



First-Aid Kit for your Ship

SHiP + AiD®

船の救急箱 シップエイド

Ready for any emergency in this one!

《 Lineup of SHIN SHiP+AiD 》

- **SHIN SHiP+AiD** : Standard model *International shipping is available
- **SHIN SHiP+AiD Deluxe** : For Heavy use, Full set model



※The picture is SHIN SHiP+AiD (Standard model)

ALL IN ONE PACKAGE !!
Anyone can easily and quickly repair ships !

- 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
- Repair of pump casing
- As a reinforcing material to a thinned portion
- Alternative repair at areas that can not be welded
- Repair of expansion joint crack
- Repair piping under pressure

『SHiP+AiD』 supplies you the **SAFETY** & **RELIEF**.

High adhesion & pressure repair agent

RED EPOXY



Red Label



White Label

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 alloys, Carbon steels, Stainless steels, Galvanized surface, PVC, CPVC, ABS, Fiberglass, Black polypropylene, Kyner.

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)

Red Label / Base Resin White Label / Hardener
Epoxy Resin
Content ea. 14.8ml

Approval of Food Sanitation Act No.370/595

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



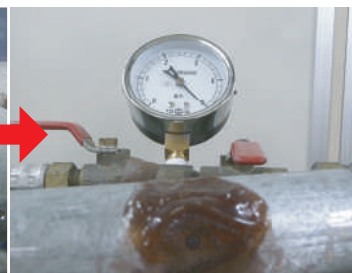
Take the same amount of base resin and hardener.



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



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**

LIQUID

PLUS

POWDER



One set package

10 sets carton



Super Strong

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 ² (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 / frozen storage.

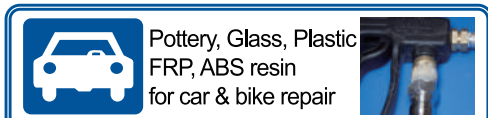
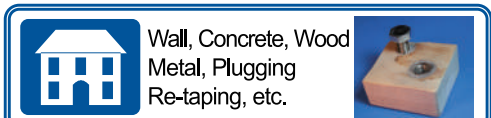
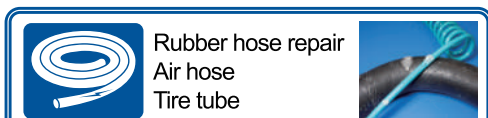
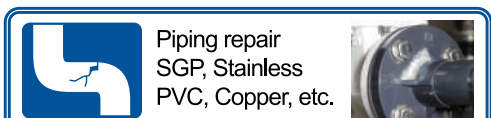
Approval of Food Sanitation Act No.370/595

Approval of ISO 10993-5

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

※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 ×=Non-conformity

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



You can watch the detailed usage
of this product with the video.

www.rapid-fix.com

Please scan the QR code
and go to the maker site.

Epoxy Putty RECTOR SEAL All-purpose putty

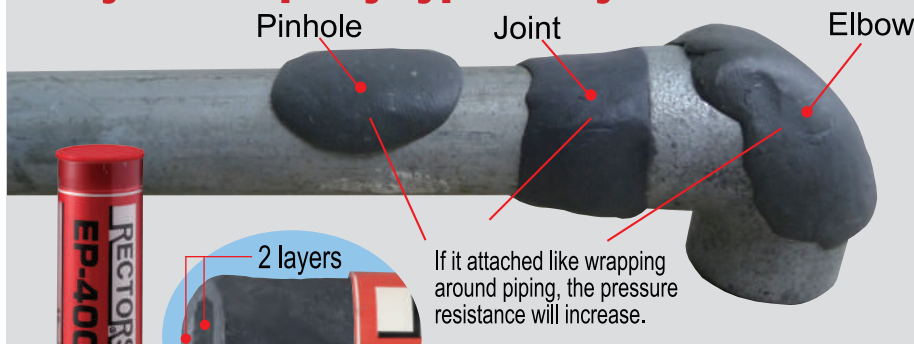
TEMP.
-40~200°C

Tough & Durable !

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

Just cut and knead it

Easy to use putty type everywhere



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)



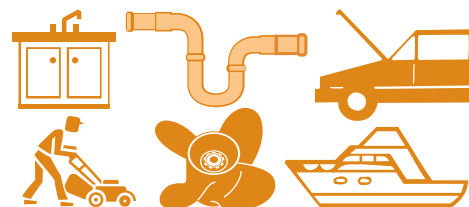
EP-400 (12pcs)

Approval of Food Sanitation Act No.370/20



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)
- ◆ Car (Oil tank, Engine block, Fan, Muffler, Oil pan, Radiator)
- ◆ Shipping (Hull, Piping, Pump casing)
- ◆ Agriculture (Tools, Machinery)
- ◆ DIY (Tile, Wall, Piping, Cabinet, Door)



RECTOR SEAL

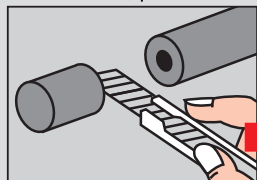
	EP-200	EP-200W	EP-400
Contents	56g	56g	112g
Color	Gray	White	Gray
Material	Epoxy resin		
Hardness	Shore D85		
Temperature	-40~200°C		
Pressure	10kg/cm ²		
Tensile strength	420kg/cm ²		
Compressive strength	1,260kg/cm ²		
Elastic coefficient	6×10 ³ PSI		
Shear strength	49kg/cm ²		
Insulation properties	400Volts/mil 0.125in		
Volume resistance	5×10 ¹⁵ Ω·cm		
JAN code	4560361000010	4560361000034	4560361000041

◆ Chemical resistance
○=Conformity ×=Non-conformity

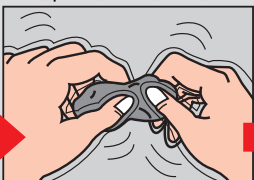
10%Acetic acid	○
2%Nitric acid	○
10%Sulfuric acid	○
10%Hydroacid	○
Acetone	○
Xylol	○
Gasoline	○
Methanol	○
Ethanol	○
10%Hydrochloric acid	○
Caustic soda	○

<How to use>※ Please repair under non-pressure.

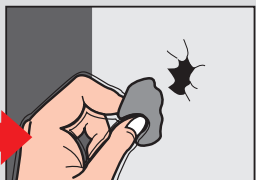
※ First of all, please remove dirt, paint, dust, rust, oil etc. on the adhesion surface.



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)

Self fusing silicon tape ARLON TAPE GRAY

Not slippery in water !

TEMP.
-50~200°C

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.



You can watch the detailed
usage of this product on the video.
Please scan the QR code.

ARLON TAPE GRAY

	Product size	Applicable dia.	Qty	JAN code
SRG-2	W 25 x L 2000mm	Under 50A	24	4560361000331
SRG-5	W 25 x L 5000mm	Under 50A	12	4560361000348
SRG-11	W 25 x L 11000mm	Under 50A	6	4560361000355
SRG-38	W 38 x L 6000mm	Under 100A	8	4560361000362

Material	Silicone rubber
Pressure	1.0MPa
Tensile strength	8.0MPa
Temperature	-50°C ~ 200°C
Coefficient of extension	600%

◆ Chemical resistance
○= Conformity ×= Non-conformity

10%Acetic acid	○
2%Nitric acid	△
10%Sulfuric acid	×
10%Hydracid	○
Acetone	×
Xylol	×
Gasoline	×
Methanol	○
Ethanol	○
Ammonia	△
Antifreeze	○

Approval of Food Sanitation Act No.370/201
Approval of JIS K6353(Rubber for water)
US military standard compliant goods (MIL-46852C)

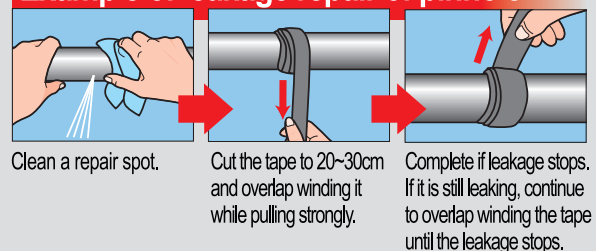
Arlon Tape Gray repair example

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.

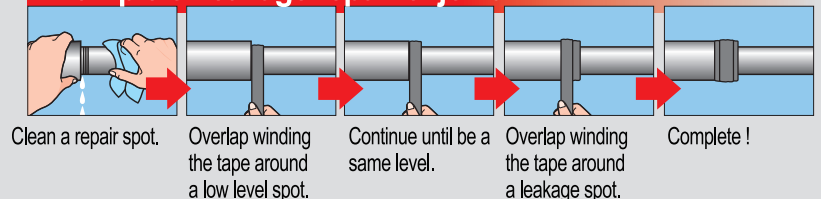
Repeat to wind the tape until stop.

Since it does not adhere to piping, any material can be repaired.

Example of leakage repair of pinhole



Example of leakage repair of joint



- 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

For pipe leakage and breakage

It solidifies like a metal and can be repaired permanently.

**TEMP.
-15~210°C**

**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.

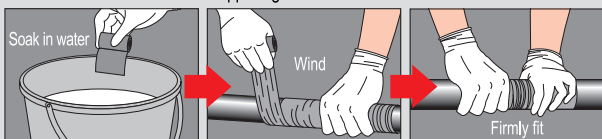
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Approval of EPA601 / Approval of AS4020

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> ※ Please 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.

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



You can watch the detailed usage of this product on the video. Please scan the QR code.

Wet and Wind

- ◆ 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	○

RECTOR HIGH TAPE

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

	RH-1	RH-2	RH-3	RH-4	RH-5
Size(mm)	W25xL750	W50xL750	W50xL1500	W75xL2700	W100xL4500
Applicable dia.	Under 15A	Under 20A	Under 40A	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 ²				
JAN code	4560361000058	4560361000065	4560361000072	4560361000089	456036100009

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

TEMP.
-15~210°C

Only wet and wind
RECTOR QUICK TAPE

Harden in 3mins

Significant shortening of construction time for fast fixation!

Strong Bond

DRINKING WATER LINE OK



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.

Approval of Food Sanitation Act No.370/595

Approval of EPA601 / Approval of AS4020

RECTOR QUICK TAPE

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

	QT-1	QT-2	QT-3
Size(mm)	W25xL600	W50xL1200	W75xL2400
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 ² (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	○



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

Wet and Wind

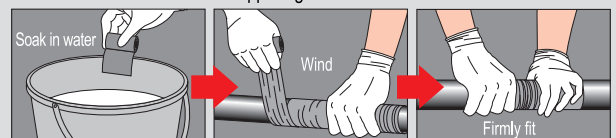
Easy work just to wet & wind

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>※ Please 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.



- Soak the tape in water (sea water/muddy water) for 20 ~ 30 seconds.
- Wind strongly while pulling the tape, and use up all the tape.
- Fit in piping to squeeze the tape, and don't allow air to enter without gaps.
- Bubbles come up from the tape after a while, keep making the tape fit in piping due to loose the tape during bubbling (It fixes in 3mins). It hardens in 20mins 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 Quick Tape for additional strength.
- Cover Arlon Tape by Quick Tape for protection.

UV curing repair material RECTOR SUN SHEET

FRP Sheet



Just cut & paste it in 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)**

PIPING



ROOF



TANK



OUT DOOR



SHIP



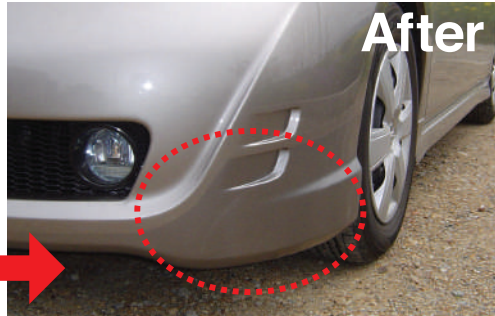
SLIDER



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.

RECTOR SUN SHEET UV600

Material	Glass fiber UV curable epoxy acrylate resin	
Size(mm)	150×220	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 ²
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.



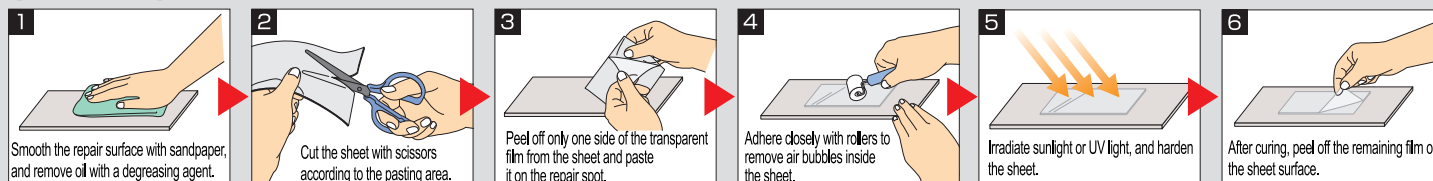
Other Uses

- Piping repair
- Sewer pipe welding reinforcement
- Steel, copper, stainless
- Air conditioning equipment
- Emergency repair of ships
- Repair of outdoor equipment (FRP boat / PWC / Fishing rod)

※ Usage prohibited

- Polyethylene
- Polypropylene
- Polycarbonate

<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.



Uni Solar Hard

UV curing repair material

UNI SOLAR

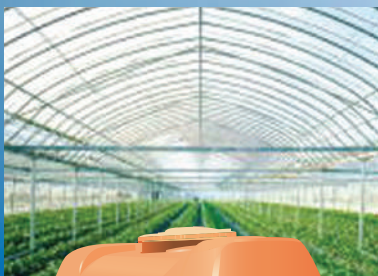
Gel type

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.



100g



100g



Uni Solar Soft for soft materials such as PE tanks.

UNI SOLAR SOFT

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

UNI SOLAR HARD

GEL TYPE

UNI SOLAR

	Soft	Hard
Material	UV curable epoxy acrylate resin	
Tensile coefficient	4.6×10 ⁵ psi	
Extension rate	5-6%	
Bending strength	1,540kg/cm ²	
Bending coefficient	4.9×10 ⁵ psi	
Compressive strength	2,240kg/cm ²	
Deformation temp.	105°C	
Hardness	Barcol 35	
Permittivity	3.38	
Shear strength	304 stainless 800 psi	
JAN code	4560361000188	456036100 0195

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.

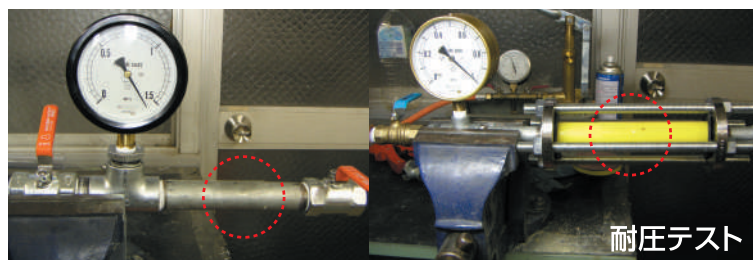
<How to use>

- 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 a industrial alcohol.



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

Work in indoors or place

where ultraviolet does not hit

365nm UV light is cured SUN SHEET & UNI SOLAR quickly.

You can use it anywhere for portable flashlight type.



UV-LED FLASHLIGHT

Battery	AAA x 3pcs
Voltage	5V
Wavelength	365nm
JAN code	4589874320040



UV curing type leakage repair material

LEAKAID



MAIN FEATURES

- ① Lipophilic before hardening, oil resistant after curing !
- ② Harden in 1 second with UV ray, slow leakage can be cured even it's leaking
- ③ No drop on vertical surface, gap can be filled
- ④ 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!

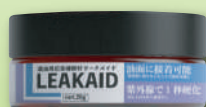
► Valuable size **200g**

P/No.: LL-200-LA200G



► Entry model **20g**

P/No.: LL-200-LA20G



Adhesive property (with #1000 surface preparation)

	EXCELLENT	Stainless, Iron, Acrylic, Glass, Brass, Aluminum, Copper, etc..
	GOOD	PP, PT etc.
	POOR	Silicon, Teflon, etc.

*Depends on material

Durability

- Mineral Oil : Good!
- Synthetic Oil : Depends on its component

UV-LED flash light

5W/365nm, AAA type x 3 batteries

*Flash light is included in SHiP+AiD standard and Delux



<DEMO MOVIE>
<https://vimeo.com/374886073>
Password : LLJ1
(all capital letters)



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/cm²
TEMP. -17~170°C

for PIPE repairing !



Overlap winding !



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 temporarily repair work and long term use. **Saving your time and cost !**

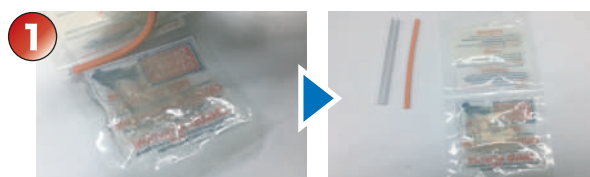
Kit List

● Fiberglass tape ● Rubber Glove

* Working Glove is not including, please prepare by your side.

	PA1015	PA1030
Size	100×150mm	100×300mm
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 2900Mpa 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 on page 3, 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.

* Possible to put as double-folding for more pressure and tough use.
* Color turns to light-yellow after few days.

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



For repairing the high temp. flange surface

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

Lab-metal (Standard)

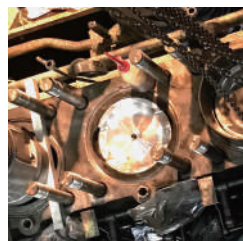
Harden like a metal Cont. service temp. **537°C**

**Single component aluminum 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.)

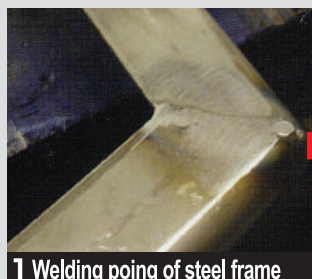
LAB-METAL

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

※ Curing time 24hrs



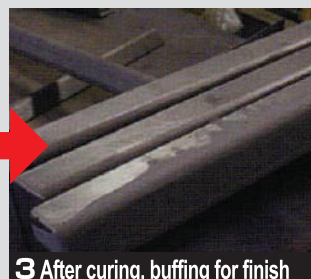
Lab-metal (Hi-Temp)



1 Welding point of steel frame



2 Dilute and apply it with brush



3 After curing, buffing for finish



4 Electrostatic coating is possible



High Temperature putty

RESBOND

Ceramic putty

〈WATER SOLUBILITY〉

Stop the high temp. gas leak !



**Easy-to-use for
dispenser 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.)
Compressive strength	105kg/cm ²
Expansion rate	5%
Permittivity	3.0 (at 10 ³ cps)
Volume resistance	10 ¹² Ω·cm
Insulation properties	145 volts/mil
Heat conductivity	6.0 (at 260°C)
Shrinkage ratio	2%
Contents	112g

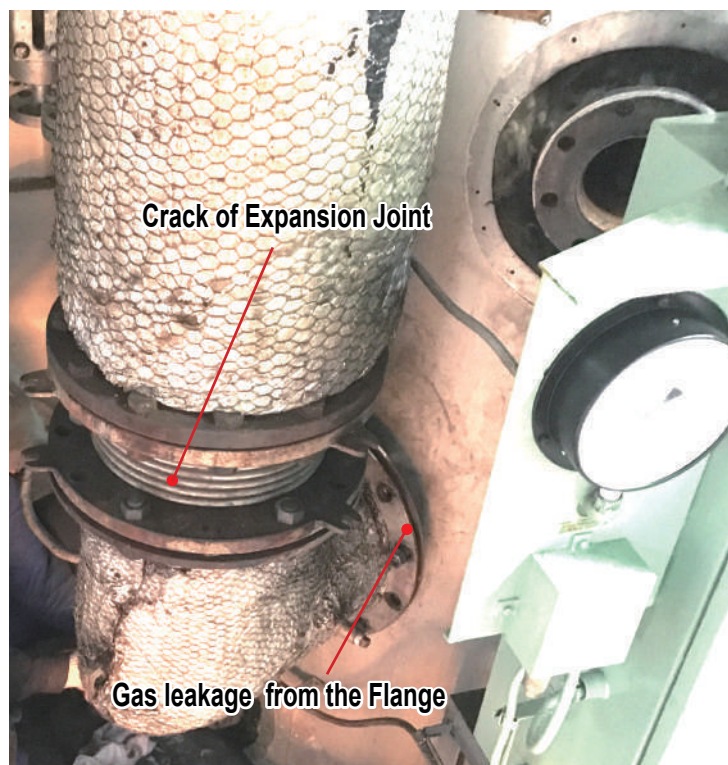
※ Curing time 24hrs

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.



Breakage of Refractory



Crack of Expansion Joint

Gas leakage from the Flange



AQUA STICK



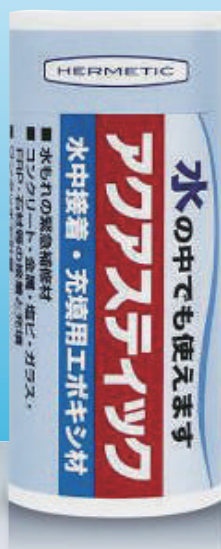
Bondable, fillable for both "underwater" & "wet surface"

Compliant to
Water Quality
Criteria

AQUA STICK

DRINKING
WATER LINE
OK

Built-in type underwater forming epoxy resin filling adhesive material



underwater adhesive
No.1 Effect



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



150cc
(12pcs/case)

50cc / Blister Pack
(10pcs/case)

Usage of AQUA STICK

Various metals

Concrete, FRP, and Vinyl Chloride, etc.

*surface preparation needed for stainless

How to use AQUA STICK

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



Take out from bottom and cut in round slice.



Squash material by spatula or trowel



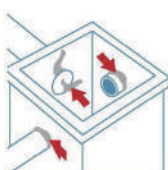
Mix until the color turns to uniform milky-white.



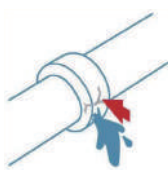
Paste like wiping and hold until harden.



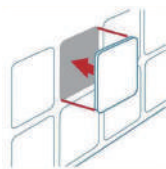
Pipe leakage
Repairing



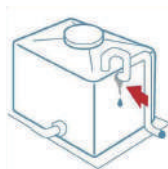
Catch-basin
Repairing



Hume pipes
Repairing



Tiles
Bonding



Tanks
Repairing



Ceramics
Bonding

Hardening Time	60~180 min.[25℃]	Main Agent	Hardener
Heatproof Temp.	56℃	Shape	Stick
Compressive Strength	920kgf/cm ²	Specific gravity	1.16 1.10
Tensile strength	650kgf/cm ²	Appearance	Clear Milky-White
Bending strength	1,120kgf/cm ²	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.



Watch your steps

Non-slip 2 components type lining material

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

*Below illustration omits procedures of "1.SURFACE PREPARATION, 2.PASTING MASKING TAPE, 3.STIRRING"



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



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



Use the special made roller for rough-patterning.



Wait to be harden

**5.0kgs set**

- Main agent 4.5kgs
- Hardener 0.5kgs

•COLOR

- Gray
- Green
- Yellow

•Exclusive Primer (Optional)

M-Primer (1-Liquid type) NET 1kg (Painting area 8 m² ~ 10 m²)

•Exclusive roller for Non-Slip Coat (Optional)

Paper tube roller (standard) : 100mm×Φ38mm× 3 pcs/bag
200mm×Φ38mm× 2 pcs/bag

Short bristle roller (for checkered plate) : 100mm×Φ38mm× 2 pcs/bag
230mm×Φ38mm× 2 pcs/bag

Features

- High-performance non-slip effects for the materials which could be a cause of slip, such as water, oil and dust.
- Stick very well with base material and hardly peel off. (Metals, Concrete, Asphalt, etc.)
- 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.
- Having self-extinguishing function, corresponded to the world standard of fire resistance "UL-94 V-0"
- Excellent resistance function of water, chemical, and wearing.

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)

<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.

	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	2Days	0Day
Actual heat resisting temp.	Excellent	Poor	Good

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



1kg/16kg

SELECT COAT - SABI CHANGE

Material	Aqueous silicone acrylic resin paint	
Contents	1 kg	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 ² /Layer	
Painting interval	2~3hours	
Drying time	3~4hours (20°C)	
Temperature	130°C	
JAN code	4560361000287	

- ※ 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.

<How to use> Hand tool cleaning (SP3) is enough for the surface preparation !

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!

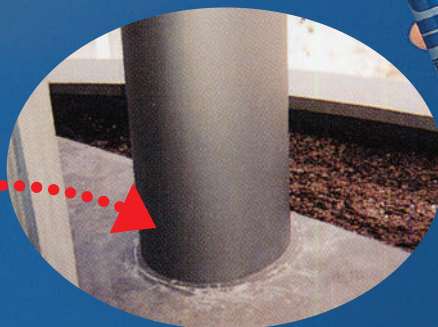
SUS316-L Coating!

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

Protect against
salt corrosion!

■ 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

* We also have the primer coating for Stainless coat.

■ PUTTY TYPE

SUS316-L main component
High-performance putty



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



STAINLESS COAT / PUTTY TYPE

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

* Curing time : 24hrs

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

No Need!
Acid Pickling

Weld burning of stainless steel ▶▶ Just coating with **STAINLESS COAT**

BEFORE

Easy Finish !

AFTER



Weld burning



Stainless coating

* Super bright /SB type is used.

First- Aid kit for your ship

SHIP AID

Repair agent kit

Easy

Quick

Secure



First-Aid Kit for your Ship

SHIP + AiD®

船の救急箱 シップエイド

Ready for any emergency in this one !

Right repair agent on the right repair spot

First-Aid Kit for your Ship SHiP+AiD

Any repair of your ship is made possible with this one!

Let's repair your ship easy & quickly with SHiP+AiD.

You can flexibly use repair agents depending on leakage place, temperature, fluid and pressure. Leaks that could not be stopped with one type of repair agent can also be stopped with combining multiple repair agents!

Usage is infinite depending on your idea !!

“SHiP+AiD” will greatly reduce the work time-consuming to repair than ever before with a simple repair. And surely that to stop the leak, backtracking work, and eliminate repetitive tasks!

《Three 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』 supplies you the **SAFETY** & **RELIEF**.

SHiP+AiD®



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 with this set content is possible.

SHiP+AiD® Deluxe

A deluxe version 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, because some dangerous goods are included.



	SHIN SHiP+AiD Standard	SHIN SHiP+AiD Deluxe
Product Size	W18×L30×H15cm / 1.5kg	W21×L36×H20cm / 3.3kg
Applicable ship type	Merchant ship	Merchant ship
JAN code	4589874320019	4589874320033

*Please select according to your ship

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 pressrue

《SHiP+AiD REPAIR AGENT LIST》

Product name	Page	Model No.	Content / size	SHIN SHiP+AiD Standard	SHIN SHiP+AiD Deluxe	Num of orders※2	Remarks
RED EPOXY	1	—		—	1set		
RAPIDFIX	2	—		1set	1set		
RECTOR SEAL	3	EP-400	112g	1pc	2pcs		
		EP-200	56g	2pcs	2pcs		
		EP-200W	56g	—	—		
ARLON TAPE GRAY	4	SRG-2	W25 x L2000mm	—	—		
		SRG-5	W25 x L5000mm	1pc	1pc		
		SRG-11	W25 x L11000mm	—	—		
		SRG-38	W38 x L6000mm	1pc	2pcs		
RECTOR HIGH TAPE	5	RH-1	W25 x L750mm	1pc	1pc		
		RH-2	W50 x L750mm	—	—		
		RH-3	W50 x L1500mm	1pc	1pc		
		RH-4	W75 x L2700mm	1pc	1pc		
		RH-5	W100 x L4500mm	—	1pc		
SUN SHEET※1	7	UV600	W150 x L220 x T1.5mm	—	1sheet		
LEAKEID	9	—	20g	1pc	1pc		
		—	200g	—	—		
POWER PATCH	10	PA1015	W100 x L150mm	—	1pc		
		PA1030	W100 x L300mm	—	—		
RESBOND	12	907GF	112g	1pc	1pc		
AQUA STICK	13	—	150cc	—	1pc		
		—	50cc	—	—		
UV-LED FLASHLIGHT	8	41LED	5V/365mm AAA x 4pcs	1pc	1pc		
HEAT GUN	1	RHG-1500	1500W 100V 50/60Hz	—	—		

※1 It can not be shipped overseas with other goods due to dangerous goods. Only individual shipment is possible as dangerous goods.

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



You are able to watch movies, which are detailed usage of the product, on the website. Please scan the QR code on the left, and visit to the page.

SHiP+AiD

http://www.ny-tokyo.com/business_guide/shipaid/

For SHiP+AiD inquiries

N.Y.co.,LTD. MAKE YOUR SHIP ENERGETIC !
<http://www.ny-tokyo.com>

For each repair agent inquiries

UNITEC EXPERT OF REPAIR MATERIALS
<http://www.unitec-ltd.jp>