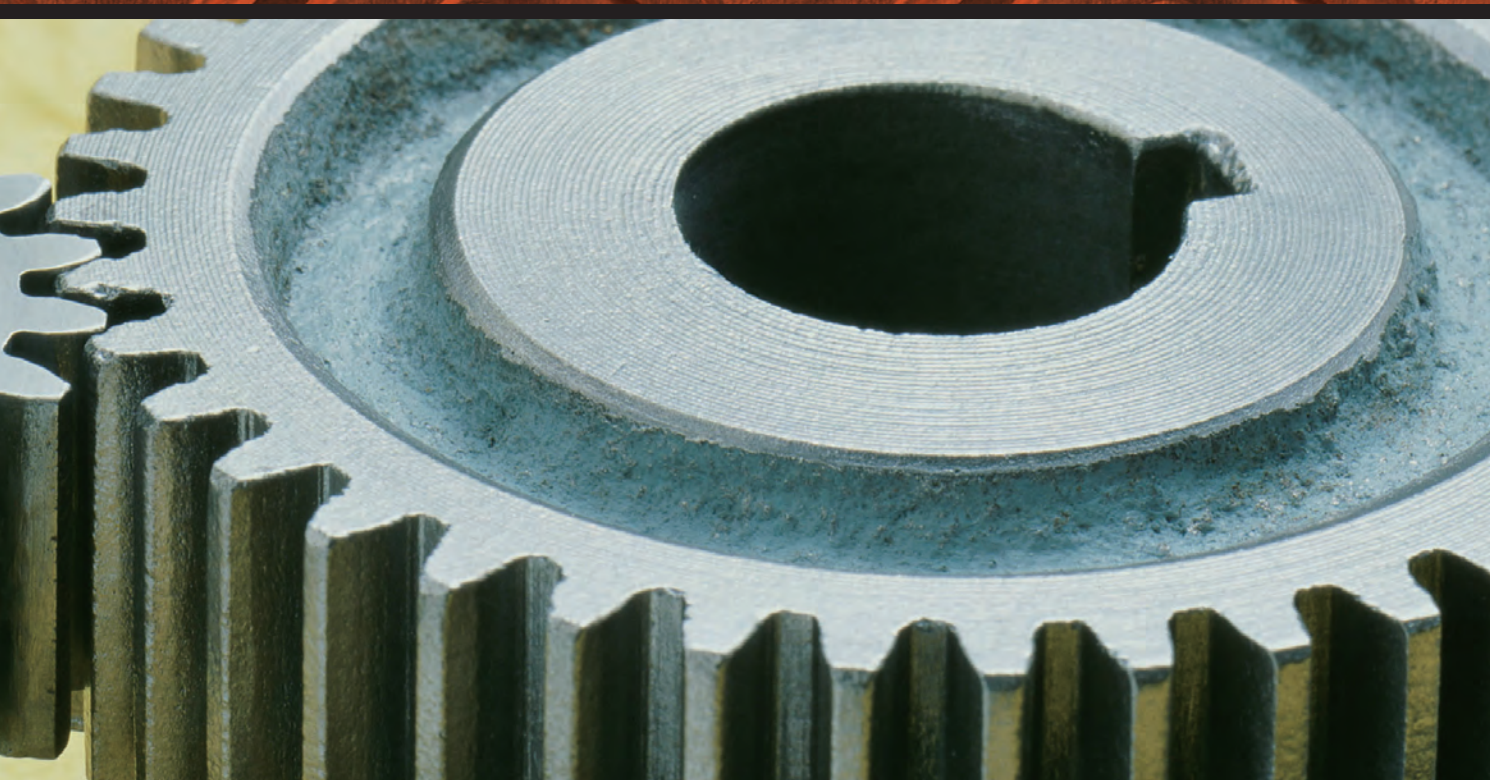


CHEMICALS FOR MAINTENANCE  
OF MACHINERY & EQUIPMENT

**JIP**







# Chemicals for Machinery and Equipment

# Cheng

**Chemicals for Machinery and Equipment**

# for

# Equipment





# CONTENTS

**004 Surface Checking Agent**  
●Invisible flaw detective agent ●Leak inspection agent

**006 Lubricant**  
●Lubricating oil ●Grease  
●Cutting oil ●Biodegradable series

**016 Food Machinery**  
●Lubricating oil ●Grease ●Others

**018 Anticorrosive / Special Paint**  
●Anticorrosive ●Wax coating ●Anticorrosive vapor  
●Heat resistant paint

**021 Cleaner**  
●Aqueous cleaner ●Solvent based cleaner ●Hand soap

**029 Adhesive**  
●Spray adhesive ●Metal adhesive material

**032 Scribbling Varnish**  
●Blue layout ink ●White-pen spray ●Layout ink remover

**037 Mould Releasing Spray**  
●Silicone Type ●For secondary process ●Fluorine type

**040 One-liquid Zinc-rich Primer Spray**  
●Zinc coat ●Clean Zinc

**042 Stainless Steel Surface Treatment**  
●Stainbrite ●Stainlite

**044 Welding Spatter Antifouling Agent/ Welding Support Product**  
●Klin spatter ●Torch clean ●Others

**048 Groove Antirust Spray**  
●Klin weld YE-F / SE-F

**050 Joining Parts Treatment Agent**  
●Hit Rock B ●Fricup Zn

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Micro Check

Invisible flaw detection agent

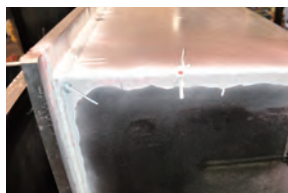
### [Features]

- Micro Check is a one-touch aerosol spray of flaw detection agent which don't require any special equipment to be used.
- Tiny cracks and invisible flaws can be easily and accurately detected.
- It can be used everywhere no matter what material the applied objects are made of or what shapes the applied objects have (expect painted surfaces and plastics).
- Being non-corrosive, it can be safely used to aluminum alloy, magnesium alloy, etc.
- Possible to detect flaws and cracks at 0°C to 80°C.
- The detectability is width 1μm and depth 10μm. (10°C~50°C)

### [Application]

The range of application is limitless; from metals, regardless of whether it is ferrous, nonferrous, magnetic or non-magnetic, to non-metals such as ceramics, glass, etc.

- 1) Cast parts—pin holes, folds due to hot water, cracks due to shrinkage.
- 2) Forged parts—cracks due to forging.
- 3) Welded point—cracks, cavity, and defective joints.
- 4) Metal fatigues—Cracks due to grinding, cracks due to backing, cracks due to cutting tools.
- 5) Leakage—tanks, boilers, pipes and others.
- 6) Seals—test of heat seal packages.



Crack detection test at welded point.



Crack detection test at heat seal package.

### [How to use]

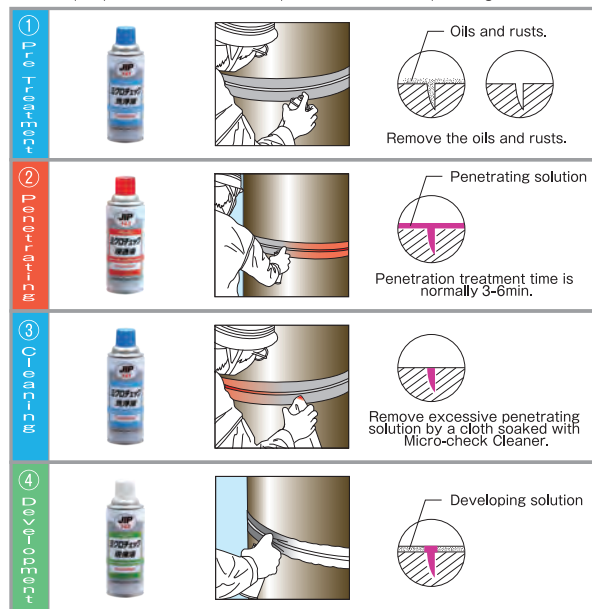
It consists of following four steps

First : Clean the inspecting surface with Micro-check Cleaner

Second : Spray on the inspecting surface with Micro-check Penetration

Third : Remove excessive Micro-check Penetration by a cloth soaked with Micro-check Cleaner.

Fourth : Spray Micro-check Development onto the inspecting surface.



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

### Micro Check Cleaner

PRTR	Toxicity
Not Applicable	Low



#### [Performance]

Outward Appearance	Colorless Transparent Liquid
Applicable temperature	0~60°C

Item No	Product Name	Volumetric capacity•Packing
000141	Micro Check Cleaner	420ml x 24pcs
000142	Micro Check Cleaner 18L	18L x 1can

### Micro Check 6P Set



#### ●Set Contents

- Microcheck Cleaner x 3 pcs
- Microcheck Penetration x 1 pc
- Microcheck Development x 2 pcs

Item No	Product Name	Volumetric capacity•Packing
000147	Micro Check 6P SET	420ml x 24pcs (4boxes x 6pcs)

### Micro Check Penetration

PRTR	Toxicity
Not Applicable	Low



#### [Performance]

Outward Appearance	Red Liquid
Applicable temperature	0~80°C

Item No	Product Name	Volumetric capacity•Packing
000143	Micro Check Penetration	420ml x 24pcs
000144	Micro Check Penetration 18L	18L x 1can

### Micro Check 4P Set



#### ●Set Contents

- Microcheck Cleaner x 2 pcs
- Microcheck Penetration x 1 pc
- Microcheck Development x 1 pc

Item No	Product Name	Volumetric capacity•Packing
000148	Micro Check 4P SET	420ml x 24pcs (6boxes x 4pcs)

### Micro Check Development

PRTR	Toxicity
Not Applicable	Low



#### [Performance]

Outward Appearance (After Dry)	White Powder Coat
Applicable temperature	0~50°C

Item No	Product Name	Volumetric capacity•Packing
000145	Micro Check Development	420ml x 24pcs
000146	Micro Check Development 18L	18L x 1can

### Water Washable Micro Check Penetration 18L

PRTR	Toxicity
Not Applicable	Low



#### ●Removable by water

#### [Performance]

Outward Appearance	Red Liquid
Applicable temperature	0~80°C

Item No	Product Name	Volumetric capacity•Packing
024392	Water Washable Micro Check Penetration 18L	18L x 1pc



# Leak Foamer/NK Foamer

Gas and air leak detection

PRTR  
Not  
Applicable

Toxicity  
Low



## [ Features ]

- Easily detects gas leakage by creating bubble. Bubbling even slight leakage
- Non-flammable and no risk by chemical reactions
- Cleared the JIS-Z2329(Methods for bubble leak testing) foaming at a 30μm hole, under 4-5x103Pa differential pressure.
- Neutral type

## [ Application ]

- Applicable to various gas piping, welded joint part of equipment and connecting parts.
- For detect refrigerant gas leakage from pipe jointing parts of machines such as air-conditioner and refrigerator.
- For detect gas leakage of town gas, propane gas, gas of industrial pipes and containers.
- Gas Leakage check for pneumatic brake piping of automobile.

## [ Performance ]

Outward Appearance	Colorless Transparent Liquid
Applicable temperature	Normal temperature



Bubble Leak Testing (JIS-Z2329)

Item No	Product Name	Volumetric capacity・Packing
025240	Leak Foamer	345g x 24pcs
023362	NK Foamer	15kgs x 1 can

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Water Leak Check

Water leak detection

PRTR  
Not  
Applicable

Toxicity  
Low



## [ Features ]

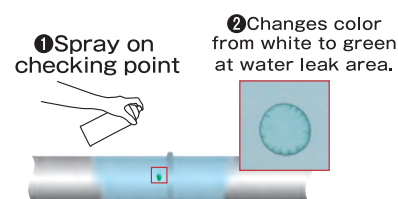
- Easily detects water leakage.
- Change the color of white coat film layer to green, if water is leaking.
- Removable by water

## [ Application ]

- Leak detection for hydraulic test of tanks.
- Leak detection for pipes and containers.

## [ Performance ]

Outward Appearance (after dry)	White Powder Coat
Applicable temperature	0~50°C



Item No	Product Name	Volumetric capacity・Packing
000612	Water Leak Check	420ml x 24pcs

# Oil Leak Check

Oil leak detection

PRTR  
Not  
Applicable

Toxicity  
Low



## [ Features ]

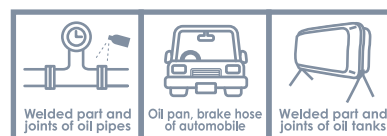
- Easily detects oil leakage by making a visible white color film.
- Absorbing oil, detects oil leakage without pressurization.
- It doesn't soil inside part for the outside application.
- It is possible remove using water

## [ Application ]

- Leak check for welded part or welded joint of various oil pipe. (Rubber hose is also available).
- Applicable to welded part or welded joint of various oil tank.
- Detects oil leaking from joint part of automobile oil pan or brake hose pipe, etc.

## [ Performance ]

Outward Appearance (after dry)	White Powder Coat
Applicable temperature	0~50°C



Item No	Product Name	Volumetric capacity・Packing
000659	Oil Leak Check	150ml x 12pcs



# Super Peneton

Full Penetration - High Pressure Lubricant



## [Features]

- It is a penetrating lubricant that can be used for many purposes such as thread unscrewing, lubrication, rust prevention, etc., emphasizing its excellent permeability compared to conventional lubricants. Makes it easy to replace rusted bolts that are firmly fixed.
- It has excellent pressure performance. Improves lubrication performance by blending with PTFE (fluoroplastic).
- Due to its water displacing properties, it removes moisture and forms a long-term rust-proof film.
- Spraying can be done remotely using spot spraying.
- Can be sprayed 360 degrees, can be upside down to spray

## [Applications]

- Used as a solution for unscrewing, bolts and nuts.
- Lubricates rubbing surfaces of cars, motorcycles, bicycles, etc.
- Prevents rust and lubricates each type of equipment and parts.

## [Performance]

Welding Load	4903N
Copper Strip Corrosion Test	1a (100°C x 1 hr)
Kinematic Viscosity (40°C)	2.02
Operating Temperature	-10~130°C

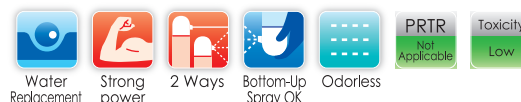


Item No	Product Name	Packing Volume	Packing Quantity
000999	Super Peneton	400 mL	24 Cans (12 Cans x 2 Boxes)

• Class 4 Type of oil Class 2, 400 mL, Hazard level 3

# Peneton A

Rust proof penetrating oil for equipment.



## [Features]

- Without unpleasant smell since it is odorless. Adopts 2-way nozzle, bottom-up spray is available.
- Rust proof effect is higher than other penetrating oil because of improved anti-rust formula.
- Penetrates rapidly into corroded metal surface. Activates on base metal under the rusty layer while lubricating the metal.
- Prevents rusting by water replacement.
- At an amazing speed, loosens binding screws, nuts etc., caused by rust.
- Solve the disconnection problem of electric system caused by moisture.
- Doesn't contain silicone oil.

## [Applications]

- Loosens binding crews, nuts, etc., caused by rust or seizure.
- For anti-rust or lubricating metal ware.

## [Performance]

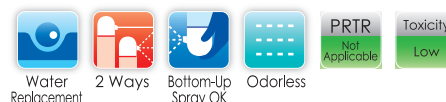
Salt spray test	Over 72 hours
Indoor rust proof	Over 12 months
Weld Load	981N
Heat Resistance	120 °C
Kinematic Viscosity(40°C)	9cSt (for reference only)
Applicable temperature	-10°C~130°C



Item No	Product Name	Volumetric capacity•Packing
000105	Peneton A	420ml x 24pcs
000605	Peneton A 18L	18L x 1can

# PN55

Rust proof penetrating oil for equipment.



## [Features]

- Without unpleasant smell since it is odorless. Adopts 2-way nozzle, bottom-up spray is available.
- Has super high lubricating effect comparing with other products because of PTFE compounded.
- Penetrates rapidly into corroded metal surface. Activates on base metal under the rusty layer while lubricating the metal.
- At an amazing speed, loosens binding screws, nuts etc., caused by rust.
- Prevents rusting by water replacement.
- Doesn't contain silicone oil.

## [Applications]

- Loosens binding crews, nuts, etc., caused by rust or seizure.
- For anti-rust or lubricating metal ware.

## [Performance]

Salt spray test	Over 48 hours
Indoor rust proof	Over 6 months
Weld Load	1570N
Heat Resistance	120 °C
Kinematic Viscosity(40°C)	9cSt (for reference only)
Applicable temperature	-10°C~130°C



Item No	Product Name	Volumetric capacity•Packing
000530	PN55	420ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
MachineryAnticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
VarnishMould  
Releasing  
SprayOne-liquid  
Zinc-rich  
Primer SprayStainless Steel  
Surface  
TreatmentWelding Spatter  
Antifouling Agent  
/Welding Support  
ProductGroove Antirust  
SprayJoining Parts  
Treatment Agent



## Jet Lube

Mucous oil, high grade lubricating and rust preventing agent.



Bottom-Up  
Spray OK



Water  
Replacement



PRTR  
Not  
Applicable



Toxicity  
Low



### [ Features ]

- Provides long term lubricating, rust proof, corrosion proof effect because of strong adhesive properties of lubricating film.
- Long-life lubrication and rust preventing agent with water displacing property, therefore, it forms strong oily film under water even if water covers on the surface.
- Penetrates to narrow openings, doesn't soil surroundings because of little splashing.

### [ Applications ]

- Rust prevention and lubrication for metal ware, precision instruments, tools, moulds and metal work desk.
- For manufacturing processes requiring extreme pressure, such as pressing and drilling works.
- For every kinds of bearings.

### [ Performance ]

Weld Load	1570N
Heat Resistance	120 °C
Kinematic Viscosity(40°C)	140cSt (for reference only)
Applicable temperature	-10°C~150°C



Item No	Product Name	Volumetric capacity・Packing
000031	Jet Lube	300ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Visco-Lube

High extreme-pressure and high-adhesive lubricating agent.



Strong  
power



PRTR  
Not  
Applicable



Toxicity  
Low



### [ Features ]

- The lubricating film, which has strong adhesive, anticorrosive and anti-rust effect, protects the coated surface from water, acid or alkaline atmosphere.
- Strong against extreme-pressures and does not get blackened owing to MCA and BN(white solid lubricating agent) compounded.
- Different from Molybdenum, doesn't contaminate surroundings.
- High adherent with least splashing.

### [ Applications ]

- Used for outer lubrication of heavy load, rotary part of all kind of construction machines and automatic warehouse.
- Applies to open gears, chains and wire ropes.
- Outer lubrication of all kinds of bearings.

### [ Performance ]

Weld Load	1570N
Heat Resistance	300°C (Solid)
Kinematic Viscosity(40°C)	4000cSt (for reference only)
Applicable temperature	-10°C~150°C



Lubricating wire

Item No	Product Name	Volumetric capacity・Packing
000106	Visco-Lube	330ml x 24pcs

## Silicone Sliding Agent

Sliding and polishing agent.



Odorless



PRTR  
Not  
Applicable



Toxicity  
Low



### [ Features ]

- Contains high - penetrating silicone oil that offers quick sliding on complicated shapes of cutters.
- Non-solvent, don't stain fabric nor dissolve plastic.
- Harmless and odorless. Prevents cutters or machines from any rust.

### [ Applications ]

- For all blades, garment cutters, paper cutters, tables for book binding machines, woodworking machines and dry plates of various cutting machines.
- For polishing and sliding of printed materials.
- For lubricating rubber products.
- Coin sliding agent for vending machines.

### [ Performance ]

Applicable temperature	-50°C~200°C
------------------------	-------------



Sliding cutting machine

Item No	Product Name	Volumetric capacity・Packing
000135	Silicone Sliding Agent	420ml x 24pcs



# High-Grade Grease

Long-term lubricating grease



2 Ways



Bottom-Up  
Spray OK



PRTR  
Not  
Applicable



Toxicity  
Low

## [Features]

- By dissolving heat-resistant (200°C), rust-preventing and lubricating grease in gas, penetrates parts quickly and offers long term lubricating effect.

## [Applications]

- Applies to rotating and vibrating parts of motors, chains and gears.
- Applies to rotating and vibrating parts of construction, agricultural machinery and machine tools.
- Stops squeaking noise from shutters, door hinges, chains of bicycles and steel furniture.

## [Performance]

Base Oil	Mineral Oil
Thickening agent	Aluminum complex soap
JIS Category	1
Consistency	about 320
Weld load (WL)	981N
Heat Resistance	200°C
Salt spray test	Over 72 hours
Applicable temperature	-20~200°C



Item No.	Product Name	Volumetric capacity・Packing
000020	High-Grade Grease	300ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Soft Grease Spray

Long term anti-corrosive & lubricating grease



Waterproof



2 Ways



PRTR  
Not  
Applicable



Toxicity  
Low

## [Features]

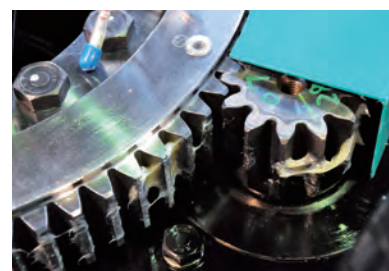
- Superior in rust - proof & water-resistance and keeps long period of lubricant effect.
- With excellent penetrating property, penetrates into narrow openings.
- Almost no foaming and splashing.
- With excellent penetrating and heat-resistant characters.

## [Applications]

- Anti-rust and lubrication for the rotating and vibrating parts of the chains, gears etc.
- Applies to rotating and vibrating places where probably moistened by water, vapor and seawater; and to the places where lubricating and penetrating required at high temperature.
- Stops squeaking noise from shutters, door hinges, chains of bicycles and steel furniture.

## [Performance]

Base Oil	Mineral Oil
Thickening agent	Special complex soap
JIS Category	1
Consistency	about 330
Weld load (WL)	1961N
Heat Resistance	200°C
Salt spray test	Over 500 hours
Applicable temperature	-20~170°C



Item No.	Product Name	Volumetric capacity・Packing
000109	Soft Grease Spray	300ml x 24pcs

# Chain Grease

White penetrating grease (compounded with white solid lubricant)

## [Features]

- Containing white solid lubricating agent with strong abrasion resistance and noise reduction effects.
- Super high - grade adhesive, waterproofing, acid & alkali resistance.
- This grease, which has excellent penetrating performance, spreads to any complicated places.
- Strong against corrosion.
- No performance reduction under water splashing conditions.
- Do not have any effect on O-Ring, such as seal chain.
- High adherent with least splashing.

## [Applications]

- Applies to open gears, guide rail, slide rail, wire rope, crane wire, gear coupling, motorcycle and chains.
- As a lubricating agent for the components where penetrating and waterproofing are necessary.
- Applies to narrow openings.
- Spray to the places where scattering or grease trickling is in question.

## [Performance]

Base Oil	Mineral Oil
Thickening agent	Lithium soap
JIS Category	0
Consistency	About 370
Weld load (WL)	1961N
Heat Resistance	100 °C
Salt spray test	Over 120 hours
Applicable temperature	-15~120°C



Waterproof



2 Ways



Bottom-Up  
Spray OK



PRTR  
Not  
Applicable



Toxicity  
Low



Grease up of open-chain where scattering is avoided

Item No.	Product Name	Volumetric capacity・Packing
00512	Chain Grease	300ml x 24pcs



# Lithium Grease

General purpose grease spray



## [Features]

- Available for Long time application, excellent consistency because of its super mechanical stability.
- Stands up to long time usage, due to its excellent water-proof, anti-rust and oxidization stabilities.

## [Applications]

- Applicable to every kind of wheel bearing, gear and pin.
- Sliding and rolling for every kind of industrial machines, bearings.

## [Performance]

Base Oil	Mineral Oil
Thickening agent	Lithium soap
JIS Category	1
Consistency	323
Weld load (WL)	1236N
Heat Resistance	150°C
Salt spray test	Over 72 hours
Applicable temperature	-20~150°C



Item No	Product Name	Volumetric capacity・Packing
000511	Lithium Grease	420ml x 24pcs

# Silicone Grease / Silicone Grease Spray

Heat resistant, cold resistant & water-proof grease



## [Features]

- Prevents rubber and plastic from wearing off and dwindling down.
- Applicable temperature from -40~180°C.
- Different from common grease, no dripping at high temperature and no hardened at low temperature. Chemically an inert product.

## [Applications]

- Lubrication for Disk Brakes O ring.
- Seals for cup rubber of wheel cylinder.
- Lubrication for wiper motor.
- Lubrication for Clutch・Pilot and Bearing
- Lubricates the bumping point of Back plate and brake shoe
- Lubricates and seals gear vibrating part.
- Anti-rust and water proof for battery terminal connector.

## [Performance]

Base Oil	Silicone Oil
Thickening agent	Lithium soap
JIS Category	2(00025)/1(00026)
Consistency	260(00025)/320(00026)
Weld load (WL)	—
Heat Resistance	180°C
Salt spray test	48 hours
Applicable temperature	-40~180°C



Lubrication of plastic parts

Item No	Product Name	Volumetric capacity・Packing
000025	Silicone Grease	100g x 24pcs
000026	Silicone Grease Spray	220ml x 24pcs

※Not applicable to Silicone Rubber and Nature Rubber.  
※Not applicable to boundary lubrication of steel and steel.

# Damp-Proof Grease for Connector

Damp-proof lubricating grease for couplers



## [Features]

- Lubricating and anti-moisture grease for coupler housing of various machines.
- Makes coupler easy attachable and removable, prevents terminal from damaging by PTFE.
- Prevents coupler from moistening in high humidity environment.
- Improves electrification, recovers electric conduction. Meanwhile, protecting contact point from rusting by its excellent anti-rust property.

## [Applications]

- Used as lubricating and moisture proof agent for coupler and terminal.
- Rust and moisture proof from the reverse side of solderless terminal.
- Lubricating and anti-moisture for coupler of automobile, vessels and various machines.

## [Performance]

Base Oil	Synthetic oil
Thickening agent	Lithium soap
JIS Category	2
Consistency	about 290
Weld load (WL)	1236N
Heat Resistance	150°C
Salt spray test	over 120 hours
Applicable temperature	-55~130°C



Item No	Product Name	Volumetric capacity・Packing
000285	Damp-proof Grease for Connector	180ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent



# Moly-Attack

High concentration molybdenum disulfide paste spray



PRTR  
Applicable

Toxicity  
Low



## [ Features ]

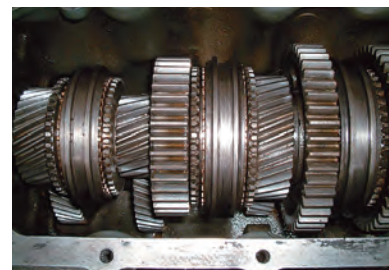
- Forms moist molybdenum disulfide film. Maintains high chemical stability and able to be used in the places immersed in water or organic solvents.
- With extremely low coefficient of friction, from low temperature to high temperature (-30~400°C), keeps high lubricating effect, strong against extreme high pressure.
- Able to be mixed with ordinary lubricating oil to increase lubricity.

## [ Applications ]

- Prevents high - pressure sliding and rotating place from burning, seizure, abrasion and squeaking for machine tools and construction machinery.

## [ Performance ]

Salt spray test	—
Indoor rust proof	—
Weld Load	2452N
Heat Resistance	400 °C
Kinetic Friction Coefficient	0.10
Applicable temperature	-30°C~400°C



Item No	Product Name	Volumetric capacity・Packing
000022	Moly-Attack	300ml x 24pcs

# Anti-Seize Spray

Preventing high temperature screw adhesion

PRTR  
Applicable

Toxicity  
Low



## [ Features ]

- Prevents screw from seizing, sticking and burning under high temperature and high load.
- Prevents parts from damaging.
- Temperature range : -40~1,200°C
- With rust-proof effect.(indoor rust proof).Keeps high performance for long period.
- With lubricity, screw can be easily detached.

## [ Applications ]

- Prevents machine screw, bolt or nut used for high temperature blast furnace or quenching furnaces from seizing, sticking and burning.

## [ Performance ]

Salt spray test	Over 120 hours
Indoor rust proof	Over 1 Year
Weld Load	2452N
Heat Resistance	1,200 °C
Kinetic Friction Coefficient	—
Applicable temperature	-40°C~1,200°C



Item No	Product Name	Volumetric capacity・Packing
000199	Anti-Seize Spray	300ml x 24pcs

# Dry Lubricant

Dry film lubricating agent "PTFE" dispersion type



PRTR  
Not Applicable



## [ Features ]

- Not sticky. Dry film(PTFE Powders), dust is not attachable.
- Most suitable for the plastic part lubricating.
- Stops v - belt squeaking noise.

## [ Applications ]

- Stops squeaking noise of V-Belt.
- Lubrication for door locks, hinges, chains, etc.
- Lubrication for oil seal and rubber hose jointing.

## [ Performance ]

Heat Resistance	250°C
Kinetic Friction Coefficient	0.04~0.07
Applicable temperature	Below 250°C



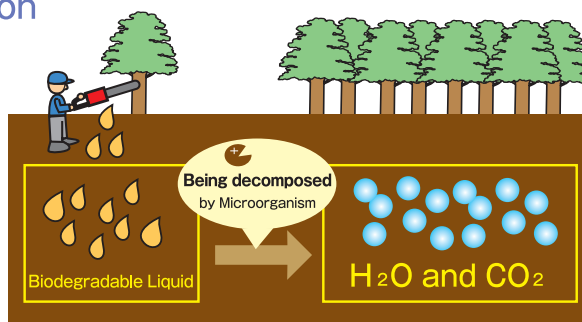
Item No	Product Name	Volumetric capacity・Packing
000186	Dry Lubricant	65ml x 48pcs



# Biodegradable Chemicals

Biodegradable products are suitable to be used at environment conservation areas (forests·farm·river, etc)

Organic chemical substances contained in the solvent are decomposed into H<sub>2</sub>O and CO<sub>2</sub> by Microorganism, return to the nature.



※Do not discharge large quantity of oil into nature rashly, please follow the reference law



## Biodegradable Oil Spray-EX

Biodegradable anti-corrosive lubricating oil



### [Features]

- Green product and safe to use since its base oil is Biodegradable Synthetic Ester.
- Biodegradable rate is more than 60% (OECD 301C/28 days).
- Raw material of this product has passed Biodegradable Lubricating Oil Eco Mark Certification Criteria.

### [Applications]

- Loosens binding crews, nuts, etc. caused by rust or seizure.
- Used as rust removing and preventing agent for blades.
- Anti-rust and lubrication for door hinges or chains, etc.



Item No	Product Name	Volumetric capacity•Packing
000820	Biodegradable Oil Spray-EX	420ml x 24pcs

## Biodegradable Grease Spray-EX

Biodegradable anti-corrosive lubricating grease



### [Features]

- Uses Biodegradable Grease, Environment - friendly product.
- Biodegradable rate is more than 60% (OECD 301C/28 days).
- Raw material of this product has passed Biodegradable Lubricating Oil Eco Mark Certification Criteria.

### [Applications]

- As a lubricating agent for rotating and vibrating places of various agriculture machines. (Tractor, Combine Harvester, Chain Saw, Bush Cutter).
- Applied to door hinges, chains or shutter, etc.



Item No	Product Name	Volumetric capacity•Packing
000821	Biodegradable Grease Spray-EX	420ml x 24pcs

## Biodegradable Chain Oil Spray-EX

Biodegradable chain oil



### [Features]

- Green product and safe to use since its base oil is Natural Vegetable Oil.
- Biodegradable rate is more than 60% (OECD 301C/28 days).
- Raw material of this product has passed Biodegradable Lubricating Oil Eco Mark Certification Criteria.

### [Applications]

- Applied to chain saw, forklift, bicycle chain or gear.
- As a lubricating agent for rotating and vibrating places of various agriculture machines. (Tractor, Combine Harvester, Chain Saw, Bush Cutter).



Item No	Product Name	Volumetric capacity•Packing
000822	Biodegradable Chain Oil Spray-EX	420ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent



# Stainless Cut / Stainless Cut L

Cutting lubricant with superior anti-weld and extreme high pressure performance



Strong power



## [Features]

- As extreme pressure chlorine additive contained, superior in anti-deposition and most suitable for hard cutting materials.
- With the effect of reducing abrasion of the drill bit, extend tools' life.
- Quicken cutting speed and raise work efficiency.
- Smoothly ejects cutting chips. Almost no burrs, curves and prevents plucking off and seizing.
- Finishes with an excellent smooth surface & improves the dimensional accuracy.

## [Applications]

- Used as a lubricating agent in the process of tapping, thread cutting, twist drilling, reaming and broaching for hard cutting materials, such as stainless, aluminum, copper, titanium alloy, etc.

## [Performance]

Weld Load	4903N
Copper strip corrosion test	1a (100°C x 1hr)
Viscosity(40°C)	36cSt
	—
Applicable temperature	Below 100°C



Item No	Product Name	Volumetric capacity•Packing
000111	Stainless Cut	330ml x 24pcs
000113	Stainless Cut 1L	1L x 12pcs

# Super-Cutting Spray / Super Cutting Oil

Chlorine and activated ion free



Environment Friendly



2 Ways



## [Features]

- Do not contain chlorine, phosphorus, activated ion and heavy metal.
- New Cutting Agent applicable to almost all materials from light cut to heavy cut.
- No worry of generation of Dioxin, since it does not contain Chlorine. Saves time for separation of waste.
- No worry of materials corrosion, because it bases mineral oil with non-reaction additives.
- No unpleasant smell from ion additives.

## [Applications]

- Applies to all kinds of metals along with non-ferrous metals.
- Used in the process of tapping, drilling, reaming, screw cutting and broaching works.

## [Performance]

Weld Load	2452N
Copper strip corrosion test	1a (100°C x 1hr)
Viscosity(40°C)	44.7cSt
Inactive Sulfur	Below 0.5%
Applicable temperature	Below 100°C



Item No	Product Name	Volumetric capacity•Packing
000114	Super Cutting Spray	420ml x 24pcs
000614	Super Cutting Oil	1L x 12pcs

# Tapping Spray(Chlorine-Free)

Cutting lubricant



Environment Friendly



## [Features]

- No worry of generation of Dioxin, since it does not contain Chlorine Paraffin. Saves time for separation of waste.

## [Applications]

- Applies to all kinds of metals along with non-ferrous metals.
- Used in the process of tapping, drilling, reaming, screw cutting and broaching works.

## [Performance]

Weld Load	2120N
Copper strip corrosion test	1a (100°C x 1hr)
Viscosity(40°C)	44.7cSt
Inactive Sulfur	Below 0.6%
Applicable temperature	Below 100°C



Item No	Product Name	Volumetric capacity•Packing
000189	Tapping Spray (Chlorine-Free)	420ml x 24pcs



# **W100 • W101 • W102**



Waterproof and high strength grease cream

- A mixture of carefully selected white solid inorganic lubricants and mineral oils. A viscosity between lithium thickened grease and cream.
- This high performance white solid lubricant protects driven or moving parts contact surfaces from shocks or high thrust under harsh environments. It also protects the surface from friction and wear caused by fretting corrosion, etc.
- The solid inorganic lubricants used will not harden or degrade the surface of the metal to be lubricated.

## [ Features ]

- Good adhesion to the surface, waterproof and good rust protection
- This white solid does not contain fluoride and silicone.
- Does not contain chlorides, heavy metals and solutions.
- Able to withstand impact.
- Excellent lubrication between ferrous and non-ferrous metals.
- Able to extend the service life of the machine, reduce the frequency of using lubricants and reduce maintenance costs.

## [ Applications ]

- Prevents grinding of the contacts during the installation process or during tightening.
- Lubricates gear, heavy-duty but low speed ball bearings.
- Lubricate the rotating bearings of the crane.
- Lubricate the king pin and bucket pin (if applied during servicing, replacement of parts will be easier).
- Lubricate the ball bearings with guide tubes that require waterproofing and heavy-duty properties, such as trailer joints, crane outriggers.
- Suitable for lubricating splines and constant velocity joints.



Item No	085975	085993	085976	085990	085977	085991
Product Name	WeissSol W100 Cartridge	WeissSol W100	WeissSol W101 Cartridge	WeissSol W101	WeissSol W102 Cartridge	WeissSol W102
Packing Quantity	400mL x 10 Pieces / Box	16kg / Tub	400mL x 10 Pieces / Box	16kg / Tub	400mL x 10 Pieces / Box	16kg / Tub
Operating Temperature	-10~120°C		-10~120°C		-10~120°C	
JIS Standard Viscosity	No.0		No.1		No.2	
Viscosity Enhancer	Lithium		Lithium		Lithium	
Color	Light yellow		Light yellow		Light yellow	

- Not a hazardous substance according to the fire prevention law

# **PU201 • PU202**



Polyurea grease for high temperature bearings

- A grease made by mixing mineral oil with a mixture of screened white solid inorganic lubricants and thickened by polyurea.
- Very little oil separation and excellent oxidizing and shear stability. Excellent water resistance.
- Excellent softening resistance for high temperature use and durability.

## [ Features ]

- Excellent oxidizing and shear stability
- Excellent resistance to electrical corrosion of bearings
- Excellent resistance to water and rust
- No fluorine or silicon in the white solid
- Separation of this blackberry at high temperatures is negligible which prevents grease from leaking.
- Can be used with high speed bearings.
- Extend equipment life and lubrication intervals
- Can help reduce maintenance costs.

## [ Applications ]

The 1st bearing of all types of motor or bearing that is exposed to high temperatures (such as the bearing of the driving gear, coke charcoal compressor that has been through a dry distillation process or bearing of the hot air blower, etc.), the exterior bearing of the blower or bearing of the exhaust fans, bearing of generators, bearing of drainage pumps, bearing of all kinds of electrical equipment, etc.



Item No	1085973	085950	1085974	1085952
Product Name	PU201 Cartridge	PU201	PU202 Cartridge	PU202
Packing Quantity	400mL x 10 Pieces / Box	16kg / Tub	400mL x 10 Pieces / Box	16kg / Tub
Operating Temperature	-20°C~+200°C		-20°C~+200°C	
JIS Standard Viscosity	No.1		No.2	
Viscosity Enhancer	Polyurea		Polyurea	
Color	Light yellow		Light yellow	

- Not a hazardous substance according to the fire prevention law

Surface Checking Agent

Lubricant

Food Machinery

Anticorrosive /Special Paint

Cleaner

Adhesive

Scribbling Varnish

Mould Releasing Spray

One-liquid Zinc-rich Primer Spray

Stainless Steel Surface Treatment

Welding Spatter Antifouling Agent /Welding Support Product

Groove Antirust Spray

Joining Parts Treatment Agent



## WeissSol HT310 fluid • HT310 • HT312

PRTR  
Applicable

Toxicity  
Low

Lubricating cream for high temperatures

- HT310 Fluid is a liquid type that can be used with a brush (must be stirred). It can be sprayed by using spraying devices.
- T310 is a semi-fluid and can be used with lubricants (must be stirred).
- HT312 is a lubricating cream that can be used with parts that are exposed to temperatures as high as +1,400 °C. There is a lubricant to prevent black stains with good adhesion and does not cause dropping points.

### [Features]

- Operating temperature range -30°C~+1,400°C (If more than +200°C, it will gradually change from cream lubrication to dry lubrication.)
- Has the ability to prevent friction and stuck between all kinds of bolts and pins.
- Can extend the maintenance period.
- Resistant to fretting corrosion and excellent corrosion protection.
- Increases work safety and reduces operating costs.
- Low friction coefficient and excellent lubrication, thus reducing corrosion on the surface.
- Can be used in a variety of operating temperature ranges and excellent lubrication properties.

### [Applications]

Protects bolts, hinges and screw joints from friction and interruption. It is also suitable for lubricating low-speed bearings, cam followers, disk cams, rotating cores and chains that need to be exposed to high temperatures. In addition, HT312 is also used in the melting furnace and plating factory, evaporating machine, turbine, sterling, exhaust gas plant, oven, screw connection in pressing head, conveyor factory, conveyor, chain and adjusting axis in smoke nozzle. \*It is recommended to use HT310 fluid with the chain.



Item No	085971	085970	085972	485984
Product Name	HT310 fluid	HT310	HT312Cartridge	HT312
Packing Quantity	4kg / Plastic container	18kg / Tub	400mL x 10 Pieces / Box	18kg / Tub
Operating Temperature	-30°C~+1,400°C	-30°C~+1,400°C	-30°C~+1,400°C	
JIS Standard Viscosity	-	No.0	No.2	
Color	Black gray	Black gray	Black gray	
Fire prevention law	Type 4 Category 2 Hazardous oil type 4	Type 4 Category 3 Hazardous oil type 18	Not a hazardous substance according to the fire prevention law	

- Not a hazardous substance according to the fire prevention law

## WeissSol F232

PRTR  
Not Applicable

Toxicity  
Low

Highly efficient, special fluorine grease

- F232 is stable for oxidation and high heat in the maximum heat at +260°C by using highly concentrated alkoxy fluoro oil as an oil component.

### [Features]

- Operating temperature range -30°C~+260°C
- Has an excellent electrical insulation property because it is a macromolecule and is compatible with many materials.
- Excellent stability for the oxidation and heat.
- Excellent chemical resistance
- Excellent high-pressure resistance
- Not flammable
- Can be used with a bearing with dnm value up to 300,000.

### [Applications]

Lubricating sliding areas inside the mold, such as the surface of the mold, the rolling axis, guide pin, which may affect the finished product due to the leakage of grease or oil. It can be used with the inside of valves, all types of bearings, metal bearings that cannot be used with general grease or oil due to solvent or the ability to dissolve in water and used in lubrication and sealing resin and air striker with metal.



Item No	85978
Product Name	F232
Packing Quantity	100g x 4 Pieces / Box
Operating Temperature	-30°C~+260°C
Color	White
Consistency	No.2
Viscosity Enhancer	PTFE

# WeissSol GEAR210-2500



Open-gear lubricant with extremely adherent property

- Tacky lubricant in a semi-liquid condition, which does not contain asphalt oil with graphite or heavy metal and can be easily used with mechanical spraying devices.
- It has excellent tube circulation properties by transforming basic oil that is highly viscous to grease. In addition, Gear210-2500 used to spray on the pump gear lubricant surface helps to protect the gear surface by operating according to the EHL theory (Hydro dynamic fluid).
- This product does not produce a drop at high temperatures and does not spread even at high speeds. It also has the ability to pump lubricants at low temperatures. It is water resistant and has excellent wear protection.
- It can be used with a large driving device in a cement plant, ball mill in sugar factory, girth gear and wire rope.



## [Features]

- Excellent anti-corrosion properties
- Corrosion resistant
- Excellent adhesion
- Especially good for sprockets or lubrication points at high rpm.
- It can be used by controlling the lubrication interval.

## [Applications]

Suitable for lubricating open gears such as kilns, circumferential gears, compound gears, sprockets, wire or wire rope hoists such as cranes, etc.

Item No	085987
Product Name	GEAR210-2500
Packing Quantity	15kg / Tub
Operating Temperature	+5°C~+140°C
JIS Standard Viscosity	Aluminium Complex
Viscosity Enhancer	No.0
Color	Black

- Not a hazardous substance according to the fire prevention law

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# WeissSol CL201



Water-resistant and high-strength grease

- A mineral oil-based calcium sulfonate complex grease with water-repellent properties used for lubrication points in contact with water
- This grease will not soften and be washed off even under constant contact with water.
- It is a combination of viscosity enhancer and additives. Provides excellent lubricity and corrosion protection under very high-pressure conditions.

## [Features]

- Water resistance and excellent practicality.
- Excellent high resistance
- Improves friction and wear resistance properties
- Excellent anti-corrosion performance
- Resistant to fretting corrosion
- Excellent suction and pumping properties.

## [Applications]

It is particularly suitable for use in rolling and sliding bearings where temperatures and bearing loads are increased or where impact, compressive stress and vibration are exerted, particularly in machinery for processing raw materials, grinders, large excavator chains, quarry dryers, conveyor chains and fan type equipment. Used as a grease for rolling and sliding bearings of low and medium speeds in the steel industry and mining.



Item No	085988
Product Name	CL201
Packing Quantity	16kg / Tub
Operating Temperature	-30°C~+150°C
JIS Standard Viscosity	No.1
Viscosity Enhancer	Calcium Sulfonate Complex
Color	Dark Brown

- Not a hazardous substance according to the fire prevention law

# WeissSol FI312



High temperature lubricant for food equipment

- FI312 is a white anti-seize lubricant that can be used up to +1200°C and is NSF H1 registered.

## [Features]

- Operating temperature range -40°C~+1,200°C (if above +200°C, gradually changes from cream lubrication to dry lubrication)
- Its anti-seize and lubricating properties remain unchanged even under high contact pressures over a wide temperature range.
- Because it is white, it does not damage the appearance and makes it easy to detect contamination.
- Excellent protection against frictional corrosion
- Helps to prolong maintenance intervals.
- It can be used in a variety of cases, not just in the food industry.

## [Applications]

Protects bolts, hinges and threaded joints from abrasion. It is also suitable for lubricating low-speed bearings, cam followers, disk cams, rotating cores and chains that need to be exposed to high temperatures. It is also suitable as a lubricant in hot shaping (die forging, hot rolling and hot extrusion of non-ferrous metals and steel, etc.).



Nonfood Compounds  
H1

Item No	085982	085983
Product Name	FI312Cartridge	FI312Cartridge
Packing Quantity	100g x 6 Pieces / Box	400mL x 10 Pieces / Box
Operating Temperature	-40°C~+1,200°C	
JIS Standard Viscosity	No.2	
Color	White	

- Not a hazardous substance according to the fire prevention law



# Food Machinery Grease H1

NSF-H1 grade grease cartridge for food processing machinery

PRTR  
Not  
ApplicableToxicity  
Low

## [Features]

- Semi-transparent grease for food processing machinery.
- There is no white powder left because it is not mixed with solid lubricants.
- H1 registered so it can be used in areas where accidental contact with food is likely to occur.

## [Applications]

- Mixer, slicer, fish fillet, grinder, etc.
- Used for gears, chains, transmission parts, bearings, sliding parts in overall food industry machinery.
- Solid combustible, 400 g

NSF	H1
Approved Number	No.156530

Item No	Product Name	Packing Volume • Packing
000181	Food Machinery Grease H1	400 g x 10 cans

## [Performance]

Test Type	Test Standard	(Unit)	Test Result
Color	Eyesight		Light yellow, semi-transparent
Viscosity Enhancer	—		Aluminium Complex Soap
Operating Temperature	—		-20°C~+180°C
Continuity	JIS K 2220		280
Dropping Point	JIS K 2220	(°C)	256
Oil Separation	JIS K 2220	(wt%)	2.9
Kinematic Viscosity of Oil Components	40 °C	JIS K 2220	68
	100 °C	JIS K 2220	9

Surface  
Checking  
Agent

Lubricant

Food  
MachineryAnticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
VarnishMould  
Releasing  
SprayOne-liquid  
Zinc-rich  
Primer SprayStainless Steel  
Surface  
TreatmentWelding Spatter  
Antifouling Agent  
/Welding Support  
ProductGroove Antirust  
SprayJoining Parts  
Treatment Agent

# Food Machine Grease 3H

Registered as NSF 3H, H1 grease with dispenser

PRTR  
Not  
ApplicableToxicity  
Low

## [Features]

- Specific grease for food machines that contains food additives as stipulated by Food Hygiene Laws
- Ideal to use for lubrication in applications where it will contact food

## [Applications]

- For a mixer, slicer, fish cutting machine, fish crushing machine, etc.
- For driving parts including all gears, chains, bearings, and bearing of moving parts
- For maintenance of all types of seafood processing machines
- For food processing, pharmaceutical, cosmetic or packaging machines

NSF	H1. 3H
Approved Number	No.157607

## [Performance]

Test Type	Test Standard	Lubrication	Test Result
Color	Eyesight	Lubrication	Light yellow, semi-transparent
Viscosity Enhancer	—		Calcium soaps
Operating Temperature	—		-20°C~+80°C
Continuity	JIS K 2220		310
Dropping Point	JIS K 2220	(°C)	98
Oil Separation	JIS K 2220	(wt%)	1.3

Item No	Product Name	Packing Volume • Packing
000185	Food Machine Grease H3	120g x 6pcs

# Food Machinery Grease

NSF-H 1 grade machinery grease spray



2 Ways

PRTR  
Not  
ApplicableToxicity  
Low

## [Features]

- White grease spray used for food machines with excellent water proof, oxidation and mechanical stability.
- Applied to the places where may contact with foods.
- With excellent oxidation stability, keeps long term lubricating effect.

## [Applications]

- As a Lubricant for food machinery chains, rotating and vibrating places.
- Used for fish or meat processing machines; filling up equipment for sake brewing, and various drinking; food conveyor or packing apparatus, etc.

NSF	H1
Approved Number	No.144729

Item No	Product Name	Packing Volume • Packing
000188	Food Machinery Grease	300 ml x 24 pcs

## [Performance]

Test category	Test Measure	Test result
Consistency	JIS K 2220	217°C
Drop point	JIS K 2220	10.2wt%
Oil Separation	JIS K 2220	
Low-temperature torque test	JIS K 2220	-20°C Starting torque 6.7N·cm
		Running torque 4.3N·cm
	-20°C	Starting torque 20.2N·cm
		Running torque 11.8N·cm
Shell four-ball test	ASTM D 2596	Last Non-Seizure load 1236N
		Welding load 3090N
		Load wear index 578N
Soda four ball test	JIS K 2519	Acceptable limit load 0.441MPa
		Average friction coefficient 0.79mm

## [Safety]

Test category	Test result
Material test	Lead Under 1ppm
	Calcium Under 1ppm
	Heavy metal Under 1ppm(Pb)
Dissolution test	Potassium permanganate consumed Under 0.5ppm

# Food Machinery Lubricant

Oil spray applied to NSF-1H and 3H grade food machines



2 Ways

PRTR  
Not  
ApplicableToxicity  
Low

## [Features]

- This lubricant, itself is eatable. Produced on Food oil Line.
- Liquid lubricating oil, with vegetal fatty acid of a high degree of purity as major ingredient.
- The properties of liquidity, permeability, digestible and absorbable, which cannot be found in other general vegetable oil.
- Super oxidation stability (preservation), able to keep long lubricating effect.
- Biodegradable and non-toxic. The composition - Triglyceride is used for processing food and medicine.

## [Applications]

- Used as lubricating agent for food processing machines; mould releasing agent for food containers.
- As lubricant for food-cutter, meanwhile, preventing food adhere.

NSF	H1. 3H
Approved Number	No.144730

## [Performance]

Lubricity	Kinetic Friction Coefficient	0.17
	Pressure Resistance	0.55Mpa (Four Ball Test: 200rpm)
Oxidation Stability	97.8±0.2°C	Over 300 hours
Temperature characteristics	Applicable temperature	-5°C~200°C
	Flash point	240°C

## [Safety]

Taste	Taste less
Digestibility	Hydrolysis and absorption easily
Metabolizability	Easily Oxidized
Coliform Group	Negative

Item No	Product Name	Packing Volume • Packing
000127	Food Machinery Lubricant	420 ml x 24 pcs
000627	Food Machinery Lubricant	16 L x 1 Tub

# Food Oil

Lubricant spray for food production machinery grades NSF – H1 and 3H



2 Ways

PRTR  
Not Applicable

Toxicity  
Low



## [Features]

- Certified by NSF "3H", it's safe despite contaminating with food.
- By using a 2-way cap, there is no need to remove the nozzle and reduce the risk of loss of the nozzle.
- By adopting a blue cover, even if the cover is misplaced, it is easy to spot because it is blue.
- Economical type, packing size up to 500 mL.

## [Applications]

- Used as a non-stick oil (European confectionery, bread, rice robot for rotating sushi).
- Used as a blade lubricant for food cutting machines.
- Used as a lubricant for food production machinery.

NSF	H1, 3H
Approved Number	No.154785

Item No.	Product Name	Packing Volume • Packing
000183	Food Oil	500ml x 24pcs

## [Performance]

Lubrication	Coefficient of Kinetic and Pendulum Friction	0.11
	Load Resistance, Shell Four-Ball Test at 1770 rpm	784N
Oxidizing Stability (CDM Test)	120°C	9.9 cm
Temperature Characteristics	Operating Temperature	-5°C~200°C
	Flash Point	316°C
	Freezing Point	-19°C

## [Biochemical performance]

Taste	No taste
Coliform Group	Negative

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Food Machinery Silicone Spray

Silicone lubricant for food machinery NSF-H1 grade



Odorless



Bottom-Up  
Spray OK



2 Ways

PRTR  
Not Applicable

Toxicity  
Low



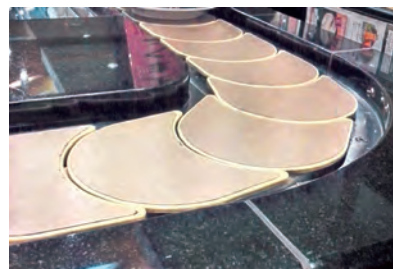
## [Features]

- It is a high safety silicone lubricant registered in the NSF H1 grade that is safe even for accidental contact with food.
- It is a solvent-free formulation to reduce viscosity and is highly safe and can be used in food factories.
- It has no effect on rubber or plastic. (Excluding raw rubber, silicone rubber)
- Economical type, packing size up to 500 mL.
- Use a 2-way cover, a stainless-steel nozzle and can be injected upside down.

## [Applications]

- Used as a mold release agent and light lubricant of food production machinery, etc.
- Applies to food, pharmaceuticals, cosmetic manufacturing equipment, washing equipment, transportation equipment at self-refueling stations.
- Improves the penetration of rubber products (packing, stamping).

NSF	H1
Approved Number	No.151632



Item No.	Product Name	Packing Volume • Packing
000184	Food Machinery Silicone Spray	500ml x 24pcs

# Heat Seal Checker

Poor seal checking fluid



2 Ways

PRTR  
Not Applicable

Toxicity  
Low



## [Features]

- All ingredients are compatible with food and food additives. Poor seal positions can be inspected at the micron level. The bright red dye gives excellent visibility and it has a really great penetration.
- Use of water-soluble dyes for food, resulting in superior washing and removal abilities compared to oil-soluble solutions.
- It can be used as a penetrating solution to check for penetrating defects using dye with food machinery.

## [Applications]

- Used for checking the part covered with a heat seal, the part stretched to the back, the part of the device whether it is completely sealed or not.

Item No.	Product Name	Packing Volume • Packing
000310	Heat Seal Checker	220ml x 6pcs

- Class 4, Class 1 oil type, 132 mL, Hazard level 2

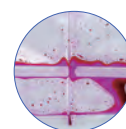
## [Performance]

External Appearance	Red liquid
Operating Temperature	0 ~ 80°C

① Spray the parts to be inspected.



② If poor adhesion detected, red dye oozes from the poorly bonded part.



# Scale Remover

PRTR  
Not Applicable

Toxicity  
Low



## [Features]

- Descaling on steel and rust that occurs on metal such as heat transfer plate from hot water, steam
- Flush scale (iron-based) as well as the scale contained in groundwater and pipes by immersion.
- Reacts with iron powder and turns purple-red for quick cleaning results.

## [Applications]

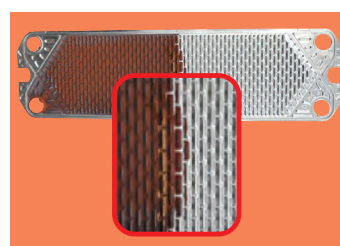
- Scale cleaning agent for plate heat exchangers
- Removes rust from metal parts and heat transfer plate.

## [Performance]

Operating Temperature	Room temperature
-----------------------	------------------

## [Direction]

1. Please clean the dirt on the plate in advance.
2. Please soak it in the bath containing this solution.
3. Soak until the scale has been completely removed. (Depending on the amount of scale, the threshold is 8 hrs.) The liquid will change from clear to dark purple.
4. Please take out the plate, rinse off the solution sufficiently and dry.
  - ※ Dilute according to the degree of scaling (undiluted solution ~ 3-time dilution) and soak until the scale is completely removed.
  - ※ If the temperature is raised to 40 to 50 °C, the cleaning power will be increased.



Item No.	Product Name	Packing Volume • Packing
000569	Heat Seal Checker	24kg x 1Tub

- Not a dangerous goods according to the fire prevention law



## Rust Jet

Water displacing anti-rust agent

PRTR Not Applicable	Toxicity Low
---------------------------	-----------------

### [ Features ]

- Prevents rusting by displacing water. Able to apply to all kinds of metals. Doesn't corrode metal surface or change its color.
- No interference with electrical contacts; Suitable for the protection of electrical devices.
- Protects coated surface from salt adhesion or corrosion on sea; Prevents from corrosion caused by fingerprints.

### [ Applications ]

- For rust prevention and lubrication of all kinds of metal products, precision instruments, tools and surface plates, etc.
- For rust and moisture prevention on complicated wiring of electrical devices, batteries, communication equipment, computers and motors.

### [ Performance ]

Salt spray test	Over 120 hours
Indoor rust proof	Over 24 months
Outdoor rust proof	Not Available
Film thickness	2-3µm
Applicable temperature	-10°C~130°C



Item No	Product Name	Volumetric capacity·Packing
000107	Rust Jet	420ml x 24pcs
000160	Rust Jet 15L	15L x 1 can

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Rustguard

Semi-dried anti-rust agent

PRTR Applicable
--------------------

### [ Features ]

- Semi-dried, no stripping even scratched by hand.
- Super-strong rust-preventing property in adverse conditions caused by outdoors moisture, salinity and chemical or corrosive environment.
- Suitable used as long-term indoor and outdoor rust preventing agent.
- Can be used as lubricant and anti-corrosive agent for hinges of bonnet and boot.

### [ Applications ]

- Rust proof for parts in processing, storage and transit.
- Indoor and outdoor storage for ferrous material and machinery.
- Corrosion-protection for machinery, like iron plate, ferrous material of garage, pump, house and factory near the sea.
- Weld surfaces under chassis and inside of fender, locker panel.

### [ Performance ]

Salt spray test	Over 480 hours
Indoor rust proof	Over 5 years at film thickness 50µm
Outdoor rust proof	Over 2 years at film thickness 50µm
Film thickness	20µm~50µm
Applicable temperature	Below 100°C



Item No	Product Name	Volumetric capacity·Packing
000088	Rustguard Clear	500ml x 24pcs
000089	Rustguard Brown	500ml x 24pcs

## Rustguard Green

Wax-based · mould anti-rust agent

Odorless	PRTR Not Applicable	Toxicity Low
----------	---------------------------	-----------------

### [ Features ]

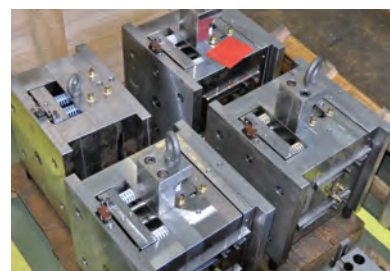
- An odorless anti-corrosive agent made from high-refined wax and little odor solvent.
- Wax-based, semi-dried film protects metal surface and keeps excellent rust proof effect.
- Not only used for mould, but also can be applied to machine parts and equipment.
- Film is easy to be checked because of the green color. Increase work efficiency.
- Suitable for places where the agent is required to be removed in future.

### [ Applications ]

- Corrosion prevention for mould, machine parts and equipments.

### [ Performance ]

Salt spray test	Over 96 hours
Indoor rust proof	Over 1 and half a year
Semi-sealed condition	2 Years~3 Years
Film thickness	20µm~50µm
Applicable temperature	Below 50°C



Item No	Product Name	Volumetric capacity·Packing
000129	Rustguard Green	480ml x 24pcs

# Mould Anti-Corrosion Agent-Volatile

Volatile anti-rust agent

PRTR  
Not  
Applicable

Toxicity  
Low


## [Features]

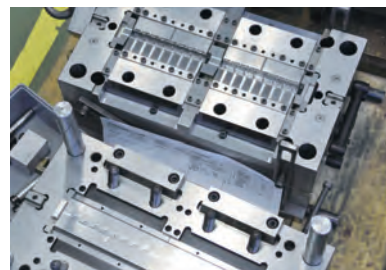
- Excellent rust - proof effect in any small & complicated places owing to volatility. (Including the places where can not be covered by spray)
- Different from anticorrosive oil or wax type, can be used without mould cleaning.
- Can be restarted the mould without cleaning.
- Only shoot out 2 to 3 times for trial run.
- Once it is applied, rust proof film is formed on the metal surface and meanwhile, volatilized rust prevention molecule reacts with water and changes to rust - proof water to prevent metals from corrosion.

## [Applications]

- Rust prevention for injection mold.
- Rust proof for preserve or transport of metal parts, etc.

## [Performance]

Salt spray test	—
Semi-sealed condition	6 Months~1 year
Completely sealed condition	1~2 years
Applicable temperature	Below 80°C



Item No	Product Name	Volumetric capacity・Packing
000125	Mould Anti-corrosion Agent-Volatile	420ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Sabes SP 500 / Sabes SP 4L

PRTR  
Applicable

Toxicity  
Low

## [Features]

- Releases rust from corroded and fastened bolt by several minutes penetrating.
- Removing rust by dipping rusted metals into SABES for less than 10 minutes.

## [Applications]

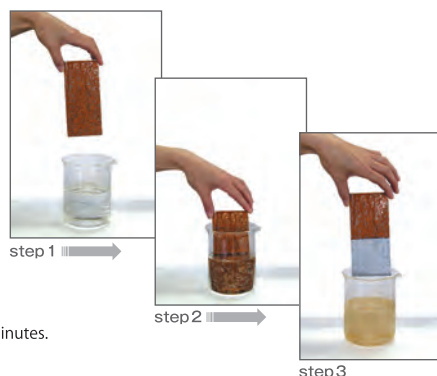
- Removes rust from metals, removal of oxidation film such as oxidation film of concrete on steel surface and lime calcium sediment etc.
- After removal of rust, cleans the surface by washing or wipe off by cloth. Afterwards, proceed anticorrosive treating.

## [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------

## [Application method]

- 1: Applies evenly on corroded surface, and leaves it for several minutes.
- 2: Afterwards, wipe rust off with waste.
- 3: If rust is not completely removed, repeats ① and ②.
- 4: After removing rust, flush the surface with water.
- 5: To prevent getting rusted again, use anti-corrosive agent for final anti-corrosive treatment.
  - ※ For severe rust, scrapes coarse rust with wire brush beforehand.
  - ※ After applying SABES, don't leave it for more than 10 minutes.
  - It may cause corrosion on non-rusted parts.
  - ※ The same procedure with lime calcium sediment and concrete.



Item No	Product Name	Volumetric capacity・Packing
00694	Sabes SP 500	500ml x 12pcs
00695	Sabes SP 4L	4L x 4bottles

# Rustguard F Clear

Not listed in Organic Solvent Poisoning Regulations, Penetrating Long Term Rust Preventive

PRTR  
Not  
Applicable

Toxicity  
Low


## [Features]

- Not a substance listed in the Organic Solvent Poisoning Regulations
- Not classified as a PRTR substance
- It has the ability to penetrate and form a protective coating in the material and can be used as a rust preventative in gaps or fissures.
- Suitable for long term rust protection both outdoor and indoor.

## [Applications]

- For both outdoor and indoor storage of machinery or steel materials
- Rust prevention of parts that are produced, stored or in transit
- Corrosion prevention of steel or machinery in factories, buildings or sheds in coastal areas
- Long-term rust prevention of press molds

## [Performance]

Salt Water Spraying	480 hrs	Coating Thickness	20~50μm
Indoor Rust Proofing	2 years	Operating Temperature	not more than 50°C
Outdoor Rust Proofing	from 1 year onwards	Temperature Level Used	



Item No	Product Name	Packing Volume・Packing
000388	Rustguard F Clear	500ml x 24pcs

• Class 4 product, Class 1 oil type, 250 mL, Hazard level 2



## Blackening Spray

High adhesion and quality finish

PRTR  
Applicable

### [ Features ]

- Clear black finish with thin film.
- Compounded of high concentration of graphite and high adhesion of resin.
- The coating film won't peel off even if the metals bump with each other.

### [ Applications ]

- For blackening metals like iron, stainless, copper, aluminum, and POM(POLYACETAL) and ABS resin.

### [ Performance ]

Drying time (to touch)	2~3 min
Drying time (to be hard)	about 20 min
Heat-resistant temperature	150°C
Application area	1.5㎡
Applicable temperature	Normal temperature



Blackening metal parts

Item No	Product Name	Volumetric capacity·Packing
000179	Blackening Spray	420ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Repair Pen Black

Black repair paint

PRTR  
Applicable

### [ Features ]

- Pen type black paint.
- Simply brush the peeling off parts with the pen, do not soil the hands.
- Clear black finish with the covered thin film.
- Contains special epoxy resin, which has excellent oil resistant property.
- High adhesion thin film won't peel off the surface even the metals bump with each other.

### [ Applications ]

- Repairs metals, such as iron, stainless, copper, aluminum, etc. (\*It is not available for rubber and plastic.)

### [ Performance ]

Drying time (to touch)	2~3 min
Drying time (to be hard)	about 20 min
Heat-resistant temperature	150°C
Application area	1.5~2 ㎡
Applicable temperature	Normal temperature



Blackening parts with repair pen

Item No	Product Name	Volumetric capacity·Packing
000590	Repair Pen Black	30ml x 6pcs

## Heat Resistant Silver / Heat Resistant Black

Heat resistant paint

PRTR  
Applicable

### [ Features ]

- Heat Resistant Temperature: 600 °C
- Even at 600 °C shocked by cold water, the coated film won't either peeling off or discolor.
- Protects from salt damage caused by snow melt agent, etc.
- When film gets dried, more adhesion hardened - film is formed by heating up.

### [ Applications ]

- Exhaust Muffler of Automobile and Motorbike, Heating Stove, Chimney, Incinerator, Steam Piping etc.

### [ Performance ]

Drying time (to touch)	15~20 min
Drying time (to be hard)	Differ to heating condition
Heat-resistant temperature	600 °C
Application area	0.6~0.7㎡



Item No	Product Name	Volumetric capacity·Packing
00082	Heat Resistant Silver	420ml x 24pcs
00086	Heat Resistant Black	420ml x 24pcs

# Super Safety

Strong alkali water-based cleaner

## [Features]

- Alkali cleaning agent, remove obstinate oily dirt stained on the metals, machines, such as rough oily dirt and backed oil on engine.
- Water-based agent, not flammable or explosive.

## [Applications]

- Removal of oily dirt from machines, parts, tools, factory equipment and floor.
- Cleaning oily dirt stained on cars or ships.
- Cleaner for car engine, chassis, tire, lining in vehicle, the inside of hook hood and trunk.

\*Can be used by undiluted solution or water-diluted solution.

\*Hand spray bottle (Item No: 00196, 1 Lit) is available for Separate Sale.



Super Safety refill sprayer bottle (sold separately)

Item No	Product Name	Volumetric capacity • Packing
000196	Bottle Sprayer	1L x 1pc

Item No	000068	000069	000175	000170 / 000304
Product Name	Super Safety A (Volumetric capacity 18L x Packing 1 box)	Strong Super Safety (Volumetric capacity 18L x Packing 1 box)	Strongest Super Safety Cube (Volumetric capacity 18Kg x Packing 1 box)	Phosphorus-Free Super Safety (170 Volumetric capacity 18L / Packing 1 box 304 Volumetric capacity 1L x Packing 12 bottles)
				
Features	Available to be applied to obstinate oily dirty of animal & plant.	Very strong alkali cleaner. To remove the dirty which can not be cleansed by other cleaners or scorched oily dirt, etc.	Strong power cleaner. Water-diluted solution is available to be applied to all places.	Neutral cleaning agent, little effect on aluminum, rubber and plastic.
ph	13~14	13~14	13~14	7~8
Clean Power	★★★	★★★★	★★★★★	★
Mist Odor	a little	strong	strong	without pungent smell
Law	 	 	 	 

※ ★ Indicates cleaning power, the more ★ the stronger the cleaning power is.

## Dilution Ratio

Application	68	69	175	170
Cleans various engine, scorched oily dirty and oxidized dirty.	undiluted liquid~	undiluted liquid~	undiluted liquid~	undiluted liquid~
Removes oily dirty from Machines, Parts, and tools.	~5x	~10x	~15x	1~2x
Cleans factory and office floor.	5~10x	10~20x	20x~	3~5x
Cleans process goods, removes process oil and anti-rust oil from every kind of parts, machines.	10~15x	20x~	30x~	5~10x
Indoor cleaning for automobile, vessel, etc.	15x~	20x~	30x~	5x~
General office cleaning such as steel furniture, desks and chairs	20x~	30x~	50x~	10x~

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent



# Bubbleless Clean e

Bubbleless ionic and alkaline cleaner



Environment Friendly



## [Features]

- The ionic cleaning agent does not contain surfactants and is alkaline.
- Since there is no surfactant included, no foam is produced.
- Due to its watery nature, there is no stickiness after wiping.
- Apart from mineral, vegetable and animal oil, it is also highly effective in cleaning protein stains.
- Suitable as a cleaning solution for ultrasonic cleaning.

## [Applications]

- Removal of oil stains from machines, spare parts, tools, factory equipment, etc.
  - It is a cleaning solution for ultrasonic cleaners and high-pressure cleaners.
  - For cleaning in kitchens and food factories
  - It is a floor cleaner for bowling alleys.
- ※ Please use undiluted or diluted with water as necessary.

## [Performance]

pH	13	Fog Smell	None (with mucosal irritation)
Cleaning Power (Without Impurities)	★★	Operating Temperature	Room temperature



Bowling alley approach floor cleaner

Item No	Product Name	Packing Volume • Packing
000431	Bubbleless Clean e	20L x 1Box

- Not a dangerous goods according to the fire prevention law
- ※ Product is made to order.

# Super Safety Floor Cleaner

Water-soluble cleaner



## [Features]

- It is a cleaner that uses alkaline components to effectively remove oil stains.
- It hardly pollutes the water source. Emulsifier can decompose very well.
- Non-hazardous, non-flammable

## [Applications]

- Factory and office floor cleaning
- Cleaning vehicles, machines for agriculture, various machines
- Clean oil that is stuck on machines, parts, various tools and appliances.

## [Technical Information]

- Operating temperature: room temperature ~ 60°C



Item No	Product Name	Packing Volume • Packing
000468	Super Safety Floor Cleaner	18L x 1Tub

- Not a dangerous goods according to the fire prevention law

# Parts & Brake Cleaner Series

Toxicity  
Low

## [ Features ]

- A chemical cleaning agent with very low toxicity.
- Rapid dry type.
- Quick removes oily dirty from metal, mould and precision instrument.
- This agent, itself, doesn't corrode any metal.
- Little influence on resin and rubber products.
- We have a great variety of cleaning products to meet every kind of needs.

## [ Applications ]

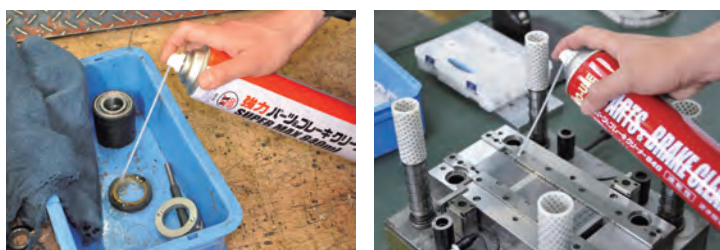
- Cleanse anti-corrosive oil and cutting oil from metal parts, mould and tools.
- Removal of oil stains along with iron powder from hydraulic instruments or cylinders.
- Removal of grease stains from gearboxes and bearings.
- Removal of oil stains from hydraulic machinery or cylinders.
- Cleaning of precision machinery.
- Cleaning of oily dirty surrounding automobile, forklift and brake.

**Cautions :** Because it is flammable, don't use it while electric switch on.  
Do not spray excessively onto rubber, plastic and paint surface.

Item No	Product Name	Volumetric capacity・Packing	Clean Power	Drying speed	Influence on resin	Feature	PRTR
① 000118	Parts & Brake Cleaner	420ml x 24pcs	★★	★★	★★	Little affect on resin and rubber	Applicable
② 000062	Parts & Brake Cleaner A	500ml x 24pcs	★★★	★★	★	Standard specification, almighty type	Not Applicable
③ 000598	Parts & Brake Cleaner 840	840ml x 30pcs	★★	★★	★★★	Jumbo can, economy size	Not Applicable
④ 000600	Strong Parts & Brake Cleaner SUPER MAX	840ml x 24pcs	★★★★	★★	★	Strong cleaning power, 840ml Jumbo Can	Not Applicable
⑤ 000601	Quick dry parts & Brake Cleaner SUPER MAX	840ml x 24pcs	★	★★★★	★★★	Dry quickly, 840ml Jumbo Can.	Applicable
⑥ 000262	Parts & Brake Cleaner A 18L	18L x 1can	★★★	★★	★★	18L can of 00062 liquid type. Refill spray set (00930) is available	Not Applicable
⑦ 000265	Parts & Brake Cleaner T 18L	18L x 1can	★★★	★★	★★	18L can of 00062 liquid type with screw cap. Refill spray set (00930) is available	Not Applicable

## [ Performance ]

Applicable temperature	Normal temperature
------------------------	--------------------



## Regarding ★ mark

- ※The comparison of cleaning power, drying characteristics and resin impact are based on solvent cleaning data of our company. The number of ★ indicates the power of each product. The more ★, the stronger the power is.
- ◆The more ★, the stronger the cleaning power is.
  - ◆The more ★, the quicker the product gets dried.
  - ◆The more ★, the less affect resin.
- ※The resin impact is different according to resin type, therefore, please test on unnoticeable place before use.



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent



## 2B Cleaner

Class II petro-leums



2 Ways



Bottom-Up  
Spray OK



Environment  
Friendly



PRTR  
Not  
Applicable



Toxicity  
Low

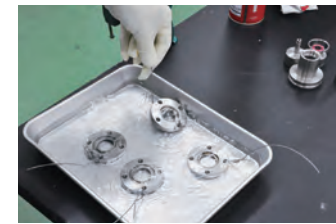


### [Features]

- Class II petroleum has a high flash point, and it is safety comparing with class I petroleum.
- Low toxicity chemical cleaning agent.
- Dry slowly, strong clean power and easy handling.
- Reduces empty can waste by using refill spray bottle. (see page 17)

### [Applications]

- Cleans anti-corrosive or cutting oil from metal parts, mould and tool, etc.
- Removes grease from gearbox and bearings.
- Removal of oil stains from hydraulic machinery or cylinders.
- Removal of oil dirty from chain.
- Cleaning of precision machinery.
- Cleaning of oily dirty surrounding automobile, forklift and brake.



Applicable temperature Normal temperature

Item No	Product Name	Volumetric capacity・Packing
000251	2B Cleaner	18L x 1can
000255	2B CleanerS	500ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Strong Power 2B Cleaner S

Powerful type 2 oil-based cleaner



2 Ways



Bottom-Up  
Spray OK



Strong  
power



Environment  
Friendly



PRTR  
Not  
Applicable



Toxicity  
Low



### [Features]

- Product capable of cleaning substances in the second category of oils that clean powerfully.
- It can be used in conjunction with brake fluid. It is therefore most suitable to be used to clean brakes.
- The product has a higher flash point when compared type I oil. Therefore, there is a higher operational safety.
- It is a product with little smell.
- It can be used to remove oil paint.

### [Applications]

- Used to clean rust preventive oil or oil used in the cutting process of metal parts, molds or various tools, etc.
- Used to clean grease stains on gear boxes or bearings.
- Used to clean oil stains on hydraulic equipment or cylinders.
- Used to clean oil stains on the chain.
- Used to clean precision equipment.
- Used to clean brake parts or equipment for automobiles or forklifts, etc.

### [Performance]

Operating Temperature Room temperature



Item No	Product Name	Packing Volume・Packing
000355	Strong Power 2B Cleaner S	500ml x 24pcs

- Class 4, Class 2 oil type, Hazard level 3, 250 mL

## M-1 Cleaner

Strong power degreasing cleaner, dry at medium speed



Bottom-Up  
Spray OK  
(Item No 00258)



PRTR  
Not  
Applicable



Toxicity  
Low



### [Features]

- A Strong power degreasing cleaner, get dried at medium speed.
- Actual capacity is 15% increase than normal 840 ml can (Compared to our company's products)
- Glycolic brake oil gets mixed with dirty oil without separation.
- Not applicable to PRTR.
- Bottom-up spray is available, stainless nozzle sprays to every narrow openings.

### [Applications]

- Cleaning of oily dirty on machine, equipment and parts.
- Cleans anti-corrosive or cutting oil from metal parts, mould and tool, etc.
- Removes grease from gearbox and bearings.
- Removal of oil stains from hydraulic machinery or cylinders.
- Removal of oil dirty from chain.
- Cleaning of oily dirty surrounding automobile, forklift and brake.



Item No	Product Name	Volumetric capacity・Packing
000257	M-1 Cleaner 18L	18L x 1can
000258	M-1 Cleaner 840ml	840ml x 30pcs

## Brake Clean

Strong power degreasing cleaner



Strong  
powder



PRTR  
Applicable



### [Features]

- The most powerful cleaner among aerosol cleaners.
- Because it is not a quick dry type, penetrates and clearly cleanses oily dirty even with a small amount of cleaner.
- Glycolic brake oil gets mixed with dirty oil without separation.
- Not applicable to resin, rubber and paint surface because of its strong cleaning power.
- Able to remove oily ink.

### [Applications]

- Degreasing cleaner for metal parts.
- Removes oily dirty from pipe or motor, etc.
- Cleaning of oily dirty surrounding automobile, forklift and brake.
- Removal of marking paint and magic ink, etc.
- Removal of oil dirty from chain.

### [Performance]

Clean Power	Drying speed	Influence on resin
★★★★	★	not applicable

Applicable temperature Normal temperature



Item No	Product Name	Volumetric capacity・Packing
000060	Brake Clean	500ml x 24pcs

# Econo II Refill Equipment

An easy refill equipment for Parts Cleaner



## [Features]

- An economy and easy refilling system. Only available for refilling Parts Cleaner.
- Green product, jetting out liquid by compressed air.
- 00262 Parts & Brake Cleaner is not applicable to PRTR.
- Cleaner and air are refilled at the same time.
- Air can be filled up separately when only liquid is left in Spray Can.
- Special spray can set, which is made by light and pressure – resistant steel is able to be refilled repeatedly.

## [How to use]

- ①Set up the special cleaner agent and air hose at refilling machine.
  - ②Put the changeover switch at [Agent + Air] side and the operation switch at [Filling up] side.
  - ③For start the filling up operation fix the special filling bottle at the clamp plate.
  - ④The indicator starts work and when it complete put the operation switch at [Detachment] side. Then you can detach the special filling bottle.
- ※Please read the machine attached instruction manual for more details.



000932 Econo II Refilling Machine



000934 Econo II Refilling Can Set

000933 Econo II Refilling Machine Stand

Item No	Product Name	Volumetric capacity-Packing
000932	Econo II Refilling Machine	1 machine
000933	Econo II Refilling Machine Stand	1 pc
000934	Econo II Refilling Can Set	3 pcs

# Refill Spray Set

An easy refill equipment for parts cleaner



Environment Friendly

## [Features]

- One can of Parts & Brake cleaner is enough for refilling 78 bottles.
- Green product, jetting out liquid by compressed air.
- Our cleaners (00265, 00257 and 00251) are not applicable to PRTR.
- Special spray can set, which is made by light and pressure – resistant steel is able to be refilled repeatedly.

## [How to use]

- ①Set up the Quantitative Cock at 18L can.
  - ※It is not possible use at screw cap type 18L can.
  - ②Lay the 18L can as putting the transparent pipe to look down. Take off the cap of Spray Can and insert it at the transparent pipe.
  - ③Push the black button, when the solution stop to flow push again the black button and take off slowly from the pipe.
  - ④Close the Spray Can cap tightly.
  - ⑤Complete injecting air for 3 to 5 second from bottom of the Spray Can.
- ※Please read the machine attached instruction manual for more details.

## Refill Spray Set ( Item No: 000940 )

- includes
- 1 pc of Spray Can,
  - 1 Air Refill-up Hose,
  - 1 Quantitative Cock and Handling,
  - Instruction,



Item No	Product Name	Packing
000940	Refill Spray Set	1 set
000941	Refill Spray Can	1 pc
000942	Air Fill Up Hose	1 pc
000943	Quantitative Cock	1 pc



No.000941 Refill Spray Can



No.000265 Parts & Brake Cleaner T 18L



No.000257 M-1 Cleaner 18L



No.000251 2B Cleaner 18L

Surface Checking Agent

Lubricant

Food Machinery

Anticorrosive /Special Paint

Cleaner

Adhesive

Scribbling Varnish

Mould Releasing Spray

One-liquid Zinc-rich Primer Spray

Stainless Steel Surface Treatment

Welding Spatter Antifouling Agent /Welding Support Product

Groove Antirust Spray

Joining Parts Treatment Agent



# Mould Cleaner

Degreasing cleaner for mould



2 Ways  
(00619 only)



Bottom-Up  
Spray OK  
(00619 only)



PRTR  
Not Applicable



Toxicity  
Low



## [Features]

- Product developed for clean mould.
- Simply removes cutting oil and powder generated during mould processing.
- Simply removes anti-rust or anti-corrosive wax
- Not applicable to PRTR.
- Superior cleaning power, rapid dry and high work efficiency.

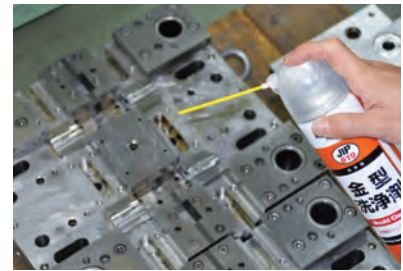
## [Applications]

- Chemical Cleaner for removal of cutting oil and powder generated during mould processing.
- Removal of anti-corrosive agent and oily dirty for mould.
- Removes oil stains from machines, equipment and parts.

## [Performance]

Clean Power	Drying speed	Influence on resin	Applicable temperature	Normal temperature
★★★★	★★★	★★★		

Please see page 16 regarding ★ mark.



Item No	Product Name	Volumetric capacity・Packing
000119	Mould Cleaner	500ml x 24pcs
000619	Mould Cleaner 840ml	840ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Deposit Cleaner for Injection Mould

Strong & cleaning agent for injection mould



Strong  
power



PRTR  
Applicable



## [Features]

- Dissolving & removing gummy and thin stain film stuck on mould during plastic mould injecting. Helps reducing inferior goods.
- Most suitable for easily stained resins, such as POM.
- Applies based on stain situation during moulding intervals or after work.

\*Not able to be used when mould is warm. Applies when the mould temperature drops to room temperature.

\*For mould storage, rust proof is necessary.

## [Applications]

- Used as gummy removing and deposit cleaning agent for injection mould.
- Degreasing cleaner for mould.

## [Performance]

Clean Power	Drying speed	Influence on resin	Applicable temperature	Normal temperature
★★★★	—	not applicable		

Please see page 16 regarding ★ mark.



Item No	Product Name	Volumetric capacity・Packing
000126	Deposit Cleaner for Injection Mould	420ml x 24pcs

# Packing Stripper

Strong release agent



Strong  
power



PRTR  
Applicable



## [Features]

- A strong stripping agent compounded of met-hylene chloride and micro-molecular cellulose.
- Aerosol spray, easy applied to stripping surface.
- Stripping and removal of burnt oil, paint coat and adhesive agent, etc.
- After stripping, stains can be cleaned by water.

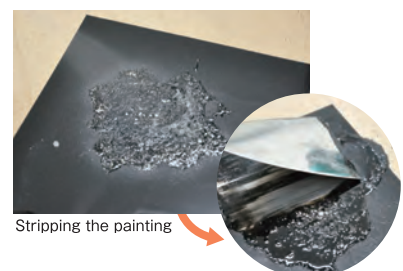
## [Applications]

- Stripping and removal of burnt packing of engine. (Cylinder Packing Ring and Cylinder Head Gasket)
- Removal of stubborn oil stains, burnt carbon, sealing compound and adhesives.
- Removal of every kind of paint.

## [Performance]

Clean Power	Drying speed	Influence on resin	Applicable temperature	Normal temperature
★★★★	—	not applicable		

Please see page 16 regarding ★ mark.



Stripping the painting

Item No	Product Name	Volumetric capacity・Packing
000066	Packing Stripper	300ml x 24pcs

# Packing Stripper F



Not enforced to be used with PRTR / adhesive remover, rubber and paint



## [Features]

- This product is not a special protective hazardous substance and there is no methyl chloride.
- Used to remove sealant, liquid gaskets and hard gaskets that is difficult to peel off. It can be used to remove stubborn oil stains, coating film and old glue stains, etc.
- It has powerful stain removal properties compared to other substances belonging to the group of special protective hazardous chemicals.

## [Applications]

- Peel and remove burnt engine gaskets. (piston rings and cylinder head gasket)
- Remove oil stains, soot, seals and stubborn adhesives.
- Wash all kinds of paints.

## [Performance]

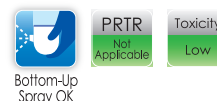
Operating Temperature		Room temperature
Cleaning Power	Quick Drying	Resin Effect
★★★★	—	Not applicable

Item No	Product Name	Packing Volume • Packing
000158	F Packing Stripper	300ml x 24pcs

• Class 4, Class 1 oil type, Hazard level 2, 165 mL

# Air Duster

Blow dust by dry air



## [Features]

- Easily blows off dust, waste thread and trash just by spray.
- Simply removes the dust from every narrow opening.
- Global Warming Potential 1.40 (about 1/10 of HFC-134a)
- Contains special gas absorbent, bottom-up spray is available and liquid gas doesn't spout out.

## [Applications]

- Used for computer, OA equipment, phototypesetter, camera, lens, scanner, FD, CD, Bills & coins processing machine, pinball machine, sewing machine, knitting machine, optical fiber connector, Television, VTR, etc.

## [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Blowing off dust of amusement machine

Item No	Product Name	Volumetric capacity • Packing
000227	Air Duster	350ml x 24pcs

# Electronic Parts Cleaner

Degreaser for electronic parts



## [Features]

- Cleaning of circuit board, joint points and terminals.
- Removal of carbon of electronic contacts, greasy oil, etc.
- Not applicable to PRTR. A chemical cleaning agent with very low toxicity.
- Quick dry, low influence on resin and rubber.

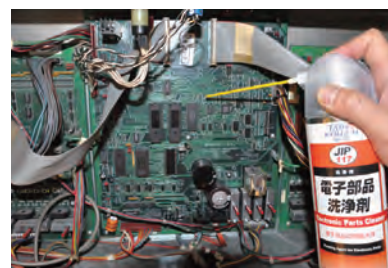
## [Applications]

- Cleaning electric and electronic equipment, precision machines, general machines and parts, etc.
- Cleanses relay contact of various electronics, recovery of contact function.
- Cleaning of pin jack, volume, and connector, etc.
- Used as degreasing cleaner for metal parts, etc.

## [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------

**Attention:** This product is flammable. Turn off electric power when spray at machines.  
Don't spray a lot amount at rubbers, plastics and coated surfaces.



Item No	Product Name	Volumetric capacity • Packing
000117	Electronic Parts Cleaner	420ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent



# Multi-Cleaner N / Display Cleaner

Anti-static agent compounded, multi-degreasing cleaner

PRTR  
Not  
Applicable

Toxicity  
Low

## [Features]

- Removes fingerprint, dirt from display panel and glass.
- Quick dry, no white slag or uneven wiping trace left on the surface.
- Preventing static electricity because of static agent compounded.
- Don't get frozen even in winter or cold district.
- Able to clean Oily Magic Mark.

## [Applications]

- Clearly cleans various screens, for example, the screen of TV, computer, car - navigation system and touch panel, etc.
- Cleans glass, window and mirror, etc.
- Cleaning of duplicator, OA equipment, exterior of electric appliances, milky - white plastic and glass.
- Cleaning maintenance for amusement equipment, magnetic head, cassette and IC card, etc.

## [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Maintenance cleaning of amusement machine

Item No	Product Name	Volumetric capacity•Packing
000268	Multi-Cleaner N	500ml x 6pcs
000269	Display Cleaner	4L x 1bottle

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Remove Stains Soap

Scrub Compound•Cosmetic Grade Soap

PRTR  
Not  
Applicable

Toxicity  
Low

## [Features]

- Cosmetic Grade - Vegetable oil and fat pure soap
- Quickly washes off obstinate oily dirt attached on your hands as it has excellent bubbling and rinsing property.
- Compounded with Hyaluronate Sodium, Royal Jelly Extract and Aloe Barbadensis Leaf Extract (Moisturizing Ingredient)
- Moisturizing your hands gently and finish up with clean and soft touch.

## [Applications]

Removes obstinate oily dirt from your hands. (Scrub liquid hand soap for washing hands.)



Refill  
Product



RMS Hand Soap  
2.0 kgs



RMS Hand Soap  
16 kgs



Item No	Product Name	Volumetric capacity•Packing
000557	RMS Hand Soap 2.5 kgs	2.5kgs x 6bottles
000558	RMS Hand Soap 2.0 kgs	2.0kgs x 6bags(2bagsx3boxes)
000559	RMS Hand Soap 16 kgs	16kgs x 1box

# Bio-Soap

Biodegradable scrub compound, cosmetic grade hand soap

ขนาดรีฟิล 2 กก.



Environment  
Friendly

PRTR  
Not  
Applicable

Toxicity  
Low

## [Features]

- Cosmetic grade liquid soap for washing your hands with scrub compounded.
- Contains biodegradable scrub particles.
- Biodegradable scrub particles deeply penetrate into obstinate dirt to wash the hands clearly.
- Moisturizing ingredients, such as hyaluronic acid, collagen, royal jelly extract gently care your hands.
- Different from other soap powder, it is a neutral liquid soap which doesn't cause the blockage in the drainpipe.

## [Applications]

- Cleans obstinate dirt stains on hands.



For refill



Bio-soap  
2.0 kgs



Bio-soap  
16 kgs



Item No	Product Name	Volumetric capacity•Packing
000521	Bio-soap 2.5 kgs	2.5kgs x 6bottles
000522	Bio-soap 2.0 kgs	2.0kgs x 6bags
000523	Bio-soap 16 kgs	16kgs x 1box

## AD ACE

Adhesive of synthetic rubber



### [Features]

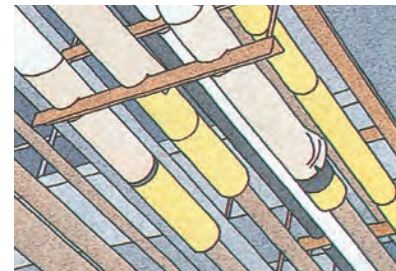
- Aerosol spray with strong adhesion, quick dry.
- Do not penetrate into paper and cloth, so its adhesive force performs well.
- Excellent adhesive force with a little spray.
- Applicable to styrene foam.

### [Applications]

- For pictures and posters.
- For all kinds of sewing paper patterns, such as appliqué and felt.
- For adhesion of all kinds of heat-insulating material, sound absorbing material of wool glass, styrene foam and urethane foam.
- Temporary adhesion for car lining.

### [Performance]

Applicable temperature	Below 60°C
------------------------	------------



Item No.	Product Name	Volumetric capacity・Packing
000131	AD ACE	420ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## RTV Gasket

Silicone solventless sealing agent



### [Features]

- De-oxime single-fluid RTV rubber.
- Reacts with vapor in the air and hardens into a rubber-like elastic substance at normal temperature.
- Excellent at heat and cold resistance (-40°C~+240°C), oil/water resistance and electrical insulating.

### [Applications]

- For sealing of electrical and electronics equipments (terminal of cables and motors, heat insulation of heaters and joints of refrigerator.)
- For sealing of window glass, sash, concrete and mortar, etc.
- As sealing agent for dust collecting equipment, ventilation equipment, heating/cooling duct.
- For connecting flanges' surface
- Used as liquid packing for engine, etc.

### [Performance]

Applicable temperature	-40°C~240°C
------------------------	-------------



NX77 RTV Gasket White	NX78 RTV Gasket Black	NX79 RTV Gasket Red
-----------------------------	-----------------------------	---------------------------

Item No.	Product Name	Volumetric capacity・Packing
000077	RTV Gasket White	100g x 24pcs
000078	RTV Gasket Black	100g x 24pcs
000079	RTV Gasket Red	137g x 24pcs

## NK Steel 816

Metal adhesive material



### [Features]

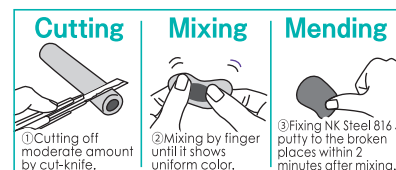
- Metal adhesive putty, cutting off moderate amount by cut-knife.
- 30 Minutes after application, grinding by the way of drilling, tapping and sanding.
- Repairs screw with stripped head and broken metal parts. Moreover, because top coating is available, it can also be used for repair of aero-parts. (Various usages)
- Bonding the places between metal and woodwork, metal and resin; repairing the places between metal and broken resin parts.
- Top coating is available after reparation.

### [Applications]

- Bonding or reinforcement of metal parts.
- Repairs metal parts, screws, or plastic parts except PP and PE.
- Repairing screws with stripped head.

### [Performance]

Applicable time	3 ~ 5 min
Durometer Hardness(D) (25°C)	85
Compression Strength(25°C)	70 N/mm <sup>2</sup>
Shearing Strength(25°C)	7N/mm <sup>2</sup>
Applicable temperature	-40°C~150°C



Item No.	Product Name	Volumetric capacity・Packing
000816	NK Steel 816	114g x 24pcs



# Water Soluble Oil Processing Agent



Oil removal agent



## [Features]

- Not cloudy. After sticking to the fat, it will accelerate the disintegration.
- It has excellent cleaning performance.
- 91% Biodegradable (by OECD DOC method).

## [Applications]

- Used for cleaning factory floors, manholes, oil pump floors, etc.
- Can be used on concrete, asphalt (except new ones).

## [Directions]

### ① Polishing

1. Use Oil Get (oil absorbing sheet) to absorb oil stains as much as possible.
2. Mix with 50 times water and pour on the stained spot before scrubbing.
3. Rinse with water.

### ② Using a high-pressure car wash

1. Use Oil Get (oil absorbing sheet) to absorb oil stains as much as possible.
2. Mix with 50 times water and pour on the stained spot.
3. Remove stains using a high-pressure car wash.

Item No	Product Name	Packing Volume • Packing
000410	Water Soluble Oil Processing Agent	4L x 24Bottles

- Not a dangerous goods according to the fire prevention law

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Mail Clean 505

Oil leak management solution



## [Features]

- It can be used as a solution to deal with oil spills on the sea. It is a type of approved product for boats (P-269).
- It is an aerosol emulsion product with very low toxicity to fishery resources and has good biodegradability.

## [Applications]

- Used to deal with oil spills.

## [Amount Increased from Standard]

Type of Oil	Amount Used (compared to leaking oil)
Heavy oils A, B, C	20~25%
Quality light oils	20~25%

Item No	Product Name	Packing Volume • Packing
022312	Mail Clean 505	18L x 1Tub

- Class 4, Class 3 oil type, Water soluble, Hazard level 3

# Oil Hunter

High efficiency oil adsorbent, natural fiber (cotton)



Environment  
Friendly

## [ Features ]

- The material of Oil Hunter is natural fiber (cotton).
- High power adsorption, compared to polypropylene (PP).
- Effecting on high viscosity and high temperature oil no matter it is mineral oil or animal and vegetable oil.
- Calorific Value generated during incinerating is about half of PP fiber.
- One piece of Oil Hunter can absorb around 2L of oil.

## [ Applications ]

- Used as oil and water separator, flowing oil adsorption of drainage canal in factory, kitchen, and gasoline station.
- A absorbing agent when oils flow in an emergency.
- Oil subdivision, absorbing oil spilled when changing brake parts, etc.

## [ Performance ]

One sheet weight (Item No: 00985)	about 100g
Oiling quantity /g	18.23g



Item No	Product Name	Volumetric capacity・Packing
000985	Oil Hunter	100sheets (50cm x 50cm)
000987	Oil Hunter Roller	2rolls (50cm x 33m)



# Oil Get J

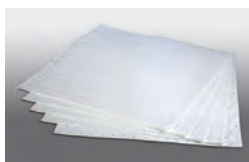
Oil absorbing sheet

## [ Features ]

- Excellent absorbency
- Absorbs from vegetable oil to mineral oil.
- Incompatible with water thus absorbing only oil
- It can be used to absorb oil floating on the surface or spilled on the floor.

## [ Applications ]

- Separates oil in drains, manholes or oil-water separator tanks.
- Oil separation during machine maintenance
- Cleans the oil from the factory floor or the well in the garage.
- Absorbs oil leaking from machinery.



Oil Get sheet



Oil Get roll



Item No	Product Name	Packing Volume	Packing Quantity
70160	Oil Get J Sheet Type	38 cm x 38 cm	100 sheets
70161	Oil Get J Roll Type	76 cm x 19 m	1 roll

- Solid flammable substance

# Oil Get J for both Water and Oil

Oil - water absorbing sheet

## [ Features ]

- Absorbs both water and oil.
- Absorbs from water-soluble cutting oil to vegetable oil, mineral oil.
- Excellent absorbency

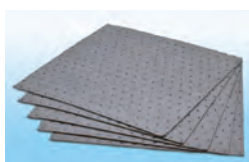
## [ Applications ]

- Absorbs cutting oil during start-up.
- Oil separation during machine maintenance
- Cleaning water - oil from factory floors or wells in garages.
- Absorbs oil leaking from machinery.

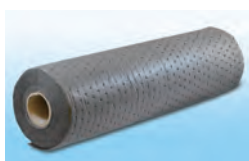
## [ Absorbing Quantity ]

※It is the company's actual measurement value. Actual absorption amount may deviate from this figure.  
※Measurement method is a certified method.

	Weight Ratio	Adsorption Amount Per Sheet	Adsorption Amount Per Box
Heavy oil A	12.9	372.62 grams	37.3 kilograms
Heavy oil C	13.3	382.85 grams	38.3 kilograms
Vegetable oil	13.4	386.01 grams	38.6 kilograms
Engine oil	12.5	362.06 grams	36.2 kilograms
Tap water	13.1	378.48 grams	37.8 kilograms



Oil Get for both Water and Oil sheet



Oil Get for both Water and Oil roll



Item No	Product Name	Packing Volume	Packing Quantity
70162	Oil Get J for both Water and Oil Sheet Type	38 cm x 38 cm	100 sheets
70163	Oil Get J for both Water and Oil Roll Type	76 cm x 19 m	1 roll

- Synthetic flammable substance 4 kg (Item No 070158)
- Synthetic flammable substance 5 kg (Item No 070158)

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent



## iCoat ET

Used with primer

2-liquid epoxy resin (solvent type)

It is a 2-liquid epoxy resin with good adhesion, water resistance, oil resistance, wear resistance. It can be applied with a roller or brush. It is durable and cost effective.

Japan Paint Manufacturers Association registration	
Registration Number	I16003
Level of Formaldehyde Dissipation	F☆☆☆☆
Inquiries	<a href="https://www.toryo.or.jp/">https://www.toryo.or.jp/</a>

### Application Procedure

**Equipment Required** • Gloves • Mask • Empty cans • Scales

• Mixer • Tape • Brush • Roller

#### 1. Preliminary preparation

Remove water, oil and debris from surfaces using a cloth or cleaner.



#### 2. Mixing

Mix solution A (main ingredient) and solution B (hardener) in the ratio of **4:1** by mass. Mix by a mixer within 1-2 minutes.



#### 3. Surface application

In difficult areas, use a brush to apply first. After that **apply a thin coat evenly** using a roller. ※Use a medium stiff roller.



### Application



Roller



Brush

### Features



Durable



Abrasion resistant



Oil resistant

### Features

Components in 1 set Quantity: 15 kg  
Mix ratio: 4 : 1  
Standard application amount: 0.2 kg/m<sup>2</sup>  
Applicable surface area: 70-80 m<sup>2</sup>

❗ Please consult if you want to apply over the paint of other products.

※It cannot be applied over oil-stained surfaces, colored concrete, and acrylic.

\*Use a thinner dampened cloth to wipe off the primer. If there is a paint that comes off, it is an acrylic type paint.

## iCoat UT

2-liquid epoxy resin (solvent type)

Excellent in polishing and chemical resistance

Japan Paint Manufacturers Association registration	
Registration Number	I16003
Level of Formaldehyde Dissipation	F☆☆☆☆
Inquiries	<a href="https://www.toryo.or.jp/">https://www.toryo.or.jp/</a>

### Application Procedure

**Equipment Required** • Gloves • Mask • Empty cans • Scales

• Mixer • Tape • Brush • Roller

#### 1. Preliminary preparation

Remove water, oil and debris from surfaces using a cloth or cleaner.



#### 2. Mixing

Mix solution A (main ingredient) and solution B (hardener) in the ratio of **1:1** by mass. Mix by a mixer within 1-2 minutes.



#### 3. Surface application

In difficult areas, use a brush to apply first. After that **apply a thin coat evenly** using a roller. ※Use a medium stiff roller.



### Application



Roller



Brush

### Features



Durable



Abrasion resistant



Oil resistant



Chemical resistant

Toluene: ○	10% Sulfuric acid: ○
Gasoline: ○	10% Hydrochloric acid: ○
Methanol: ○	30% Phosphoric acid: ○
10% Acetic acid: ○	10% Citric acid: ○
10% Sodium hypochlorite: ○	
5% Caustic soda: ○	

### Features

Components in 1 set Quantity: 10 kg  
Mix ratio: 1 : 1  
Standard application amount: 0.15 kg/m<sup>2</sup>  
Applicable surface area: 60-70 m<sup>2</sup>

❗ Prime with E primer or ET.

❗ Please consult if you want to apply over the paint of other products.

※It can be used with epoxy or urethane primer but cannot be used with acrylic.

# iCoat Repair Material For Concrete

PRTR

Not Applicable

Toxicity

Low

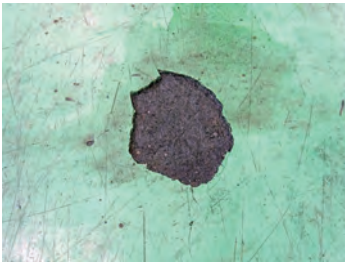
Solvent-free epoxy resin, Repair material for concrete

[ Features ]

- It is a filler repair material for concrete.
- Uneven parts can be repaired.
- Using epoxy resin, so the adhesion is excellent.
- Approximately 2.4 m<sup>2</sup> (3-mm thick) can be used for 1-time construction.

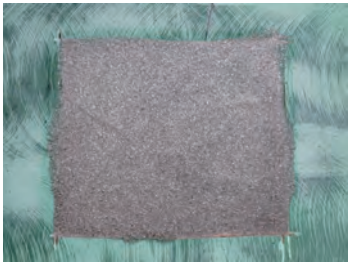
[ Applications ]

- Repair holes made from concrete floors such as factory floors, garages, parking lots, etc.



Before Construction

Please remove garbage, oil stains and water stains by using detergent to remove them.



After Construction

Mix the main ingredient, hardener and silica sand well with a mixer. Use a plastering trowel and press down with it when working in order not to cause gaps to complete the process.

Product Number	Product Name	Included in the Set
006220	iCoat Repair Material For Concrete	2 kg of main ingredient + 1 kg of hardener + 10 kg of silica sand

# iCoat Quick Drying Repair Material for Asphalt

PRTR

Not Applicable

Toxicity

Low

Repair material for quick-drying asphalt surface

[ Features ]

- It is a putty repair material for asphalt.
- 凹凸 can repair uneven parts.
- Because it is a fast-drying type, it can be used within 1 hour after coating. (in the case of room temperature 20 °C)
- Excellent adhesion to concrete
- It can be mixed without a mixer.
- Approximately 0.15 m<sup>2</sup> (10-mm thick) can be used for 1-time construction.

[ Applications ]

- Repair holes made from asphalt floors such as factory floors, garages, parking lots, etc.



Before Construction

Please remove garbage, oil stains and water stains by using detergent to remove them.



After Construction

Mix the resin and other ingredients well. Use a plastering trowel and press down with it when working in order not to cause gaps to complete the process.

Product Number	Product Name	Included in the Set
006222	iCoat Quick Drying Repair Material for Asphalt	0.8 kg of resin + 4 kg of other ingredients

- Surface Checking Agent
- Lubricant
- Food Machinery
- Anticorrosive /Special Paint
- Cleaner
- Adhesive
- Scribbling Varnish
- Mould Releasing Spray
- One-liquid Zinc-rich Primer Spray
- Stainless Steel Surface Treatment
- Welding Spatter Antifouling Agent /Welding Support Product
- Groove Antirust Spray
- Joining Parts Treatment Agent



# iCoat Quick-Drying Repair Material

It's a quick dry type. After 1-hour maintenance, it can be used immediately (type S, temperature 20 °C).

No mixer needed. It can fill holes on uneven surfaces including solving the problem of uneven floors.

Product Number	Product Name	Temperature
006223	Type S	For 15-35 °C
006224	Type W	For 0-20 °C

Application Method

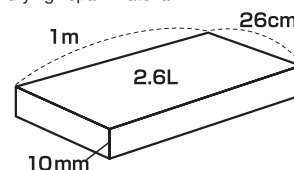


## Trowel

Components in 1 set

1 kg of resin + 4 kg of cement powder

The volume that can use 1 set of this quick-drying repair material



	Temperature	Usable Period	Setting Time
Type S	35°C	Approx. 10 min	Approx. 40 min
	20°C	Approx. 15 min	Approx. 60 min
Type W	20°C	Approx. 10 min	Approx. 40 min
	0°C	Approx. 20 min	Approx. 120 min

## Adhesion to This Product

Adhesion when applied to surface	ET	UT	EFR	AT
	○	◎	◎	×

\*For better adhesion, sanding is recommended.

## Application Procedure

Equipment Required • Gloves • Mask • Tape • Trowel

### 1. Preliminary preparation



Remove water, oil and debris from the surface using a cloth or cleaner.

### 2. Liquid addition



Cut the bag and fill it with resin.

\*Use the whole bag each time.

### 3. Mixing



Knead the mixture well within 1-2 minutes.

### 4. Surface application (Usage)



Apply with a trowel without creating gaps.

\*Use up within 1-15 minutes.

## Precautions for applying

### <Working environment>

- Avoid using in the presence of fire.
- Do not use at temperatures below 0°C.
- Wear a mask for organic solvents when applying iCoat, a quick-drying repair material, and use when there is ventilation.

### <Preparation of the workpiece>

- Remove water, oil and other debris from the repair area.

### <Filling holes>

- Do not use fire in materials storage or operation areas.
- After mixing, it should be used up for the period specified above.
- If the specified period is exceeded, do not use because the viscosity will be higher.
- After repair, used equipment must be cleaned (with thinner) immediately.
- If sticking to the skin, immediately wipe it off. Wash with water or soap, etc.

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# Blue Varnish Spray / Aotack 50 / Aotack 500

 PRTR  
Not  
Applicable

Paint for line-drawing / Blue

## [Features]

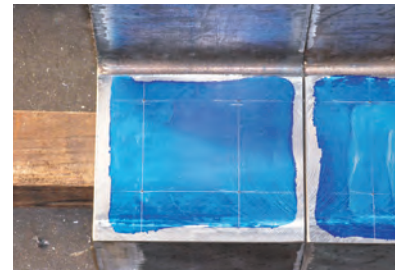
- Easy application spray with high adhesion.
- Coating film is 0.005mm thick. Suitable for clear and precise scribbling.
- Suitable to be applied to metal and glass surface.
- Rapid dry (within 1 minute), shortens waiting time.
- Aerosol type (Blue varnish spray) and brushing type (Aotack 50) are available.
- \* Replenishes Aotack 50 with Aotack 500.

## [Applications]

- For scribbling on machines, electric instruments, devices, parts and metal surface with grinds.

## [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Item No	Product Name	Volumetric capacity・Packing
000101	Blue Varnish Spray	300ml x 24pcs

Item No	Product Name	Volumetric capacity・Packing
000102	Aotack 50	50ml x 48pcs
000110	Aotack 500	500ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
MachineryAnticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
VarnishMould  
Releasing  
SprayOne-liquid  
Zinc-rich  
Primer SprayStainless Steel  
Surface  
TreatmentWelding Spatter  
Antifouling Agent  
/Welding Support  
ProductGroove Antirust  
SprayJoining Parts  
Treatment Agent

# White-Pen Spray

Paint for line-drawing / White

 PRTR  
Applicable

## [Features]

- It is a white scribbling spray, easy & simple operation.
- Coating film thickness: 0.01mm. Covers uneven surface, finish up with clear and precise scribbling.
- Excellent adhesiveness, applicable to all kinds of metal surfaces and cast iron.
- Rapid dry (within 3 minutes); shortens waiting time.

## [Applications]

- For scribbling onto machines, casting, devices and metal surface with dark color.

## [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Item No	Product Name	Volumetric capacity・Packing
000103	White - Pen Spray	420ml x 24pcs

# Blue Layout Ink Remover

Removal of varnish Paint / Powerful degreasing spray

 PRTR  
Applicable

## [Features]

- Rapid dry and easy removal of scribbling paint.
- Spray type, easy access to any location.
- Washing agent for cleaning oils from metal parts and metal working products.

## [Applications]

- For removal of BLUE VARNISH, AOTACK and WHITE PEN SPRAY.
- Washing agent for cleaning oils from metal parts, mould and tools.
- Cleaning of anti-corrosive agent applied on metals.

## [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Item No	Product Name	Volumetric capacity・Packing
000104	Blue Layout Ink Remover	420ml x 24pcs
000604	Blue Layout Ink Remover 15L	15L x 1can

## Blue Varnish Spray S

Not applicable to PRTR•Spray for line-drawing/blue



PRTR  
Not Applicable

Toxicity  
Low

Environment  
Friendly

### [Features]

- With dark blue color, gentle on eyes. Spray type, easy and simple operation.
- Safe to use. Harmless to the environment and human body.
- Film thickness is 0.005mm. Suitable for precise scribbling.
- High adhesion, Suitable for metal and glass surface.
- Rapid dry (within 1 minute); cuts time down on drying.

### [Applications]

- For scribbling on machines, electric instruments, devices and metal surface with grinds.

### [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Item No	Product Name	Volumetric capacity•Packing
000151	Blue Varnish Spray S	420ml x 24pcs

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## White-Pen Spray S

Not applicable to PRTR•Spray for line-drawing /white



PRTR  
Not Applicable

Toxicity  
Low

Environment  
Friendly

### [Features]

- It is a white scribbling spray, easy & simple operation.
- Safe to use. Harmless to the environment and human body.
- Excellent adhesiveness, applicable to all kinds of metal surfaces and cast iron.
- Film thickness: 0.01mm. Covers uneven surface, finish up with clear and precise scribbling.
- Rapid dry (within 3 minutes); shortens waiting time.

### [Applications]

- For scribbling onto machines, casting, devices and metal surface with dark color.

### [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Item No	Product Name	Volumetric capacity•Packing
000153	White-Pen Spray S	420ml x 24pcs

## Blue Layout Ink Remover S

Not applicable to PRTR•Remover for varnish paint



PRTR  
Not Applicable

Toxicity  
Low

Environment  
Friendly

### [Features]

- Rapid dry and easy removal of scribbling paint.
- Safe to use. Harmless to the environment and human body.
- Powerful degreasing spray, easy access to any location.

### [Applications]

- For removal of Blue Varnish Spray S, White-Pen Spray S
- Washing agent for cleaning oils from metal parts, mould, etc.

### [Performance]

Applicable temperature	Normal temperature
------------------------	--------------------



Item No	Product Name	Volumetric capacity•Packing
000154	Blue Layout Ink Remover S	420ml x 24pcs
000632	Blue Layout Ink Remover S 18L	18L x 1can





Plastics  
Smart

Biomass Additive

ONE BIO



B-001



**Biomass additive for polypropylene (PP) and polyethylene (PE)**

- ONE BIO B-001 is made from natural raw materials from 80% corn, reducing carbon dioxide emissions and contributing to the prevention of global warming.
- Simply mix with PP or PE pellets to increase biomass levels.
- Since it does not change the physical characteristics of PP material, injection molding machines can be used.
- If B-001 is added, the product is made with natural ingredients.
- If mixed with B-001 at 12.5%, it will pass the biomass usage standard called Biomass 10.
- It can be used as part of daily life for environmental measures (SDG, etc.).



Product Number	Product Name	Packing Volume	Packing Quantity
042895	One Bio B-001	25 kg	1 Bag

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Mould Releasing Agent

Used for plastic mould release

- Available for mould release of various thermoplastic resin, thermosetting resin, phenol resin and PET.
- Aerosol Spray. / Uniform Application. / Long Lasting.
- 00124 and 00637 with different application are available for Secondary Process.



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

### Mould Release Agent High Viscosity Silicone Type

PRTR  
Not  
Applicable

Toxicity  
Low



#### [ Features ]

- Contains high viscosity silicone, excellent durability.
- Available for both thermoplastic resin and thermosetting resin.
- Used for rubber mould releasing.
- Excellent in thermal stability (Heat resistance: 200~250°C)

#### [ Applications ]

- Used for thermoplastic resin, such as, PE, PP, PS, ABS, A S, PMMA, PC, nylon, polyacetal.
- Applies to thermosetting resin, such as, phenol, urea, melamine, epoxy, unsaturated polyester, etc.

Item No	Product Name	Volumetric capacity•Packing
000122	Mould Release Agent High Viscosity	420ml x 24pcs

### Mould Release Agent Low Viscosity Silicone Type

PRTR  
Not  
Applicable

Toxicity  
Low



#### [ Features ]

- Contains low viscosity silicone, penetrates to any complicated places.
- Available for both thermoplastic resin and thermosetting resin.
- Hardly any weld line occur.
- Excellent in thermal stability (Heat resistance: 200~250°C)

#### [ Applications ]

- Used for thermoplastic resin, such as, PE, PP, PS, ABS, A S, PMMA, PC, nylon, polyacetal.
- Applies to thermosetting resin, such as, phenol, urea, melamine, epoxy, unsaturated polyester, etc.

Item No	Product Name	Volumetric capacity•Packing
000121	Mould Release Agent Low Viscosity	420ml x 24pcs

### Mould Release Agent Lecithin Oil Type

PRTR  
Not  
Applicable

Toxicity  
Low



#### [ Features ]

- A paintable mould release agent, vegetable lecithin as the major ingredient.
- No silicone oil contained.
- After releasing the mold, gluing, painting and printing can be processed with little effect on the original paint.
- Excellent in thermal stability. (Molding temperature: 330°C, Metal Mold temperature: 120°C)

#### [ Applications ]

- Mould release for thermoplastic resin like polyacetal, PE, PP, PS, ABS, AS, PMMA, PC, nylon, etc.
- Mould releasing agent applies to high temperature mould, such as Polysulfone, etc.

Item No	Product Name	Volumetric capacity•Packing
000124	Mould Release Agent Lecithin Oil Type	420ml x 24pcs

### Mould Release Agent Fluorine Type R

PRTR  
Not  
Applicable

Toxicity  
Low



#### [ Features ]

- No negative influences on electric contact point, suitable for electric parts molding.
- Good at release of rubber resin, silicone resin and fluororesin mould.
- Gluing, painting and printing are available when only small amount of this agent is needed.
- Excellent in thermal stability. (Heat-resistant: 200~250°C)

#### [ Applications ]

- Mould Release for plastic and various rubber.
- Applicable to thermoplastic resins, phenol resin, PET, FRP, SMC.
- Used for releasing of silicone mould when producing of prototypes.

Item No	Product Name	Volumetric capacity•Packing
000637	Mould Release Agent Fluorine Type R	420ml x 24pcs

### Denature Silicone Spray (High Viscosity Silicone Type)

PRTR  
Not  
Applicable

Toxicity  
Low



#### [ Features ]

- From the main ingredient of Denature Silicone, after removing the workpiece from the mold, it rarely affects printing, adhesion or painting.
- It can be used with thermoplastic and thermosetting resins.

#### [ Applications ]

- Used as a non-stick spray for plastic injection parts that are processed further.
- Used as a lubricant when inserting rubber hoses, etc.
- Used in places where lubrication, slippage is required, such as in a printing house, logistics warehouse, etc.

Item No	Product Name	Packing Volume • Packing
000635	Denature Silicone Spray	420ml x 24pcs

### Shuttle Protector FS

PRTR  
Not  
Applicable

Toxicity  
Low



#### [ Features ]

- Because it contains both Fluorine and Silicone, able to prevent mould from sticking, excellent mould releasing effect.
- Available for both thermoplastic resin and thermosetting resin.

#### [ Applications ]

- Mould release for thermoplastic resin, such as PE, PP, PS, ABS, AS, PMMA, PC, nylon and polyacetal etc.
- Mould releasing agent applies to high temperature mould, such as Polysulfone, etc.

Item No	Product Name	Volumetric capacity•Packing
000638	Shuttle Protector FS	420ml x 24pcs



Silicone mould

## [Mould Release Agent Choice Sheet]

### Mould Release Agent High Viscosity Silicone Type

Major Ingredient	Heat - Resistant	Secondary Process	Mould Release Ability			
			Thermoplastic Property	Thermosetting Property	Rubber	Silicone, Fluorine
Silicone	200~250°C	Unavailable	◎	◎	○	×

### Mould Release Agent Low Viscosity Silicone Type

Major Ingredient	Heat - Resistant	Secondary Process	Mould Release Ability			
			Thermoplastic Property	Thermosetting Property	Rubber	Silicone, Fluorine
Silicone	200~250°C	Unavailable	◎	◎	△	×

### Mould Release Agent Lecithin Oil Type

Major Ingredient	Heat - Resistant	Secondary Process	Mould Release Ability			
			Thermoplastic Property	Thermosetting Property	Rubber	Silicone, Fluorine
Vegetable Phospholipid	300°C	Painting & Plating is available	◎	△	△	×

### Mould Release Agent Fluorine Type R

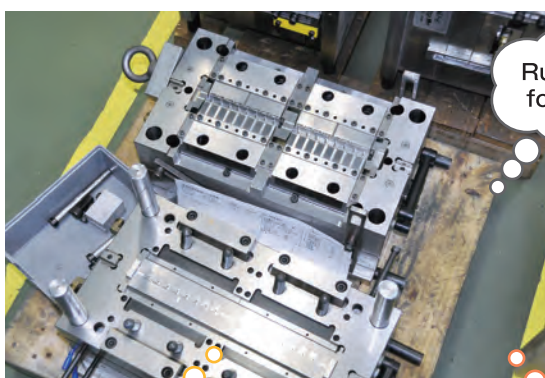
Major Ingredient	Heat - Resistant	Secondary Process	Mould Release Ability			
			Thermoplastic Property	Thermosetting Property	Rubber	Silicone, Fluorine
Special Fluorine Compound	200~250°C	Painting & Plating is available	◎	◎	◎	○

### Denature Silicone Spray (High Viscosity Silicone Type)

Major Ingredient	Heat - Resistant	Secondary Process	Mould Release Ability			
			Thermoplastic Property	Thermosetting Property	Rubber	Silicone, Fluorine
Silicone Fluorine Compound	200~250°C	Painting & Plating is available	○	○	×	×

### Shuttle Protector FS

Major Ingredient	Heat - Resistant	Secondary Process	Mould Release Ability			
			Thermoplastic Property	Thermosetting Property	Rubber	Silicone, Fluorine
Silicone Fluorine Compound	250°C	Unavailable	◎	◎	○	○



Rust Proof for mould.

Oil base, Wax base and volatile liquid type are available.  
See page 12.



Gummy removing and deposit cleaning.

Strong Clean Power.  
See page 19.



Removes anti-corrosion agent clearly.

Mould releasing agent, and other cleaning agent are available.  
See page 19.



Surface Checking Agent

Lubricant

Food Machinery

Anticorrosive /Special Paint

Cleaner

Adhesive

Scribbling Varnish

Mould Releasing Spray

One-liquid Zinc-rich Primer Spray

Stainless Steel Surface Treatment

Welding Spatter Antifouling Agent /Welding Support Product

Groove Antirust Spray

Joining Parts Treatment Agent



## One-Liquid Rich Zinc Primer

Zinc powder anti-corrosion primer

### [ Features ]

- One-liquid aerosol type, zinc rich epoxy paint.
- While ultramicro zinc powder with super anti-rust property reacts on the iron surface electrochemically, its coated zinc surface is stabilized and transformed to insoluble film to strengthen anti-corrosion performance furthermore.
- F series does not contain toluene and xylene. Environment Friendly product.
- Almost all lacquer can be painted on the zinc-coated surface. (Not applicable to phthalic anhydrous paint for it may cause peeling between layers).

### [ Applications ]

- Applicable to ships, storage spaces, tanks, bridges and harbor installations.
- Rust proof for railway equipment, electric generation and transmission facility, building construction, vehicles, etc.
- Repairs scratch on galvanized surface, burned stain or dirty spot, etc.
- Anti-rusting or repairs cutting plane, welding surface or scratches caused during installation operation.
- Used as anticorrosive & repair paint applied to galvanized areas around constructive scaffold.

#### Type 1: High-Concentration of Zinc

Zinc powder contained in dry paint film is over 84%. Almost all lacquer can be painted on the zinc-coated surface. Anti-corrosion is a major purpose of zinc base coat (gray color).

Mainly used in shipyard, harbor installations, etc. or as a rust inhibitive primer of base coat.

#### Type 2: Shiny silver color

A repair paint with shiny silver color which similar to hot dip galvanizing.

Repair of damaged hot - dip galvanized coatings, or provide it with a shiny final coating on construction sites. Use after applying type 1 (high-concentration of zinc) to the base coat, will finish a rust proof and clear shiny coat.

The major usage of type 2 is to regain the clear coating, repair and color reproduction of the dull color like gray or black/gray occurred during hot - dip galvanizing to match the surrounding galvanized coat. Repairs cutting plane, welding surface in construction sites after application of type 1 (high-concentration of zinc)

#### Type 3: Environmentally conscious F series

One liquid zinc rich Primer, not applicable to PRTR.

TX (toluene and xylene) free, ecological products, anti-corrosion and dry time are almost the same with the existing products.



### Salt Spray Corrosion Test

Test Product

000130 Super Zinc Coat95

Film thickness  
left: 30μm  
middle: 60μm  
right: 90μm

After  
26  
hours



After  
504  
hours



After  
1080  
hours



Paint coat peels off  
after SST1080 hours



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

# One-Liquid Rich Zinc Primer



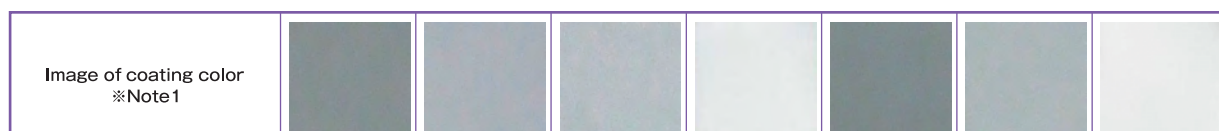
Environment  
Friendly



Environment  
Friendly

[ Specification table ]

Products Name	Zinc Coat	Klin-Zinc	Zinc Coat SA	Klin-Zinc L	Klin-Zinc HL	Klin-Zinc F	Klin-Zinc LF
Item No	000130	070977	000137	072351	072360	000453	000438



Zinc powder in dry paint film	over 84%	over 77.5%	over 73%	over 10.9%	over 15.0%	over 77.6%	—
Specific gravity of liquids	1.75	1.25	1.58	0.93	0.98	1.60	0.88
Salt Spray Test	Over 500hours	Over 200hours	Over 400hours	—	—	Over 200hours	—
Outdoor Exposure	Over 2years	—	Over 2years	—	—	—	—
Film thickness ※Note2	15~25μm	5~15μm	15~25μm	5~15μm	5~15μm	15~25μm	5~10μm
Cross cut adhesion test	100/100	100/100	100/100	100/100	100/100	100/100	100/100
For last coating ※Note3	O	x	x	x	x	x	x
Tacky dry / 20℃(standard)	About 5minutes	About 5minutes	About 10minutes	About 15minutes	About 10minutes	About 5minutes	About 5minutes
Hard dry	7hours	7hours	8hours	24hours	12hours	7hours	12hours
Coated area ※Note4	0.4~0.6㎡	0.2~0.3㎡	0.4~0.6㎡	0.8~1.2㎡	1.5~2.0㎡	0.4~0.6㎡	1.4~1.8㎡
Heat Resistance (short period)	180℃	180℃	180℃	180℃	100℃	100℃	100℃
Heat Resistance (long period)	Below 150℃	Below 150℃	Below 150℃	Below 150℃	Below 80℃	Below 80℃	Below 80℃

Inner Capacity	450g	420ml	420ml	420ml	420ml	420ml	420ml
Packing	24pcs/ctn	24pcs/ctn	24pcs/ctn	24pcs/ctn	24pcs/ctn	24pcs/ctn	24pcs/ctn

- ※Note1 Print color may slightly differ from actual color.
- ※Note2 Standard of single coat. May slightly differ based on spray speed and distance.
- ※Note3 Not applicable to phthalic anhydrous paint for it may cause peeling between layers.
- ※Note4 Coated area is calculated based on the film thickness from 30 to 40μm. Big difference may occur by difference of application method.



Anti-rust repair for scaffolding of construction



Glossy silver repair for hotdip galvanizing

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Super Stainbrite

Electrolysis Removal of Burnt Deposit from Stainless Steel

Up to now, we use Nitric Fluorine Acid, Hydrochloric Acid, Sand Paper or blast to remove oxidized scale and temper color,

But these cleaning methods have some problems as follows: 1. Waste acid and fine particles deteriorate the work environment.

2. Beauty of stainless steel surface could be spoiled by fusion and grinding.

3. Causes time and cost loss.

Our Stainbrite and Stainlight Series can solve all these problems.



## Super Stainbrite TK-230

It is designed to be easy to use.

There is a dedicated holder for a brush mop!

### [Features]

- There is an adjustment knob so that it is convenient to select all kinds of applications. It is lightweight but powerful enough.
- Optimum application with low pressure allows use with brush mops.
- Can be used abroad. It supports from 100 to 240 volts.
- A filter is installed on the back to reduce the damage of the device from mixed foreign matter.

Product Number		Model
026105		TK-230
Specifications	Input	Input voltage: 100-240 V
	Output	Output power: 600 watts (Max.) Max AC: 26 A

Machine Size	Machine Weight
175H×260W×360D (mm)	7.3 kg



※There is a built-in auto reset function.

## Super Stainbrite TK-330

High power, with plug for connecting trowel electrodes.

It is designed to be easy to use. Easy operation of all 3 electrodes.

### [Features]

- It can be used with trowel electrodes, various types of mop brushes and attachments.
- High power (45A). It can handle a lot of burns.
- It can be used abroad. It supports from 100 to 240 volts.
- A filter is installed on the back to reduce the damage of the device from mixed foreign matter.

Product Number		Model
026108		TK-330
Specifications	Input	Input voltage: 100-240 V
	Output	Output power: 100 watts (Max.) Max AC: 45 A

Machine Size	Machine Weight
175H×260W×360D (mm)	8 kg



※There is a built-in auto reset function.

## Brush

Brush mop



### [Features]

- Powerful in removing black deposits in small spots such as narrow inner corners and cross-welded parts.
- When using the brush mode, the TK330 and TK230 are less prone to sparking.
- The brush is softer and easier to use. Therefore, it has the ability to work well.

## Electrode

Trowel electrode



### [Features]

- The area that can be worked in one time is large due to the wide surface area of the trowel efficient. Therefore, it has the ability to work well.
- Suitable for large workpieces
- Efficient cleaning performance of surfaces
- Compatible with TK-330, TK-5

Product Number	Product Name	Packing Quantity
071136	Brush Mop	5 Pieces

Product Number	Product Name	Packing Quantity
068670	Trowel Electrode (for 330)	1 Piece (5 m)
068671	Trowel Electrode (for 510)	1 Piece (5 m)










## Electrochemical Liquid

STAINBRITE Series (Neutral Electrochemical Liquid) and STAINLITE Series (Acid Electrochemical Liquid)

PRTR  
N/A

OPOS  
N/A

We have total 6 kinds of Electrochemical liquid and 2 kinds of Treatment Agent, which can be chosen to meet your various purpose and all requires. Safe to use, treat the burnt surface quickly and satisfy you with beauty finish.

Electrochemical Liquid	Stock No	Product Name	Packing	pH	Liquid Color	Features	Mode	
Neutrality		026054 NB-F 1L	1bottle	7.0	Yellow	<b>Neutral Liquid · Best Finish · Speedy &amp; High Power</b> ●To gain the best performance, use it by combining with our Stainbrite TK-210. ●Form Passive Film	H Burnt Mark Removal	E Burnt Mark Removal
		026053 NB-F 4L	1bottle				H Polish	Special
		026052 NB-F 20L	1bottle					
		026133 EH-400 4L	1bottle	7.0	Purple	<b>Put more emphasis on final finish Good at cleaning and final finish</b> ●Effluent treatment is not necessary. ●Most suitable for applying on the material which difficult to be washed by water, such as semiconductor.	H Burnt Mark Removal	E Burnt Mark Removal
		026132 EH-400 20L	1bottle				H Polish	Special
		026138 EH-700 4L	1bottle	7.0	Purple	<b>Put more emphasis on final finish &amp; speed up</b> ●Effluent treatment is not necessary. ●Most suitable for applying on the material which difficult to be washed by water, such as semiconductor.	H Burnt Mark Removal	E Burnt Mark Removal
		026137 EH-700 20L	1bottle				H Polish	Special
		026149 FB-1 4L	1bottle	7.0	Pale Green	<b>2B · High effect on hot rolled steel</b> ●Suitable for alternate current electrolysis passivation treatment. ●Neural high power	H Burnt Mark Removal	E Burnt Mark Removal
		026150 FB-1 20L	1bottle				H Polish	Special
Acidity		025876 H-800 5kg	1bottle	2.0	Blue	<b>Suitable for electrolytic polishing and removal of stubborn burn mark. Almighty acid electrochemical liquid</b> ●Able to remove the burnt mark from the core of the reverse side of hot rolled steel ●Food-grade acid, safety in use.	H Burnt Mark Removal	E Burnt Mark Removal
		025866 H-800 20kg	1bottle				H Polish	Special
		026153 H-900 5kg	1bottle	2.0	Pale Blue	<b>Acid electrochemical liquid, suitable for electrolytic polishing and removal of stubborn burn mark, high Quality Finish</b> ●Able to remove the burnt mark from the core of the reverse side of hot rolled steel ●Food-grade acid, safety in use.	H Burnt Mark Removal	E Burnt Mark Removal
		026154 H-900 30kg	1bottle				H Polish	Special
Treatment Agent		025873 C-100 4kg	1bottle	1.7	White	<b>Removes dirty and rust from SUS(304)</b> ●Simply removal of rust and dirty 5 to 30 minutes after application. (Paste, no dripping.) ●After treatment, the surface can be simply washed by water or just wiping by cloth. ●Not applicable to Toxicity Law.		
		025872 C-100 20kg	1bottle					
		026021 Neutralizing Cleaner 4kg	1bottle	13 ~ 14	Yellow	<b>Cleaner for neutralizing acid waste</b> ●Spray the diluted liquid onto acid waste liquid(usually dilute to 5~10times), then the waste liquid can be disposed.		
		025862 Neutralizing Cleaner 20kg	1bottle					

Surface Checking Agent

Lubricant

Food Machinery

Anticorrosive /Special Paint

Cleaner

Adhesive

Scribbling Varnish

Mould Releasing Spray

One-liquid Zinc-rich Primer Spray

Stainless Steel Surface Treatment

Welding Spatter Antifouling Agent /Welding Support Product

Groove Antirust Spray

Joining Parts Treatment Agent

## Klin Spatter

Anti-spatter agents

- Klin Spatter is used to prevent adhesion of unwanted spatter, generated in welding processes. These anti-spatter agents are helpful in reducing the unnecessary labor costs involved removal of spatter and improving the finish of the welded article. It is pollution-free, safe, easy – operation, economy, efficiency and rust-proof.
- A massive range of product items, including big drum and aerosolized products, all of which have excellent spatter release effect.
- Klin Spatter series prevent rust within short period.



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Klin Spatter Overcoat Available Type

ES-55/E-32/Z/GW-2



### [ Features ]

- Available to be overcoated by paint because a hardened film forms on the welding surface. It is not necessary remove Klin Spatter film before painting.
- Generally used as anti-spatter agent for SS(Iron).
- \*Not able to be applied to stainless steel conducted with electrodeposition or plating.
- \*Please pretest when special paint is to be applied.



Product Number	Product Name	Packing Volume	Packing Quantity
020550	Klin Spatter ES-55 F	420 ml	12 pcs

- Class 4, Class 1 oil type, Hazard level 2, 210 ml

Product Number	Product Name	Packing Volume	Packing Quantity
020533	Klin Spatter E-32 3kg	18 kg	4 cans
020532	Klin Spatter E-32 18kg	18 kg	1 can
020530	Klin Spatter E-32 198kg	198 kg	1 pc
020555	Klin Spatter ES-55	198 kg	12 pcs
020558	Klin Spatter ES-55	420 ml	12 pcs
020557	Klin Spatter ES-55 18kg	18 kg	1 can
020752	Klin Spatter Z 18kg	18 kg	1 can
020742	Klin Spatter GW-2 18kg	18 kg	1 can

- Not a dangerous goods according to the fire prevention law

## Klin Spatter Overcoat & Removal OK Type

300/500/WN-L/W-2000/W-1000



### [ Features ]

- After welding, either overcoat or removing is available.
- Can be used to both SUS and SS.
- \*Electrodeposition or plating can be conducted after removing the coating film.
- \*Please pretest when special paint is to be applied.



Product Number	Product Name	Packing Volume	Packing Quantity
020704	Klin Spatter WN-L	420ml	12 pcs

- Class 4, Alcohol type, Hazard level 2, 210 ml

Product Number	Product Name	Packing Volume	Packing Quantity
020613	Klin Spatter 300 3kg	3 kg	4 cans
020612	Klin Spatter 300 18kg	18 kg	1 can
020611	Klin Spatter 300 198kg	198 kg	1 pc
020636	Klin Spatter 500 18kg	18 kg	1 can
020687	Klin Spatter W-2000 18kg	18 kg	1 can
020685	Klin Spatter W-2000 198kg	198 kg	1 pc
020692	Klin Spatter W-1000	1 L	6 pcs
020691	Klin Spatter W-1000 18kg	18 kg	1 box
020690	Klin Spatter W-1000 198kg	198 kg	1 pc

- Not a dangerous goods according to the fire prevention law

## Klin Spatter Removable Type

AW/AX/AX-2/M/S



### [ Features ]

- After welding, coating film is easy to be removed.
- Generally used as anti-spatter agent for SUS (Stainless).
- \*Paint will come off if the coating film is not removed.
- \*Painting is available after removing coating film.



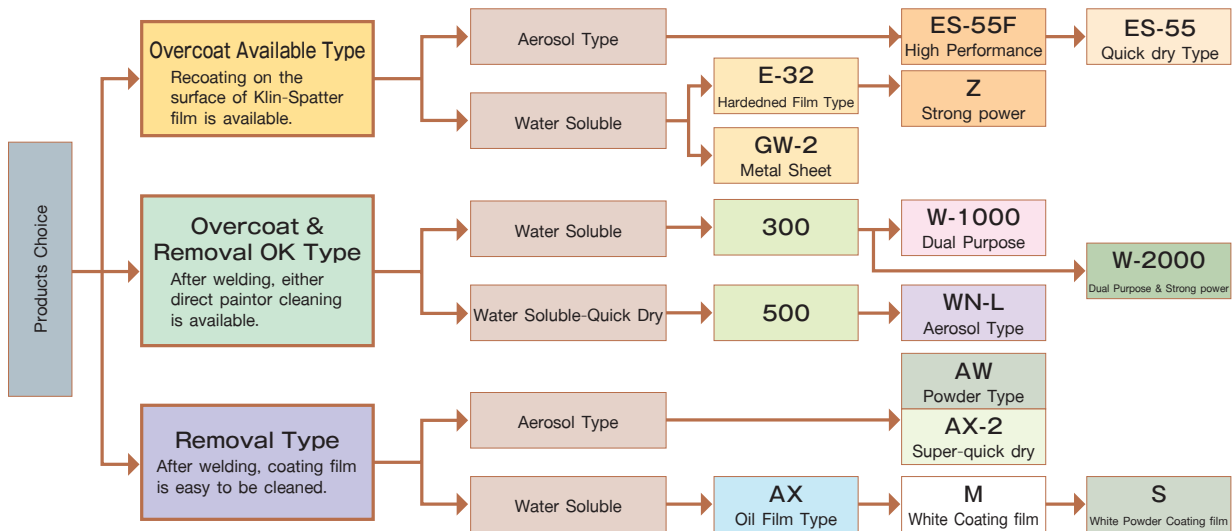
Product Number	Product Name	Packing Volume	Packing Quantity
020489	Klin Spatter AW	420ml	12 pcs
020485	Klin Spatter AX-2	420ml	12 pcs

- Class 4, Class 1 oil type, Water soluble, Hazard level 2, 210 ml (20489)
- Class 4, Class 1 oil type, Water soluble, Hazard level 2, 210 ml (20485)

Product Number	Product Name	Packing Volume	Packing Quantity
020465	Klin Spatter AX 3kg	3 kg	4 cans
020462	Klin Spatter AX 18kg	18 kg	1 can
020460	Klin Spatter AX 198kg	198 kg	1 pc
020792	Klin Spatter M 18kg	18 kg	1 can
020790	Klin Spatter M 198kg	198 kg	1 pc
020623	Klin Spatter S 5kg	5 kg	2 cans
020622	Klin Spatter S 20kg	20 kg	1 can

- Not a dangerous goods according to the fire prevention law

# Welding Spatter Antifouling Agent / Welding Support Product



Application	Product Name	Product Number	Packing Volume	Type		Coating file		Anti-spattering effect			Removing Film Method				Features	PRTR Law	
				Solvent	Water-Soluble	Color	Drying Time	Recoating	Available for 1-2 Layer Welding	Multi-Layer Welding	Water Washing	Acid Pickling	Alkaline Cleaning	Solvent Treatment		PRTR	Toxicity
Overcoat Available Type	ES-55F	020550	420 ml x12	●		Clear	3 Minutes	○	●	○	×	×	×	×	●Quick Dry, Raise Work Efficiency. ●Heat - Resistance.	PRTR Applicable	Toxicity Applicable
	ES-55	020558	420 ml x12	●		Clear	90 Minutes	○	●	○	×	×	×	×	●Water-Soluble. ●Hardened film formed, high adhesion with paint.	PRTR Applicable	Toxicity Applicable
		020557	18 kg x1														
	E-32	020555	198 kg x1	●		Clear	15 Minutes	○	●	△	×	×	×	×	●Water-Soluble. ●Hardened film formed, high adhesion with paint.	PRTR Not Applicable	Toxicity Low
		020533	3 kg x4														
		020532	18 kg x1														
Z	020530	198 kg x1	●		Clear	15 Minutes	○	●	○	×	×	×	×	●Water-Soluble. ●Strongly preventing adhesion of unwanted spatter. ●Most suitable for recoating.	PRTR Not Applicable	Toxicity Low	
	020752	18 kg x1															
GW-2	020742	18 kg x1	●		Silver	15 Minutes	○	●	○	×	×	×	×	●Water-Soluble. ●Strongly preventing adhesion of unwanted spatter. ●Most suitable for recoating.	PRTR Applicable	Toxicity Low	
Overcoat & Removal OK Type	300	020613	3 kg x4	●		Clear	15 Minutes	○	●	△	○	○	○	○	●Water-Soluble.	PRTR Not Applicable	Toxicity Low
		020612	18 kg x1														
		020611	198 kg x1														
	500	020636	18 kg x1	●		Clear	10 Minutes	○	●	△	○	○	○	○	●Water-Soluble, quick dry.	PRTR Not Applicable	Toxicity Low
		020687	18 kg x1														
	W-2000	020685	198 kg x1	●		Clear	15 Minutes	○	●	○	○	○	○	○	●Water-Soluble, Safe and Environment friendly products. ●W-2000 Strong power type of #300	PRTR Applicable	Toxicity Low
020692		1Lx6															
W-1000	020691	18 kg x1	●		Clear	15 Minutes	○	●	△	○	○	○	○	●Water-Soluble, Safe and Environment friendly products. ●W-1000 Strong power type	PRTR Not Applicable	Toxicity Low	
	020690	198 kg x1															
WN-L	020704	420 ml x12	●		Clear	5 Minutes	○	●	○	○	○	○	○	●Aerosol spray. ●Most suitable for stainless, benderizing plate.	PRTR Not Applicable	Toxicity Low	
Removal Type	AW	020489	420 ml x12	●		White Powder	5 Minutes	×	●	○	○	○	○	○	●Aerosol spray. ●Most suitable for stainless, benderizing plate, those need afterward cleaning stainless material. ●Coating film can easily be removed by water washing of alkaline cleaning.	PRTR Not Applicable	Toxicity Low
	AX-2	020485	420 ml x12	●		Clear	90 Minutes	×	●	△	○	○	○	○	●Super quick dry aerosol spray. ●Applied to stainless and stainless material used for plating or electrodepositing. ●Coating film can easily be removed by water washing of alkaline cleaning.	PRTR Applicable	Toxicity Applicable
	AX	020465	3 kg x4	●		Clear	15 Minutes	×	●	△	○	△	○	○	●Water-Soluble. ●Standard Formula, oil film formed.	PRTR Not Applicable	Toxicity Low
		020462	18 kg x1														
	M	020460	198 kg x1	●		White Powder	15 Minutes	×	●	○	○	○	○	○	●Water-Soluble. ●White powder coating film is formed. ●Heat resistance.	PRTR Not Applicable	Toxicity Low
		020792	18 kg x1														
S	020790	198 kg x1	●		White Powder	15 Minutes	×	●	○	○	○	○	△	●Water-Soluble. ●Strongly preventing adhesion of unwanted spatter. ●Coating film can easily be removed by water washing of alkaline cleaning.	PRTR Not Applicable	Toxicity Low	

◎ Show the best function ○ Able to show excellent performance △ Standard × Can not be used

- Surface Checking Agent
- Lubricant
- Food Machinery
- Anticorrosive /Special Paint
- Cleaner
- Adhesive
- Scribbling Varnish
- Mould Releasing Spray
- One-liquid Zinc-rich Primer Spray
- Stainless Steel Surface Treatment
- Welding Spatter Antifouling Agent /Welding Support Product
- Groove Antirust Spray
- Joining Parts Treatment Agent



## Torch Klin

Anti-spatter agent for torch

- Solve the weak point for all automatic, semi-automatic welding machine and new era welding robot.
- A new anti-spatter agent used for torch, guarantees high efficient and high precise processing.
- Solid type, oil-base, water-base, ceramics compounding Torch Klin are available.



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Torch Klin

PRTR  
Not  
Applicable

Toxicity  
Low



### [Features]

- Greasy type.
- Melting Point: Over 50°C
- Applies when nozzle is hot.

### [Performance]

Category	Solid
Outward Appearance	Green paste
Specific Gravity	0.90

Item No	Product Name	Volumetric capacity·Packing
027913	Torch Klin 300g	300g x 10pcs
027912	Torch Klin 15kgs	15kgs x 1can

## Torch Klin Super

PRTR  
Not  
Applicable

Toxicity  
Low



### [Features]

- Oil - base agent.
- Used for robot
- Special oil which has heat resistant and removing properties prevents spatter from attaching to inside nozzle.
- Nozzle tip doesn't get clogged.
- Also available to positioners and tools.

### [Performance]

Category	Oil base
Outward Appearance	Light brown transparent liquid
Specific Gravity	0.91

Item No	Product Name	Volumetric capacity·Packing
027939	Torch Klin Super	220ml x 12pcs
027943	Torch Klin Super 4L	4L x 1pc
027942	Torch Klin Super 18L	18L x 1can

## Torch Klin KS

PRTR  
Not  
Applicable

Toxicity  
Low



### [Features]

- Water soluble agent.
- Powerful type.
- Available for a cold nozzle.

### [Performance]

Category	Water Soluble
Outward Appearance	Light brown transparent liquid
Specific Gravity	1.01

Item No	Product Name	Volumetric capacity·Packing
027922	Torch Klin KS	18kgs x 1can

## Torch Klin 21

PRTR  
Applicable



### [Features]

- Suitable for high temperature and high current service torch.
- Excellent adhesion.
- The most suitable for continuous service of robot welder.

### [Performance]

Category	Ceramics compounding
Outward Appearance	Light brown transparent liquid
Specific Gravity	1.29

Item No	Product Name	Volumetric capacity·Packing
027973	Torch Klin 21	220ml x 24pcs

## Torch Klin RS-L

PRTR  
Applicable



### [Features]

- Long - term effect because of special ceramics compounded.
- Because its film is removable, no clogging occurs.
- Able to be applied to a cold nozzle.

### [Performance]

Category	Ceramics compounding
Outward Appearance	Grayish white powder
Specific Gravity	1.30

Item No	Product Name	Volumetric capacity·Packing
027937	Torch Klin RS-L	420ml x 12pcs

## Weld Pliers 350/500

Pliers for CO welding



### [Features]

- A special steel is used for the blade, if used for cutting wire (especially stainless steel), the cut is continuous.
- 1 piece can be used for 8 things.

### [Applications]

- ① Take the tip in - out.
- ② Cut the wire.
- ③ Use as a hammer.
- ④ Take the nozzle in and out.
- ⑤ Take the pipe in and out.
- ⑥ Pull the wire.
- ⑦ Remove debris from both the outside and inside the nozzle.
- ⑧ Remove debris from the nozzle tip.



Item No	Product Name	Packing capacity
070962	Weld Pliers 350	10pcs
070960	Weld Pliers 500	10pcs

## Liner Klin F



Non-organic conduit cleaner



### [Features]

- Not classified as organic
- Does not contain fluorocarbon and chloride solvents.
- Not strong smell.

### [Applications]

- Clean the conduit.
- Clean the outlet.
- Clean the transfer roller.
- Clean machine parts and machine tools and equipment.
- Clean the platen.

## Liner Klin S



Conduit tube cleaner



### [Features]

- Don't contain Fluorocarbon and Chlorine solvents.
- Strong cleaning power.
- Aerosol spray.

### [Applications]

- Used for cleaning Conduit Tube.
- Cleanse outlet guide.
- Cleanse feedroller.
- Cleanse machine parts and tools.
- Cleanse printing press.

Item No	Product Name	Volumetric capacity • Packing
020326	Liner Klin F	420ml x 12pcs

• Class 4, Class 1 oil type, Hazard level 2, 210 ml

Item No	Product Name	Volumetric capacity • Packing
025226	Liner Klin S	420ml x 12pcs

• Class 4, Class 1 oil type, Hazard level 2, 210 ml

## Taiboron D-100 / Taiboron SD-1



Dross adhesion inhibitor for laser cut / Antireflection agent for laser



### [Features]

- Dross adhesion inhibitor for carbon dioxide laser cut whose major ingredient is graphite.
- Water soluble, even application without any repelling.
- Do not erode aluminum, stainless, etc.
- Can be easily washed by water after use.
- Clean working environment for no bad odor and smoke.

### [Applications]

- It is used to prevent adhesion of dross by applying to the reverse side of laser cut.
- It is used to prevent light reflecting by applying to the surface side of laser cut.
- Prevents readhesion of spatter.

### [Performance]

	D-100	SD-1
Outward Appearance	Black Liquid	Black Liquid
Specific Gravity	1.12±0.02	0.94±0.02
Inflammability	None	16°C



Item No	Product Name	Volumetric capacity • Packing
027533	Taiboron D-100	5kgs x 1 can
027539	Taiboron SD-1	420ml x 12pcs

## Klin Bead CB



TIG welding accelerator



### [Features]

- Prevents blowhole.
- Improves melting and helps deep penetrating into weld zone.
- Able to obtain a satisfactory welding effect even if black scale or rust exists.
- Pretty penetration bead is obtainable even high current welding.
- Quick dry (about 1 minute), welding is able to be done soon after Klin Bead CB is applied.
- Coated layer can be simply removed by water, solvent, acid cleaning or air blower.

### [Applications]

- Prevents blowhole generating during TIG welding process, such as welding of mild steel, bonderizing plate or stainless steel, etc.
- Promotes deep penetrating into weld zone.
- \* Please pretests when TIG welding for titanium steel or aluminum.

### [Performance]

Outward Appearance	Grayish white
Specific Gravity	1.21
Inflammability	None



Item No	Product Name	Volumetric capacity • Packing
020813	Klin Bead CB	400ml x 12pcs

Surface Checking Agent

Lubricant

Food Machinery

Anticorrosive /Special Paint

Cleaner

Adhesive

Scribbling Varnish

Mould Releasing Spray

One-liquid Zinc-rich Primer Spray

Stainless Steel Surface Treatment

Welding Spatter Antifouling Agent /Welding Support Product

Groove Antirust Spray

Joining Parts Treatment Agent

## Klin Weld F series

Corrosion inhibitor for groove weld

- Rust on the groove weld may cause a lot of problems, such as weld defect, low steel commercial value, etc. Klin Weld prevents groove surface from corrosion during the period of edge preparation to welding processes.
- Generally anti-corrosion agent applied to a groove weld have to be removed before welding, but Klin Weld F Products Series is able to be used during welding process, therefore, able to save time.
- Klin Weld F Products Series is a long term anti - rust agent, able to be used for thick and repeat coating.

Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## Klin Weld YE-F

Corrosion inhibitor for groove weld / Clear color

PRTR  
Applicable

Toxicity  
Applicable



### [ Features ]

- Welding is available without removal of coating layer.
- Painting and re- coating are available.
- Beveling area is visible after applying.

### [ Performance ]

Outward Appearance	Transparent Yellow Liquid	Salt Spray Test	72Hours
Dry to touch	about 5 minutes	Dry Hard	12~24Hours
Film thickness	5~12μm	Coated area	10~20m²/L

Item No	Product Name	Volumetric capacity•Packing
020425	Klin Weld YE-F/420mL	420mL x 12pcs
020426	Klin Weld YE-F/4L	4L x 1pc
020427	Klin Weld YE-F/18L	18L x 1can

## Klin Weld SE-F

Corrosion inhibitor for groove weld / Silver

PRTR  
Applicable

Toxicity  
Applicable



### [ Features ]

- Welding is available without removal of coating layer.
- Superior corrosion resistant formula.

### [ Performance ]

Outward Appearance	Silver	Salt Spray Test	120Hours
Dry to touch	about 3 minutes	Dry Hard	12~24Hours
Film thickness	5~12μm	Coated area	15~25m²/L

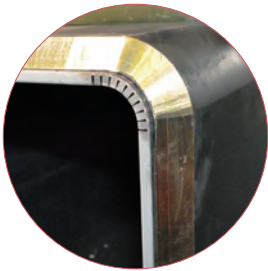
Item No	Product Name	Volumetric capacity•Packing
020355	Klin Weld YE-F/420mL	420mL x 12pcs
020353	Klin Weld YE-F/4L	4L x 1pc
020352	Klin Weld YE-F/18L	18L x 1can



# Klin Weld

Corrosion inhibitor in grooved welds

- Rust in grooved welds can cause a number of problems, such as weld defects, deterioration of steel values, etc. Klin Weld protects groove surfaces from corrosion during edge preparation to welding.
- Normally, the corrosion inhibitor applied to the grooved weld must be washed off before welding, but Klin Weld YE and Klin Weld SE can also be used during the welding process. Therefore, it can save time.
- Klin Weld H is a long-term rust inhibitor. It can be used with thick coatings and repeatability is required.



# Klin Weld H

Corrosion inhibitor for groove weld / Long term rust proof

PRTR  
Applicable

[ Features ]

- Removes coated layer by burner before welding.
- Long term rust proof is available by repeat coating.

[ Performance ]

Outward Appearance	Clear coat	Outdoor exposure test	over 6 months
Dry to touch	about 20 minutes	Viscosity 20℃	15±1Second (F.C No.4)
Film thickness	15~20μm	Coated area	10~15㎡/L



Item No	Product Name	Volumetric capacity•Packing
020363	Klin Weld H/4L	4L x 1pc
020362	Klin Weld H/18L	18L x 1can



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent

## HITROCK B

Rust occurrence agent for bolt joints

PRTR	Toxicity
Not Applicable	Low

**HITROCK B is applied onto high strength bolt joints for construction, promoting the occurrence and stabilization of rust.**

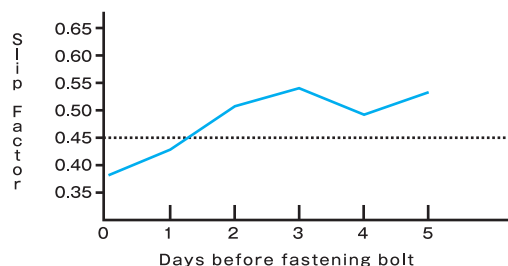
Concerning coefficients for high strength bolts, according to Standard Specifications of Construction Work(JASS-6) and Technical Guides for Steel - Frame Work, mill scale should be removed from bolt joint to check rust occurrence. Generally, this kind of rust is to be generated from a steel frame which is left outside for a long time after removal of mill scale. Rust occurrence depends on a geographical or weather condition, which may cause civil engineering or construction work delay.

Therefore, there are a lot of rust promotion agents adopted, but among them, some problems occurred such as insufficient or excessive rust occurrence, otherwise rust still develops even after re-connecting joints.

HITROCK B does not have the above problems! After HITROCK B is applied onto joint surface, rust occurs over a few hours. Rust generated by HITROCK B has stability, does not develop excessively.

### Slip Factor Test

Days Neglected	0	1st day	2nd day	3rd day	4th day	5th day
Slip Factor	0.362	0.437	0.513	0.535	0.501	0.530
Temperature °C	—	6	5	8	5	5
Humidity	—	24	39	25	35	51



### [Features]

- Only need to apply, no worry of noise or dust.
- Slip Coefficient is above 0.45.
- First applies HITROCK B onto the joint surface and keeps rusting for 48 hours, then Fastening the bolt is available.
- Corrosion doesn't expand because of its stability.

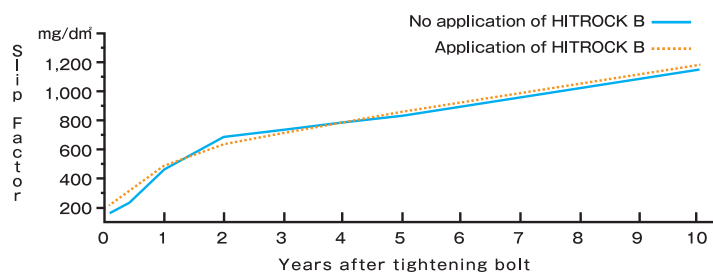
### [Performance]

Outward Appearance	Yellowish brown transparent liquid
Specific Gravity	1.0
Inflammability	None
P H	2 ~ 3
Dry to touch	20minutes (20°C)
Standard Application Quantity	50~100g/m <sup>2</sup>

\*At the temperature below 5 °C, humidity over 80%, Slip coefficient may not be guaranteed sometimes.

### Amount of rust (Jointed condition)

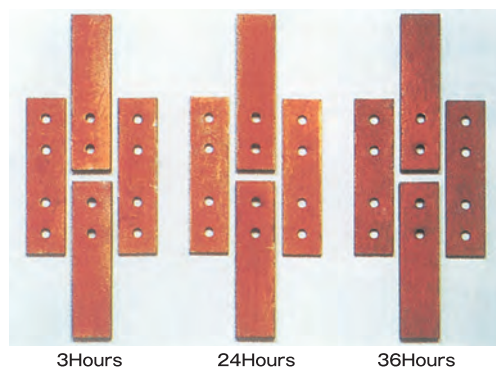
	1Month	6Months	1Year	2Years	5Years	10Years
No coating (mg/dm <sup>2</sup> )	14	115	340	533	756	1018
HITROCK B coating (mg/dm <sup>2</sup> )	141	263	370	505	761	1041



\*The amount of rust generated is the same after 1 year.  
Not affected by HITROCK B any more.



Item No	Product Name	Volumetric capacity·Packing
153581	HITROCK B	18L x 1box

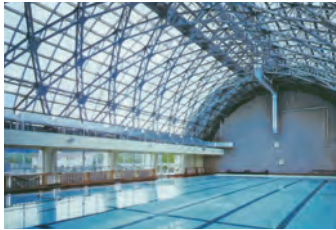


# Friction Up Zn

A treatment agent for friction joint surface of high strength bolts



Friction Up Zn is a treatment agent used on high strength bolt friction joint surface in the field of hot dip galvanizing construction.



Friction Up Zn is a treatment agent used on high strength bolt friction joint surface in the field of hot dip galvanizing construction. JASS-6 published by Architectural Inst of Japan approves Blasting Treatment, but in order to raise work efficiency and improve stabilization of slip strength we developed Friction Up Zn.

Hot dip galvanizing that has a lot of advantages, such as resisting corrosion, maintenance free, etc. is adopted by many construction structures, but Slip Strength of High Strength Zigzag Bolted Friction Joints is not enough. Friction Up Zn only need to be simply applied to Bolt Joint Surface, then enough Slip Strength can be secured, unlike Blasting treatment, no need of special skill, no worry of noisy and without moving products, saving masking time.



Item No	Product Name	Volumetric capacity
014454	Friction Up Zn 4kg	4kg

Item No	Product Name	Volumetric capacity
014453	Friction Up Zn 20kg	20kg

## [Features]

- High working efficiency can be secured because no need of blasting equipment, moving product is not necessary.
- Applies only, no worry of noisy and dust.
- No influences on corrosion resistance of plating.
- Slip Coefficient is above 0.4.
- No need to measure surface roughness.

## [Performance]

Outward Appearance	Transparent and colorless liquid
Specific Gravity	1.0
Inflammability	None
P H	1.30-1.32
Dry to touch	10minutes (20°C)
Standard Application Quantity	100g/m <sup>2</sup>

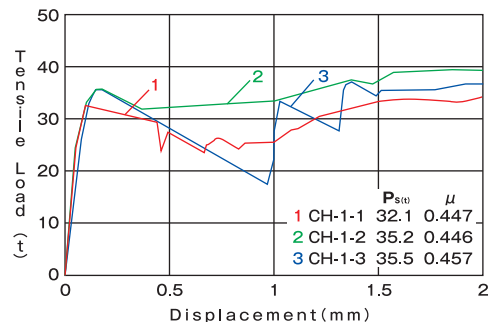
## Slip Factor Test

High Strength Bolt F8T M20×80

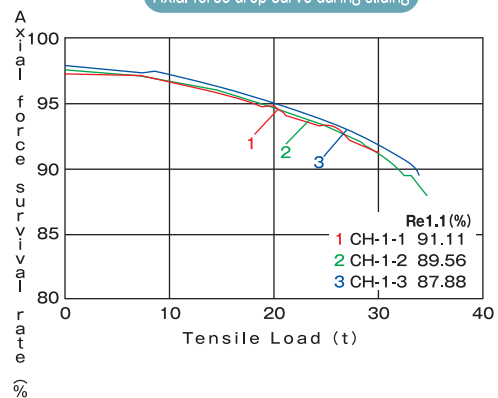
Mark	Exposure Time	N <sub>1(t)</sub>	P <sub>s(t)</sub>	Slip Factor		Sliding Noise
				Test Results	Average	
CH-1	1	48 Hours	35.8	32.1	0.447	Have
	2		37.8	35.2	0.446	None
	3		38.8	35.5	0.457	Have
CH-2	1	48 Hours	38.8	35.6	0.459	Have
	2		37.9	32.1	0.423	Have
	3		38.3	31.1	0.406	Have

N<sub>1</sub>: Adding up of Initial bolt installation. P<sub>s</sub>: Slip Load.

## Load-Deformation Curve



## Axial force drop curve during sliding



Surface  
Checking  
Agent

Lubricant

Food  
Machinery

Anticorrosive  
/Special Paint

Cleaner

Adhesive

Scribbling  
Varnish

Mould  
Releasing  
Spray

One-liquid  
Zinc-rich  
Primer Spray

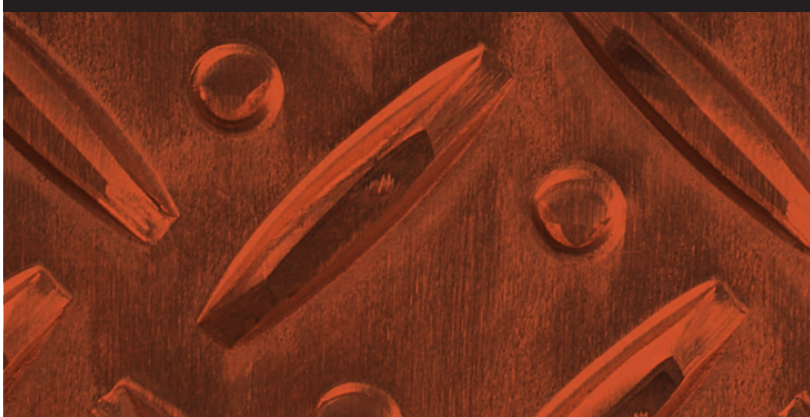
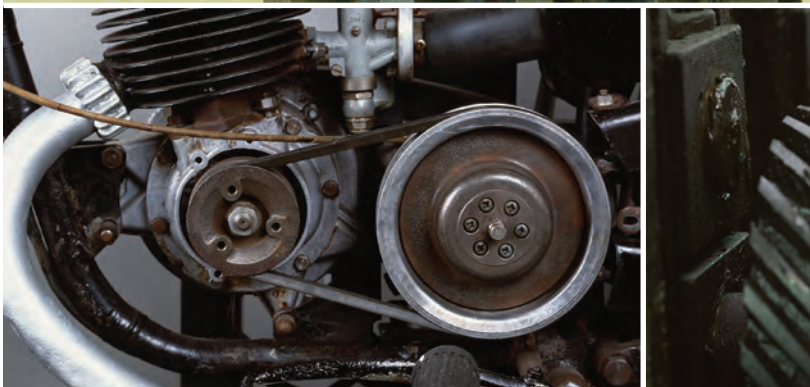
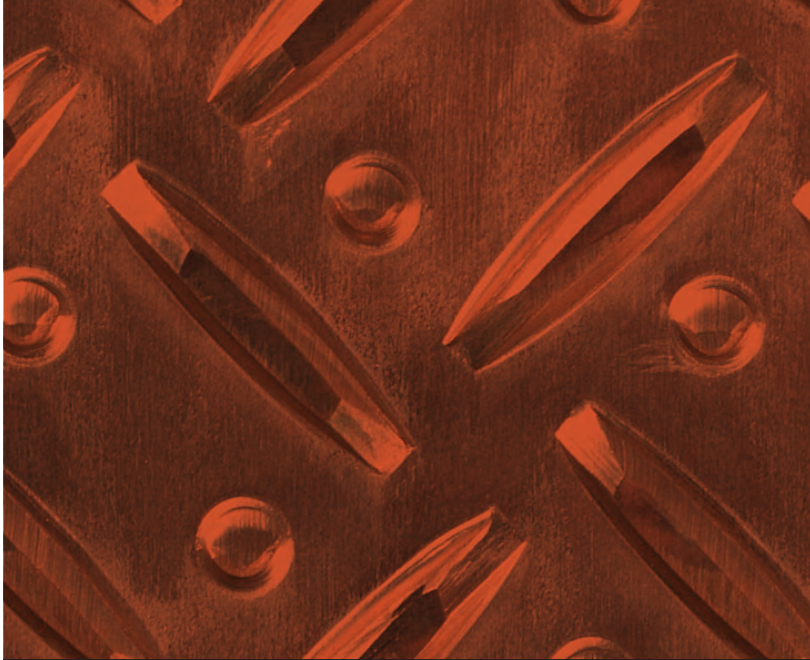
Stainless Steel  
Surface  
Treatment

Welding Spatter  
Antifouling Agent  
/Welding Support  
Product

Groove Antirust  
Spray

Joining Parts  
Treatment Agent





## ICHINEN CHEMICALS CO.,LTD.

Sumitomo Fudosan Mita Twin Building (East) 8F.  
4-2-8, Shibaura, Minato-ku, Tokyo 108-0023 Japan  
Tel : (81) -3-6414-5609 Fax : (81)-3-6414-5622

<http://www.ichinen-chem.co.jp>

