- Polycarbonate

Watch the detailed usage  
of this product with the video.



<https://youtu.be/muaX3dKFBM>

**CAR**



**Before**



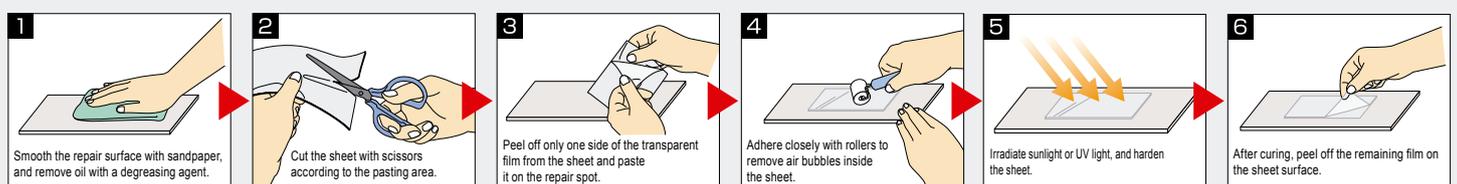
**After**

• Mold from the back of the bumper with Sun Sheet.

• Finish the surface with resin.

\*It's a repair example using Uni Solar in combination.

### How to use



- Remove dust, mud and oil in repair spots.
- If water is out, stop water and dry the surface before using.

- Please be careful not to put in the air when pasting. (Remove the air with roller or hands.)

- The surface temperature of the repair spot should be less than 80°C
- Avoid outdoor work in rainy weather.

EXP: 2 YEARS FROM  
MANUFACTURING DATE



Uni Solar Hard

UV curing repair material  
**UNI SOLAR**

**Gel type**

# For repairing cracks & holes !

Hardening to irradiate sunlight or UV light.  
Special gel quickly repair cracks & gaps.  
It's suitable for emergency repair of tanks & piping.



Uni Solar Soft for soft  
materials such as PE tanks.

**UNI SOLAR SOFT**



100g



100g

**GEL TYPE**



Uni Solar Hard for repair of  
pressure part such as pipings.

**UNI SOLAR HARD**

## UNI SOLAR

	Soft	Hard
Material	UV curable epoxy acrylate resin	
Tensile coefficient	4.6×10 <sup>5</sup> psi	
Extension rate	5~6%	
Bending strength	1,540kg/cm <sup>2</sup>	
Bending coefficient	4.9×10 <sup>5</sup> psi	
Compressive strength	2,240kg/cm <sup>2</sup>	
Deformation temp.	105°C	
Hardness	Barcol 35	
Permittivity	3.38	
Shear strength	304 stainless 800 psi	
JAN code	4560361000188	4560361000195

Usage : Repair and reinforce damaged and corroded parts such as steel plate, steel piping, FRP, glass, ceramic, PVC, and hardened vinyl chloride.

\*It may peel off for deformable materials.

### How to use

- ① Dry the surface, remove the dirt and the oil with a degreasing agent, and roughen the surface with coarse sandpaper to improve adhesion.
- ② Squeeze Uni Solar in the shade, and apply to the repair spot.
- ③ Irradiate with UV light or sunlight for about 3 mins.  
If you paste a transparent film on the surface of Uni Solar, then block the air and cure it, it will be a clear and beautiful finish.

\* When Uni Solar Hard is felt hard, adjust the hardness by adding a small amount of acetone.

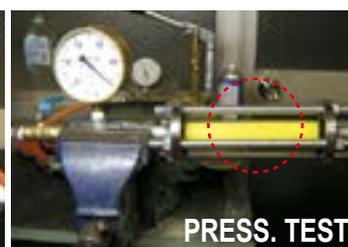
\* Since UV is difficult to reach deeply, the one with 1~2 mm of overcoating is better in the curing condition.

\* If the surface does not dry even when irradiated with UV for more than 10 mins, the surface will dry out by wiping with an industrial alcohol.

Watch the detailed usage  
of this product with the video.



<https://youtu.be/rBut9FTkKpg>



**UV-LED Flashlight that will cure  
Sun Sheet & Uni Solar quickly after repair.**

**Work in indoors or place  
where ultraviolet does not hit**



Specialized for quick curing of SUN SHEET and UNI SOLAR. Type-C rechargeable for easy use anytime, anywhere.

**NEW!**  
**UV-LED FLASHLIGHT**

充 電	TypeC (充電用ケーブル)
規 格	約2.5時間 (0~100%まで)
重 量	3.7V 2000mAh 7.4Wh
	4.7.0g



UV curing type leakage repair material

# LEAKAID



### MAIN FEATURES

- LopophilicLipophilic before hardening, oil resistant after curing !
- Harden in 1 second with UV ray, slow leakage can be cured even it's leaking
- No drop on vertical surface, gap can be filled
- Removable after hardening

**TEMP.**  
**-40~150°C**

**Effective repair material with "Adhesive on oil surface" and "Quick hardening" functions !**

Revolutionary repair material which can be used for OIL, WATER, and GAS leakage by UV curing. Strong adhesive, effective for the leakage which conventional putty could not stop.

### How to use



① Stir the material

② Apply on leakage area

③ Quick hardening with UV ray

④ Completed !

**Harden in few seconds !**

Effective especially for the leakage on **OIL, AIR, and REFRIGERANT PIPES** where is difficult to remove oil from the surface.



**FOR HEAVY USE !**

Valuable size **180g**

LL-100-LA180G

Entry model **10g**



LL-100-LA10G



**NEW!**

**UV-LED FLASH LIGHT**

Type-C (FOR CHARGE)

### Durability

**○ Mineral Oil**  
Good!

**△ Synthetic Oil**  
Depends on its component

### Adhesive property (with #1000 surface preparation)

○=Conformity ×=Non-Conformity

Stainless, Iron, Acrylic, Glass, Brass, Aluminum, Copper, etc.	○
PP, PE etc.	△
Silicon, Teflon, etc.	×

\*Depends on material

### DEMO MOVIE

<https://vimeo.com/374886073>



Password : LLJ1  
(all capital letters)

\*Flash light is included in SHIP+AiD Standard and Delux

EXP: 2 YEARS FROM  
MANUFACTURING DATE



Fiberglass sheet tape  
**POW-R PATCH**



# POW-R PATCH



**Holes, crack repairing... multi-purpose usage !**  
**Tanks, Pipes, Flat / curved surface... for all over places !**

**Strong Adhesive**

**Sheet tape type repairing material**

Apply for all kind material

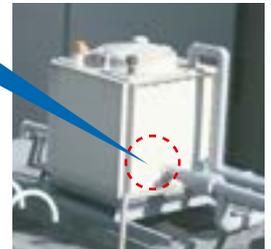
Adhesive in **15 min.**

**10** Pressure  
**kg/cm<sup>2</sup>**  
TEMP. -17~170°C



**Tank repairing example**

Remove fluid and release pressure, then clean up the repairing surface.



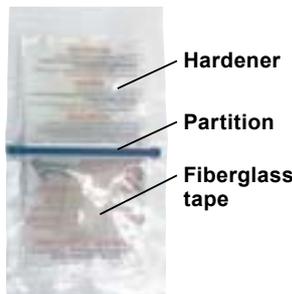
"POW-R PATCH" is a fiberglass sheet tape with **epoxy resin** which have developed in the United States. It applies for all materials, such as metals, PVC, etc. Adhesive in **15 minutes** after mixing tape and hardening agent. Safety use for both temporary repair work and long term use. **Saving your time and cost !**

## POW-R PATCH

**Kit List** ●Fiberglass tape ●Rubber Glove  
\*Working Glove is not including, please prepare by your side.

	PA1015	PA1030
Size	W100×L150mm	W100×L300mm
Type	Fiberglass fabric tape	
Color	Semitransparent	
Hardening time	5-8minutes in appearance, 15 minutes hardening	
Temperature	-17~170°C	
Hardness	(shoreD)79	
Tensile modules	@23°C 2,900Mpa 420,000psi	
Chemical resistance	Good for Gasoline, Acetic Acid (20%), Hydraulic oil, Muriatic Acid (20%), Kerosine, Toluene, Sea Water, etc.	
JAN code	4560361000515	4560361000522

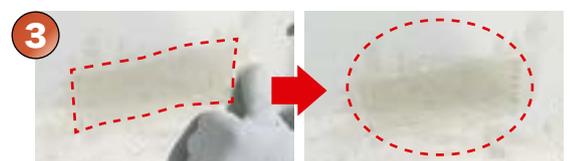
\*Use together with Rector Seal, for drinking water pipes and tanks.



Remove the partition bar between Hardener and Fiberglass tape.  
\*File the surface for more strong adhesive.



Mix the Hardener and Fiberglass tape very well (approx. 90 seconds). Then take out from the pack.  
\*Fiberglass tape is overlapped in the pack.



Put on the repairing surface, and press the sheet not to have gap between the repairing surface. Then harden in approx. 15 minutes.

### CAUTION

**Wear heavy working gloves beneath the Rubber Gloves.**

\*Pay attention not to get burned by high temperature (40~70°C) when repairing.

\*Dip in more than 60°C hot water in case of crystallization whitening. Then it turn back to normal and can be used as usual.

\*There is "12 pcs package hanger" for sales display.

High Temperature putty  
**LAB-METAL**

**Aluminum putty**



EXP: 2 YEARS FROM  
MANUFACTURING DATE

# For repairing the high temp. flange surface

**Easy-to-use for  
single component putty !**

Lab-metal(Standatd)



# Harden like a metal Cont. service temp. **537°C**

**Single component alminum putty**  
It has excellent adhesion to metals  
such as aluminum, steel and stainless,  
and wood, resin, glass and the like.

It is a multipurpose metal putty with good useability  
of single component type and strong adhesion.  
Adhesion and repair of damaged parts for molds,  
vehicles and boilers, and painting of welded parts.  
Heat resistant temperature is 537°C Hi-Temp type  
and 176°C Standard type.

If dilute it with a diluent, can apply brush and  
spray. Furthermore, polished after hardening  
it will shine like a metal.

It's suitable for repairing a surface of high  
temperature flange such as a cylinder head  
cover of main engine.



Usage : Repair and mold for metal, glass, ceramic, stone, concrete, plastic, wood  
and etc.

\*To use this product, a mixture of toluene and acetone 1:1 is required.  
(MEK and toluene 1:1, or even acetone alone can be substituted.)

## LAB-METAL

	Standard(R)	Hi-Temp(H)
Hardness	Shore D81	
Curing time	24hrs	
Expansion coefficient	15×10 <sup>-6</sup> inch/ inch per°F	
Tensile strength	45.4kg/cm <sup>2</sup>	
Compressive strength	1,400kg/cm <sup>2</sup>	
Component	Aluminum	
Specific gravity	1.95 at 24°C	
Temperature	-40~176°C	-40~537°C
Contents	336g	336g



Lab-metal(Hi-Temp)



## How to use



1. Welding poing of steel frame



2. Dilute and apply it with brush



3. After curing, buffing for finish



4. Electrostatic coating is possible

EXP: 6 MONTHS FROM  
MANUFACTURING DATE



High Temperature putty

**RESBOND**

**Ceramic putty**

<WATER SOLUBILITY>

# Stop the high temp. gas leak !



**Easy-to-use for  
sdispenser tube type !**

Sealing of exhaust ducts



Flange forming of exhaust pipings

## Cont. service temp. **1,287°C**

For adhesion and sealing of high temperature part, protection and reinforcement of connection part. It is a high-performance repair agent with strong adhesion to all metals and ceramics and corrosion resistance to most solvents and chemicals.

### Repair Agent of Boiler

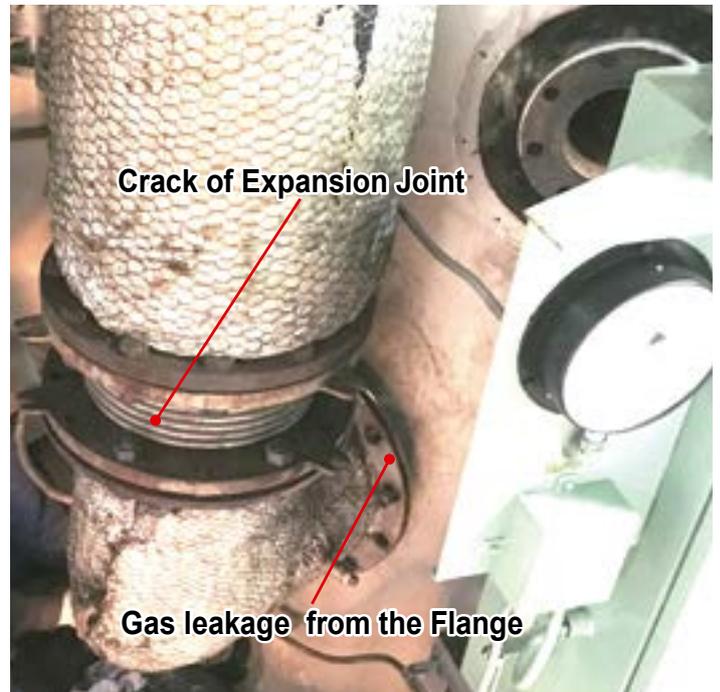
- ◆ Repair of expansion joint crack
- ◆ Repair of flange gas leakage
- ◆ Repair of refractory

### Other

It's suitable for a sealing material for diesel engines, gas turbines and turbochargers, for a repair agent for high temp. parts of incinerators and exhaust gas systems.

### RESBOND 907GF

Temperature	1,648°C(Max. temp) 1,287°C(Cont. ope. temp.)
Curing time	24hrs
Compressive strength	105kg/cm <sup>2</sup>
Expansion rate	5%
Permittivity	3.0(at 10 <sup>6</sup> cps)
Volume resistance	10 <sup>9</sup> Ω·cm
Insulation properties	145 Volts / mil
Heat conductivity	6.0(at 260°C)
Shrinkage ratio	2%
Contents	112g



Watch the detailed usage  
of this product with the video.



Usage : Adhesion, sealing and protection of high temperature part and piping such as metal and ceramic. It can be used for most chemical products and solvents.

*\*It can not be used in areas exposed to water leakage and water.*

<https://youtu.be/qCjYhJVIqes>

Built-in type underwater forming epoxy resin filling adhesive material

# AQUA STICK



EXP: 1 YEARS FROM  
MANUFACTURING DATE

Bondable, fillable for both "underwater" & "wet surface"

**NEW**

# AQUA STICK

DRINKING  
WATER LINE  
**OK!**

Built-in type underwater forming epoxy resin filling adhesive material



150ml

underwater adhesive  
**No.1 Effect**



50ml

It forms water-resistant bonding membrane when using under water & wet surface by the intermolecular bonding effect.



**BUILT-IN  
TYPE  
NO NEED to  
MEASURE!**

## How to use AQUA STICK

\*Wipe the rust, oil, and dirt off from the bonding surface before use.



1. Take out from bottom and cut in round slice.



2. Squash material by spatula or trowel.



3. Mix until the color turns to uniform milky-white.



4. Paste like wiping and hold until harden.

## Usage of AQUA STICK

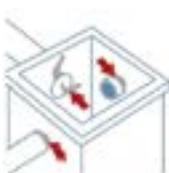
### Various metals

Concrete, FRP, and Vinyl Chloride, etc.

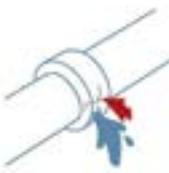
\*surface preparation needed for stainless



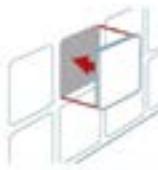
**Pipe leakage  
Repairing**



**Catch-basin  
Repairing**



**Hume pipes  
Repairing**



**Tiles  
Bonding**



**Tanks  
Repairing**



**Ceramics  
Bonding**

## AQUA ATICK

Curing time	60~180min.(25°C)
Heatproof temp.	56°C
Compressive strength	920kgf/cm <sup>2</sup>
Tensile strength	650kgf/cm <sup>2</sup>
Bending strength	1,120kgf/cm <sup>2</sup>

	Main Agent	Hardener
Shape	Stick	
Specific gravity	1.16	1.10
Appearance	Clear	Milky-White
Component	Modified Epoxy	Modified Polyamine

\*Test result data based on our testing procedures. Your using condition is beyond our jurisdiction.

## CAUTION

•Do not use other than specific purposes. •Make sure the working area is well ventilated. •Be careful not to adhere to the skin, and wear protecting mask, gloves, and safety goggles if necessary. •Wipe off immediately when adhered to the skin, then wash with soap and water sufficiently. •Take medical examination if necessary, such as becoming unwell case. •Store in a cool and dark place. Expiry date is 1 year from manufacturing date. •Use it up as soon as possible after opening. •Dispose wastes under the disposal regulations. •Keep, store and dispose in safe to prevent infant and children from touching.

## Non-slip 2 components type lining material



Watch your steps

# NON-SLIP COAT



**Safety ensuring starts from *YOUR FEET* upwards !**

Main component of Non-slip coat is epoxy resin, which is excellent in its adhesive force and chemical resistance. Also containing Silica and Ceramic filler improved its durability, revolutionary lining material with high fire-retardant performance corresponded to UL-94 V-0



1. Drop the mixed non-slip coat directly to the painting surface



2. Spread to a uniform thickness around 1~2mm by rubber spatula



3. Use the special made roller for rough-patterning.



4. Wait to be harden

**Stick very well with base material and hardly peel off.  
(Metals, Concrete, Asphalt, etc.)**

High-performance non-slip effects for the materials which could be a cause of slip, such as water, oil and dust.

### Excellent resistance function of water, chemical, and wearing.

No need of a primer treatment except rarecase. One-time easy painting by exclusive painting roller. In order to increase adhesive strength on painting surface of hot-dip galvanizing, optional exclusive primer (M-Primer) available.

## NON-SLIP COAT

Contents	5.0kg set(Main agent 4.5kg • Hardender 0.5kg)
Color	Gray • Green • Yellow
Mixing ratio	Main agent : Hardender = 9 : 1
Type	Low viscosity paste
Fire resistance	V-0
Coatable area	2~2.5m <sup>2</sup>
Curing time	24hours(walking) • 72hours(Vehicle traffic)

\*Test result data based on our testing procedures.  
Your using condition is beyond our jurisdiction.

	NON-SLIP COAT	PAINT+ GRINDING STONE	NON-SLIP TAPE
Anti-slip	Excellent	Poor	Good
Operability	Excellent	Poor	Good
Fire resistance	Excellent	Poor	Poor
Wear resistance	Excellent	Poor	Poor
Corrosion resistance	Excellent	Very Good	Poor
Off limit period	1Day	2Day	0Day
Actual heat resisting temp.	Excellent	Poor	Good



## Usage

- PCC, ladder, stair, etc.
- Rampway of Ro-Ro ferry.
- Slippery area due to water, oil, etc.
- Top board of dangerous / non-dangerous tank, stairs, dike, etc.
- Stairs, passage, lift car path, truck yard around factory and office area.  
(Also for surface protection purpose)

### Exclusive Primer (Optional)

- M-Primer (1-Liquid type) : NET 1kg (Painting area 8m<sup>2</sup>~10m<sup>2</sup>)

### Exclusive roller for Non-Slip Coat (Optional)

- Paper tube roller (standard) : 100mm×Φ38mm×3pcs/bag  
200mm×Φ38mm×2pcs/bag
- Paper tube roller (for checkered plat) : 100mm×Φ38mm×2pcs/bag  
230mm×Φ38mm×2pcs/bag

### Notes of base material

- Please ask before painting on special base material, such as "Color-crete", "Chemi-crete", or dust-proof coating. It peels when paint on such special base materials directly.
- Surface have to be polished by #40 sandpaper when painting on FRP.
- Please ask before painting on large content of glass components surface, such as granite.
- Be aware of dew drop when painting on metals in humid or winter season.
- Not adhesive on glass, silicone, and thermoplastic materials.

## CAUTION

Refer and follow the guidance on the SDS for health cautions.

Strongly prevent iron corrosion!

# SELECT COAT-SABI CHANGE

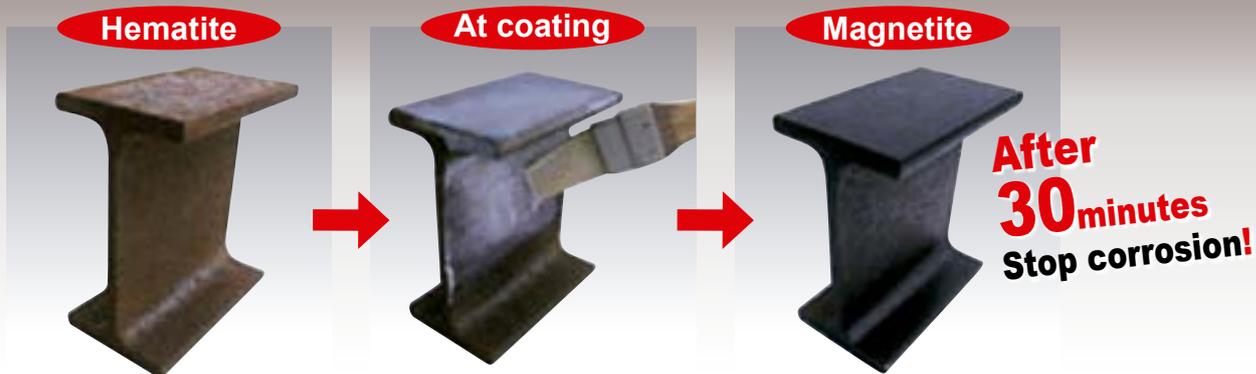
**Rust conversion agent**



Stop corrosion by chemical change!



It's more powerful than rust preventive paint.



**Red rust (hematite) turns into black rust (magnetite)**  
**Strongly prevent iron corrosion!**

**Are you troubled with rust ?** •Deck•Handrail•Piping•Valve  
•Flange•Tank•Machine tool

**Easy to prevent rust!**

**AQUEOUS PAINT**



## SELECT COAT - SABI CHANGE

Material	Aqueous silicone acrylic resin paint	
Contents	1kg	16kg
Surface Preparation	SP3 / Hand tool cleaning (Keep red rust)	
Application	2~3Layers	
Coating Method	Brush or Spray coating	
Qty for application	150~200g/m <sup>2</sup> /Layers	
Painting interval	2~3hours	
Drying time	3~4hours(20°C)	
Temperature	130°C	
JAN code	4560361000287	4560361000508

- Agitate this paint thoroughly before painting.
- Make sure there is no uncoated area.
- In coastal areas or salt damage environments, 3 layers coating is recommended.
- To keep a stable rust preventive effect, must overpaint on it.
- Recommend to overpaint on this paint after 24hrs if the medium is strong.
- It's easy to clean a brush after painting for aqueous paint.
- If water is applied on this paint before drying, it may become white as other aqueous paints. Pay attention to the weather and its surroundings so that it will not be exposed to water during painting.

**Hand tool cleaning (SP3) is enough for the surface preparation !**

**How to use**

**No fire work required !**



Apply SABI Change after the surface preparation (SP3).



Turn into black rust about 30 mins.  
※Drying time 3~4hrs



After drying, overpaint with general paint.



Stainless coat (Spray type)

# Just spraying will be stainless steel! STAINLESS COAT

Stainless steel paint

## Just applying ! SUS316-L Coating !

Deck, Funnel, Cable tray

Piping, Valve, Flange

Bolt, Nut, Air vent

**Long Life**



**Anti-corrosion**

**Anti-rust**

**Weatherability**

### ■ SPRAY TYPE



**650°C**  
for Funnel  
Exh.gas piping

#### Standard / PU Type

It is a long-term exposure type that exerts excellent effects on rust prevention and corrosion protection in the atmosphere such as corrosive gas and sea breeze.

#### Super Bright / SB Type

The color tone is bright, and mirror finish is possible by polishing after hardening. With the same finish as stainless steel material, it is also ideal for repairing weld burnign of stainless steel.

#### High Temp. / SIL Type

It has heat resistance up to 650°C and can be used mainly for high temperature exhaust gas piping and such as boiler and incinerator, funnel.

### STAINLESS COAT/SPRAY TYPE

	PU-200A	SB-200A	SIL-200A
Material	SUS316-L, Pigment		
Pencil hardness	6H		
Flexibility	2mm 180°		
Contents	200mL		
Temperature	-50~110°C	-40~110°C	-62~650°C

### ■ BRUSH ROLLER TYPE

Spray guns can also be used !



Standard /PU Type

Super Bright /SB Type

High Temp. /SIL Type

Heavy-duty Anti-corrosion EP Type

Type	Contents
PU, SB, SIL	1L, 4L, 18L
EP	2L, 8L, 36L
Primer*	5K, 10K, 20K

\*Agitate this paint thoroughly before painting.

### ■ PUTTY TYPE

**SUS316-L main component High-performance putty**



Forming repair of chip, gall and II and erosion for metal and casting.



### STAINLESS COAT/PUTTY TYPE

Material	SUS316-L, Epoxy hardener
Curing time	24hrs
Temperature	-50~200°C
Contents	900g

\*Since each type does not contain any harmful substances, it can be used for any material.

**No Need !  
Asid Picking**

Weld burning of stainless steel >>> just coating with **STAINLESS COAT**

BEFORE



Weld burning

**Easy Finish !**

AFTER



Stainless coating

\*Super bright /SB type is used.

# Resist chemicals, heat, oil WONDER COAT

EXP: 1 YEARS FROM  
MANUFACTURING DATE

## Fluorolymer coating



# Wonder Coat FC-700

ワンダーコートシリーズ

フッ素樹脂系コーティング材料

**Max. Temperature 250°C**

**High Chemical Resistance**

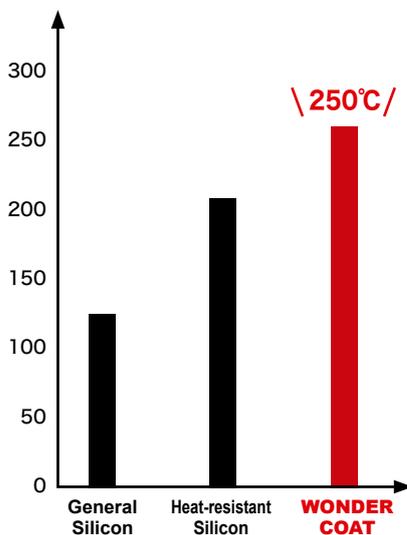
**Fuel Oil & Gasoline**

This coating compound with fluoro-resin is high-performance and resistant to chemicals, heat, oil, and insulation. It can be used for caulking, sealing, coating, and lasts a long time in harsh environments. It does not contain silicone resin or generate siloxane gas. It has no odor and can be applied safely.

### Usage

- ◆ Exhaust ducts
- ◆ Pipe flanges
- ◆ Drainage channels.
- ◆ Areas requiring acid & alkali resistance
- ◆ Areas requiring heat resistance
- ◆ Chemical pipes without pressure
- ◆ Areas where oxygen or oil liquids are used
- ◆ Electronic parts

### Heat Resistance



### ◆General Properties

Color	White/Gray
Specific	1.3
Viscosity (25°C)	250,000mPa·S
Non-volatile matter	65%
Solvents	MEK
Tack free (25°C)	5~10 minutes
Curing time (25°C)	24 hours
Full curing time (25°C)	2~3 days

### ◆Chemical Resistance / Oil Resistance

Sodium hydroxide (30%)	○
Hydrogen chloride (30%)	○
Sulfuric acid	○
Nitric acid (60%)	○
Acetic acid	×
Kerosene	○
Gasoline	○
Heavy oil	○
Light oil	○

\*Volume change rate for immersion time 7 days at room temp.  
○ : 0~5%    × : 30%~

### How to use

1. Clean the surface you're applying to.
2. For cartridges, cut the cartridge gun to the right width, break the aluminum film with a screwdriver, and set the cartridge gun in place.
3. Apply the coating at the same thickness as the nozzle to prevent air from entering.
4. Don't move until it cure.

### ⚠ CAUTION

●Do not use the product for any purpose other than its intended use. ●Ensure good ventilation when working. ●Avoid skin contact when handling. Wear protective mask, goggles, gloves, etc. as necessary. ●In case of eye contact, rinse immediately with water. ●If irritation occurs, discontinue use immediately and seek medical attention. ●For tube type, close cap tightly after use. ●Do not store at high temperatures or in direct sunlight. ●Use as soon as possible after opening the container. ●Store in a safe place out of the reach of children and infants. ●Dispose of in accordance with applicable laws and regulations.

EXP: 1 YEARS FROM  
MANUFACTURING DATE

DRINKING  
WATER LINE  
OK!

Fast & strong adhesion  
**MIRACLE 5**

Multipurpose elastic adhesive



HT-BOND ミラクルシリーズ

**MIRACLE 5**

速乾強力接着・初期接着大・環境にやさしい

**Shockproof**

**Heatproof**

**Waterproof**

## ELASTIC ADHESIVE

Elastic bonding absorbs shock and vibration. It is also resistant to temperature changes and waterproof. The paste form is also suitable for construction of uneven surfaces. Bonds to a variety of materials including concrete, tile, slate, aluminum and other metals, rigid PVC, ABS, FRP, iron and stainless steel.

## FAST&STRONG

"Miracle 5" is one-component and dries quickly. There is no need to weigh or mix the main and hardener.

## Usage

"Miracle 5" can be used in combination with various other applications such as bonding, waterproofing, caulking, repairing, sealing, etc. with just this one.

### ADHESION

- Saddle bands, leveling bands and other metal support fittings
- Waterproof surfaces and roof surfaces where fasteners cannot be used
- Use in conjunction with screws
- Waterproof ALC, thin walls and other areas where screws cannot be used
- Outdoor unit racks, solar racks, etc.
- Waterproof fixing of wheel stops
- Kitchen panels
- Decorative mirrors
- Tiles and sanitary ware

### REPAIR

- Cracks and joints in drainage PVC pipes
- Concrete racks
- FRP and stainless steel tanks
- Grease traps
- Roof sections

### WATERPROOF, CAULKING

- Gaps around pipes
- Around drain
- P-Con and FRP tanks
- Sealing waterproofing terminal treatment
- Waterproofing of insulation
- Leakage prevention around electrical equipment
- Caulking of concrete cracks

### SEALING

- Seal for screw piping
- Fixing of bolts
- Drainage PVC pipe
- Between metal and resin

### ◆General Properties

Color	White / Gray
Material	Modified urethane
Viscosity(Pa·S/23°C)	400±100(10rpm/min)
Specific	1.4 ± 0.05

### ◆Curing Time

Pot life	2 minutes after applying
Tak free	3~10 minutes
Curing time	20 minutes
Full curing time	1 day

### ◆Properties after Curing

50% Modulus(N/mm <sup>2</sup> )	1.34
100% Modulus(N/mm <sup>2</sup> )	1.79
Tensile Strength(N/mm <sup>2</sup> )	2.19
Elongation(%)	183
Temperature	-60~85°C

\*JIS6251 Tensile speed: 50 mm /min

### ◆Tensile Shear Strength

	Tensile shear strength
Stainless	2.7MPa
Aluminum	3.6MPa
Copper	2.8MPa
Mild Steel	3.4MPa
Brass	3.6MPa
Hard PVC	2.8MPa
Zinc-plated Steel	3.7MPa
ABS	2.1MPa
Polycarbonate	2.7MPa
Acrylic Resin	2.7MPa
FRP	3.5MPa

Great adhesion

# HT-BOND 777

2-components, fast-drying acrylic

DRINKING  
WATER LINE  
OK!

EXP: 1 YEARS FROM  
MANUFACTURING DATE



STRONG! FAST! RELIABLE!

# HT-Bond 777

MULTIPLE APPLICATIONS

## Welding-Like Adhesion for Metal Mastery

Two-component adhesive with strong bonding strength. It has a low odour and high safety profile and can be used on metals, wood and concrete. After curing, it has high strength and elasticity, making it resistant to impact. It can also be slightly oiled.

### BONDING METALS

Some metals, like iron, stainless steel, aluminium and copper, can be bonded together. Different metals can stick together.

### WELDING SUBSTITUTUTE

Useful in small spaces where welding is difficult or where temperature changes should be avoided. It lets you work safely without firearms.

### SEALING SCREWS

The product prevents screws from loosening or falling out. Seals screws used in areas with impact and vibration.

### EMERGENCY REPAIR FOR PIPES

SDries quickly, so you can repair cracks and pinholes instantly. The product is water-quality tested, so it can also repair water pipes.

### JOINT COPPER PIPES

Joining copper pipes used for refrigerant piping.

### HT-Bond 777

Material	2-component liquid acrylic
Temperature	150°C
Curing time	15 minutes (25°C)
Tensile shear strength	150-250kg/cm <sup>2</sup>

#### ◆Adhesive Strength

	Tensile shear strength
iron	260kg/cm <sup>2</sup>
Stainless	162kg/cm <sup>2</sup>
Brass	140kg/cm <sup>2</sup>
Copper	121kg/cm <sup>2</sup>
Aluminum	136kg/cm <sup>2</sup>
Chromium Plating	129kg/cm <sup>2</sup>
Zinc Plating	192kg/cm <sup>2</sup>
FRP	71kg/cm <sup>2</sup>

\*Measured after curing for 24 hours at 25°C with this product.

#### ◆Oil-Contaminated Surface Adhesion

	Tensile shear strength
Cutting oil	195kg/cm <sup>2</sup>
Gear oil	190kg/cm <sup>2</sup>
Anti-rust oil	215kg/cm <sup>2</sup>
Grease	180kg/cm <sup>2</sup>
Silicone oil	215kg/cm <sup>2</sup>
Spindle oil	180kg/cm <sup>2</sup>

\*Measured by bonding steel plates contaminated with approx. 10g/m<sup>2</sup> of each oil.

### How to use

1. Clean any dirt, oil, or moisture on the surface.
2. Mix A and B together in equal amounts. Make sure the mixture is uniform in color and condition.  
\*It dries fast, so mix only the necessary amount.
3. Apply evenly to the dried surface.
4. Allow to rest until fully cured.

EXP: 1 YEARS FROM  
MANUFACTURING DATE

# Strong & fast TOUGH RUBBER PUTTY NEO

2-components urethane

## Repair Damaged Rubber Back to Original-Form

### Applications

- Repair rubber parts like conveyor belts and bellows.
- Restoring airtightness of butterfly valves and manholes.
- Leakage repair of vibrating pipes, flanges, boxes, etc.
- Preventing noise from metal collisions.
- Protection of surfaces exposed to collisions.
- Adhesion between rubber materials.

This repair compound adheres to metal and rubber. When cured, it becomes a tough, elongated, rubber-like material with excellent impact and abrasion resistance. Because it is in paste form, it can be used on vertical surfaces.

### TUGH RUBBER PUTTY NEO

Mixing ratio	9 : 1	
Color	Base resin : Transparent yellow Hardener : Black	After mixing : Black
Viscosity	Base resin : 20,000~20,040mPa·s Hardener : 200~240mPa·s	
Pot life	6~9 minutes	300g , 25°C
Tack-free	30~40 minutes	Thickness : 5mm, 25°C
Curing time	7~10 minutes	Thickness : 5mm, 25°C
Specific	1.02	
hardness	shore A 80	JIS K 7215
Tensile strength	10~14 MPa	JIS K 7213
Elongation	400~450 %	JIS K 7213
Tear strength	52~59 N/mm	JIS K 7213
Tensile shore strength	Cohesive Failure : 6.2MPa Adhesive Failure : 0.6MPa	SPCC Rubber for conveyor belts
Temperature	80°C	
Coatable area	0.118m <sup>2</sup>	
Volume	Base resin : 0.54kg Hardener : 0.06kg	

### Excellent Properties

Provides a highly flexible and durable repair. It is impact resistant and can protect base materials. Also effective in reducing noise and vibration. Heat resistant up to 80°C. Can be used in a variety of environments.

### Multiple Applications

Repair rubber products with wall filler to prolong their life. It's resistant to impact and abrasion and can repair leaks in vibrating equipment. Bonds rubber materials together for flexible repairs.

### Easy and Efficient

It's easy to apply and mix. It can be used on wall surfaces. It cures quickly, so repairs can be made quickly and efficiently. It can be applied evenly to any shape or size.

### How to use

1. Wipe off dirt, oil, and moisture from the surface. Clean the surface until metal and rubber are exposed.
2. Mix the main and hardener 9:1. Make sure the color and condition are uniform. \* **Measurements should be accurate.**
3. Apply evenly to the repaired surface. Adjust thickness as needed.
4. Curing time at 25°C is about 7-10 hours. Heat curing takes about 2.5~3 hours at 60°C.

Repair rubber lining  
inside condenser flange



Repair rubber part of  
butterfly valve



Repair rubber lining of  
circulating water pipe manhole



Repair of conveyor belts for  
coal transport



# EVEN SHIPYARD



***SOLUTION TO TROUBLE  
UNDER THE WARRANTY!***

## WITH INAUGURATION

By equipping it on new ships,  
it supports the crew in maintenance  
and preserving the ship.

## FIRST AID UNTIL DOCKING

By applying suitable first aid,  
it eliminates the need for  
emergency arrangements.

## DAILY TROUBLES

Water, steam, and oil.  
It resolve various troubles  
faced by ship.

**REPAIR ANY POINT OF THE SHIP,  
FROM ENGINE ROOM TO DECK.**

**Your ship's doctor, just like your home doctor.**

There is full after-sales support available;  
Proposal suitable repair materials and methods to resolve trouble that occur on ships.  
Inventory systems to supply repair material for SHIP+AiD.

**SHIP+AiD is not just a first aid kit,**

**it is your vessel's doctor,**

**just like your home doctor.**

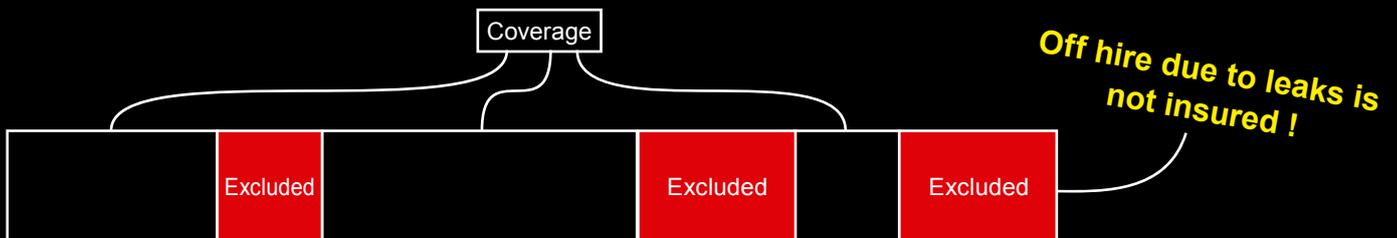
# OFF-HIRE INSURANCE

*Keep voyage going  
Keep loading-unloading safe*

SHIP+AiD is not just a repair kit. It is a comprehensive preventative solution that helps avoid or reduce troubles related to pipe and equipment deterioration issues often excluded from standard H&M insurance policies.

## If you only have M&A Insurance

Usually, H&M insurance coverage begins to apply after a trouble has already occurred. However, aging damages are often excluded and this can result in significant losses if a vessel is forced to stop due to an incident or deficiency.



**Once the vessel is halted, Losses can quickly escalate !**

## After introduced SHIP+AiD

Crew can perform on-the-spot repairs thereby reducing the need for emergency responses to leaks or other malfunctions. This proactive approach helps lower both operating costs and downtime. Furthermore, SHIP+AiD covers incidents commonly excluded from conventional H&M insurance -such as those caused by aging pipes and inadequate maintenancethus minimizing the risk of off-hire events. By bridging these coverage gaps, SHIP+AiD stands as a new type of insurance designed to prevent off-hire issues before they arise.

Coverage

**Exclusions Are Prevented Before They Occur**

**Coverage of SHIP+AiD**

## 《 SHiP+AiD REPAIR AGENT LIST 》

Product name	Page	Model No.	Content / size	SHIN SHiP+AiD Standard	SHIN SHiP+AiD Deluxe <sup>※2</sup>	Num of Orders <sup>※3</sup>	Remarks
RED EPOXY	5	—	Bace resin(Red) 14.8ml Hardener(White) 14.8ml	—	1set		
RAPIDFIX	6	—	Adhesive 10ml Welding Powder 10ml	1set	1set		
RECTOR SEAL	7	EP-200	56g	2pcs	2pcs		
		EP-400	112g	1pc	2pcs		
		EP-200W	56g	—	—		
ARLON TAPE GRAY	8	SRG-2	W 25 × L 2000mm	—	—		
		SRG-5	W 25 × L 5000mm	1pc	1pc		
		SRG-11	W 25 × L 11000mm	—	—		
		SRG-38	W 38 × L 6000mm	1pc	2pcs		
RECTOR HIGH TAPE	9	RH-1	W 25 × L 750mm	1pc	1pc		
		RH-2	W 50 × L 750mm	—	—		
		RH-3	W 50 × L 1500mm	1pc	1pc		
		RH-4	W 75 × L 2700mm	1pc	1pc		
		RH-5	W 100 × L 4500mm	—	1pc		
RECTOR SUN SHEET <sup>※1</sup>	11	UV600	W150 × L220 × T1.5mm	—	1sheet		
LEAKAID	13	LA10G	10g	1pc	1pc		
		LA180G	180g	—	—		
POWER PATCH	14	PA1015	W 100 × L 150mm	—	1sheet		
		PA1030	W 100 × L 300mm	—	—		
RESBOND	16	907GF	112g	1pc	1pc		
AQUA STICK <sup>※1</sup>	17	—	50ml	—	—		
		—	150ml	—	1pc		
UV-LED FLASHLIGHT	12	UVL-2	Type-C	1pc	1pc		
HEAT GUN	5	RHG-1500	1500W 100V 50/60Hz	—	—		

※1 It can not be shipped overseas with other goods due to dangerous goods.

※2 If you are shipping "SHiP+AiD" overseas, replace "SUN SHEET" with "POWER PATCH" and "AQUA STICK" with "RECTOR SEAL".

※3 When restock with the repair agent, please copy the above list and use it as a purchase order form.



Scan the QR code so that you can watch movies which illustrates usage of products.

SHiP+AiD

<https://www.ship-aid.com>

For SHiP+AiD inquiries

# N.Y.CO.,LTD.

MAKE YOUR SHIP ENERGETIC!

<http://www.ny-tokyo.com>