



■ **STARTUP INSTRUCTIONS** ■

PJR STARTUP PROCEDURES:

1. Open drums and insert fittings. Fittings for drum should correspond to fitting on PJR Reactor. Be sure to set drums up to match stickers, labels and colors. Never change product once designated and used in lines and PJR Reactor.
2. **MAKE SURE ALL CLIPS AND HOLD-DOWNS ARE SECURE ON REACTOR PUMP & CART.**
3. Stand PJR Cart upright with the help of another person. ***DO NOT ATTEMPT ON YOUR OWN***
4. Line up drums (jugs/bag-n-box) according to labels & fitting location. Small cam lock fittings should face the bottom of the cart.
5. Make sure valves are closed and vents remain plugged.
6. Secure drum straps into place. Make sure drum straps are in the locked position and the drums are firmly against the deck.
7. Connect cam lock fittings to drums. Make sure all fittings are connected securely and are in the locked position.
***PLEASE DOUBLE CHECK ALL FITTINGS AND CLIPS.**
8. With the help of another person pull PJR Cart down so the drums are parallel to roof deck, ensuring that wheels and rear legs are securely on the roof surface.
9. Place Generator in tray.
10. Connect all hoses, and spray gun making sure that the hoses are in the proper place. Hose fittings will only fit in one way.
11. Make sure all fittings are secure and firm.
12. Start Generator and plugin PJR Reactor to power. Allow time to warm up. **DO NOT USE IDLE CONTROL!**
Generator should run at full throttle all the time to prevent damage to PJR Reactor.
13. Install Driers into vent fittings. It may be necessary to use bleed lines into vent fittings first.
14. Put Bleed valves in "spray" position, and turn dial to 0-0.3 with gun open.
15. Make sure fluids are flowing through clear tubing.
16. Run until even flow comes through end of gun. To prevent clogging at tip when in use, purge gun every 2-3 minutes, or as necessary so adhesive does not clog.
17. Twist on a Static Mixing Nozzle Tip to your applicator gun & pull back manifold to begin spraying Static Bead.

NOTE: To change drums reverse procedure -> Reverse procedure & change one drum at a time to prevent "crossing" drums.

SPRAYING, SPRAY PATTERNS, AND VEE-AIR ISP INSTRUCTIONS NEXT PAGE



215-335-6797



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SPRAYING VEE-AIR ONE^{SP} & V-MANIFOLD APPLICATORS:

STEP 1: Inject Lithium Grease into Both Grease-Ports of Static V-Manifold Applicator Gun.

STEP 2: Always Grease the Ports on the V-Manifold at the start of a new day of spraying.

A.) WHEN USING VEE-AIR 1^{SP} Always Grease inside **ALL** Threads of Vee Air-1^{SP} Tip in addition to V-Manifold Gun.

B.) Unscrew Air-Valve Knob and Grease the Air Valve-Stem Threads with White Lithium Grease.

C.) Grease the Port on top of Vee Air-1^{SP} Tip and the Mounting Threads where **V-Manifold Gun** attaches.

STEP 3: Slowly turn VA1SP Air-Valve Knob and let air flow through the system while V-Manifold is still closed.

A.) Slowly pull down the V-Manifold handle to get A+B product flowing through your Static Mixing Nozzle.

B.) Begin feathering in your material & Adjust Pump Controls where Necessary.

SPLATTER PATTERN INSTRUCTIONS FOR VEE-AIR 1^{SP}: If using a "stepped" or "pencil point-tipped" Static Mixing Nozzle, make sure you cut off a 1/2" of Mixing-Nozzle-Spray-Tip to apply a Splatter Pattern.

When pausing spray application for 30-60 seconds at the end of a run, hold the Vee Air-1^{SP} gun with Static Mixing Nozzle pointed down toward the ground and let **AIR ONLY** flow through the Vee Air-1^{SP}. This will keep the Static Mixing Nozzle & VA1^{SP} Tip open ensuring clear passage for when you're ready to continue spraying.

PAUSING or STOPPING SPRAY APPLICATION for Lunch, End of Day or Extended Periods of Time:

- Let air flow through Vee Air-1^{SP} with manifold handle off to **Air-Purge** excess material for at least **20-30 seconds**.
- Inject 2" of White Lithium Grease into the threaded end of your Static-Mixing Nozzle and re-attach to keep the whole system air-tight. **NOTE ->** This is not to keep the Static Mixing Nozzle clean for re-use, it is to keep the entire PJR Vee Air-1^{SP} System "air-tight" and ready to continue spraying the next morning or after extended breaks.

***Always Use a Fresh NEW Static-Mixing Nozzle** after any extended breaks from spraying, or overnight downtime to ensure the best spray productivity, open flow control, and spray quality from your Vee-Air 1^{SP} setup.

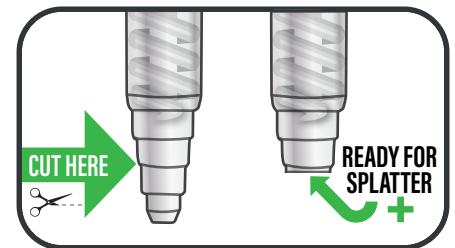
***Prior to Spraying After Overnight Down-Time or Extended Periods of Time:** Inspect Vee Air-1^{SP} Tip to ensure no quick cleaning is necessary. If there is a clog from A+B Material build-up within the Vee Air-1^{SP} Tip, use the Magnetic Hand Tool (*included/attached to the side of your Vee Air-1^{SP} gun*) or any Allen Key to quickly remove any "set" A+B Material that may have set in the tip after extended down time. This should NOT occur if you consistently follow all spray instructions, daily flushing, start-up and shutdown procedures adequately.

Cleaning Blocked V-Manifold or VA1SP Tip with Magnetic Cleaning Tool (*any Allen Key will work as well*): Twist the Magnetic Hand Tool inside both thread ports of Vee Air-1^{SP} Tip, as well as Air-Valve by simply unscrewing Knob.

SPRAY PATTERNS, AIR-PURGE, BEAD TIPS & REMINDERS:

• VEE-AIR-1SP SPLATTER PATTERN:

- 1.) Cut the tip of Static Mixing Nozzle if "Stepped" or "Pencil-Pointed" | **DIAGRAM ->**
- 2.) Then, let air flow through tip only.
- 3.) Then, slowly begin "feathering in material."



• AIR-PURGE CLEANING/KEEPING TIP + LINES FREE & CLEAR OF MATERIAL: Hold VEE-AIR Gun with Static Mixing Nozzle Tip pointed toward the ground. **ALWAYS** let the air flow through the gun for 15-20 seconds before & after runs of spraying material to ensure that the Gun and A+B lines don't get clogged.

• FULL SPRAY PATTERN: When using Vee-Air 1SP for Full Spray, use "stepped" or "pencil-pointed" Static Mixing Nozzle with more air-flow and low A+B material pressure to get a nice aerosolized type of full-spray pattern.

• STATIC BEAD: Always remember to "SLOWLY" pull down on Manifold arm of your Applicator Gun to begin feathering in your A+B material, ensuring minimal material gets wasted or creates unnecessary messes on the job.

SHUTDOWN CHECKLIST & FLUSHING PROCEDURES NEXT PAGE



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PJR OVERNIGHT SHUT DOWN CHECKLIST

(Lunch breaks, Overnight, or 3-5 days)

- 1.) Turn off rocker switch on pump. Unplug Unit.
- 2.) Turn down pressure knob to off position on pump.
- 3.) Open gun to relieve pressure in hoses.
- 4.) Close PJR VEE Manifold
- 5.) Grease gun to point of having 3" - 4" of grease in nozzle
- 6.) Turn off both ball valves at inlet hoses from drums.
- 7.) Take recirculation hoses out of vents and let hang down.
- 8.) Screw caps back on vent tubes.
- 9.) Cover PJR with Green Vinyl Cover

VEE-AIR 1^{SP} & FUSION-AP GUN OVERNIGHT SHUT DOWN CHECKLIST:

- A) Turn off rocker switch on pump. Unplug Unit.
- B) Turn down pressure knob to off position on pump. (Shut off valves on gunblock)
- C) Allow air to blow through gun for 2 - 3 minutes. Trigger gun a few times to help clear tip.
- D) Shut off air compressor. Remove air line from gun. Remove cap from top of grease fitting on gun until it comes out of gun end. Replace cap.
- E) Store gun in a dry bag.
- F) Turn off both ball valves at inlet hoses from drums.
- G) Take recirculation hoses out of vents and let hang down.
- H) Screw caps back on vent tubes.

PATRIOT JR. LONG TERM SHUT DOWN CHECKLIST:

- Close inlet ball valves
- Disconnect inlet hoses from drums.
- Using the bag-in-a-box connector hoses, connect the appropriate hose to the A side inlet cam lock.
- Place hose into container of neutralizer .
- Open both ball valves inlet - allow B side to pump air through lines while flush is being pumped through A side.
- Have both residual materials left in hoses to be pumped into a container that can be discarded after foam has hardened.
- Once all materials have been purged from lines and neutralizer is present, allow the neutralizer to refill the same container from which you are pumping out of, and Recirculate for approximately 10-15 minutes.
- Pull hose from container allowing neutralizer in hose to run back into container.
- Now insert same inlet lose into container of Dyna-lube.
- Flush out neutralizer until lube is present.
- Pump lube through system until it comes out gun.
- Leave air in B side.
- Close off inlet ball valves.
- Install dust caps and covers in cam locks.
- Turn off pump and close gun.
- Add grease into guns through grease nozzle inlets. (Fill 2" - 3" into tip)

If you have questions, please don't hesitate to call us at **215-335-6797** or visit www.ampedequipment.com

VIDEO INSTRUCTIONS & PJR DEMO VIDEOS NEXT PAGE



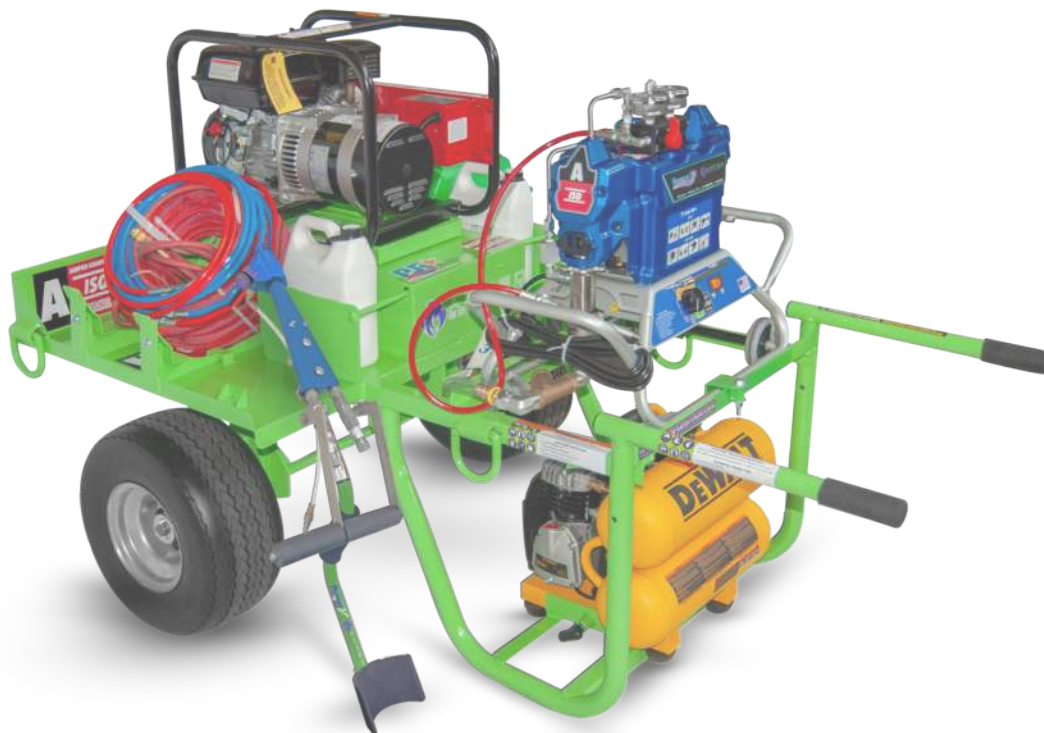
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VIDEO LIBRARY of PJR INSTRUCTIONAL & DEMO VIDEOS

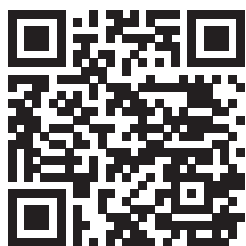
Scan the QR Code with your Phone Camera to Watch PJR & Vee-Air 1^{SP} Videos.



PATRIOT JR. / P-55 TRAINING VIDEOS

USING THE BUILT-IN CAMERA (IPHONE) OR QR READER APP ON YOUR SMART PHONE, CLICK ON THE QR CODE BELOW AND YOU WILL BE DIRECTED TO THE TRAINING VIDEO LIBRARY. IF THIS DOESN'T WORK, OPEN YOUR BROWSER AND GO TO:

<https://VIMEO.COM/CHANNELS/PATRIOTJR>



DON'T HESITATE TO CALL US WITH MORE QUESTIONS, 24/7!

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ENVIRONMENTAL

- ⦿ DOES NOT contain raw materials known to the State of California (Prop 65) to cause cancer, birth defects or other reproductive harm
- ⦿ DOES NOT contain raw materials listed on SECTION 112(b) of HAPs List
- ⦿ REACH Compliant - Does NOT contain raw materials listed on REACH Annex
- ⦿ No SARA 311, 312, 313 Ingredients
- ⦿ Reduced VOC, Non-Flammable, Non-Hazardous, Non-Combustible, Non-Toxic

CIRR D BOND™ Crystalized Isocyanates & Resin Remover

Environmentally sensible, Low Temperature Immersion Cleaner. **It removes recently hardened and cured build-up of polymers and resins** from Spray Foam Equipment, Spray Guns, Pump Packaging, Heat Exchangers, Mixing Heads, Troughs, Conveyor Parts, Side Walls, Rollers, Foam & Resin Cutting Devices, and Injection Molds. It effectively removes;

- ~ Recently cured Isocyanates (A)
- ~ MDI and TDI esters and ethers
- ~ Residual of cured polyurethane
- ~ Cured Reactive Hot Melt Polyurethane Adhesives
- ~ Resins and Fiberglass (Polyester, Vinylester, Epoxy, Polyamide, Orthophthalic, Isophthalic, and Dicyclopentadiene)
- ~ Adhesives from roll coating and dispensing equipment, as well as other industrial adhesives

~ Layers such as High & Low Solid Aliphatic, Water Borne Epoxy Primers, Polyurethane, Acrylic, Varnishes, and Alkyl Enamel Coatings

Features & Benefits

~ Replaces NMP, Acetone, MEK, Methylene Chloride, PM Acetate, etc.

Application

Use **CIRR D BOND™ Full Strength (Do NOT add water)** at room temperature **OR** heated to a **maximum of 140 °F** in a well-ventilated area. When heated, a faster polymer and resin removal result is obtained. The use of an ultrasonic Immersion tank will enhance the loosening performance. **Must have proper ventilation system mechanical exhaust in place.**

Mechanical filtering of larger particles **using a metal mesh filter or cheesecloth** will help **extend the life of the product.**

CIRR D BOND™ is NOT intended for flushing or re-circulating the product throughout the spray foam equipment, including hoses.

To remove recently hardened Isocyanate (Part A) from the hoses, **FLUSH** with **SURF X FLUSH™ 2000** first, followed with a **FINAL FLUSH** of **NZD ISO FLUSH™ Isocyanates Cleaner & Neutralizer.**

For hand wipe applications, use **CIRR D BOND™ Crystalized Isocyanates & Resin Remover GO GREEN™ Wipes.**

Crystalized Isocyanates & Resin Remover



TYPICAL PROPERTIES

Appearance:	Clear Amber Liquid
Flash Point: (Pensky-Martens closed cup)	94.45 °C or 202 °F
Odor:	Mild
pH (50% solution in water @ 68°F)	9.8 - 10.8
Vapor Pressure: (components)	≤ 0.02 - 0.04 mmHg @ 20 °C (68 °F)
Initial boiling point/boiling range (@ 760 [mm Hg])	385 - 485 °F
Ideal Operating Temp (°F)	77 - 140 °F
Ideal Operating Concentration	Full Strength
Specific Gravity @ (68°F)	0.9810 - 0.9820
Weight/Gal. (lbs. /gal.)	8.20
VOC Content: (ASTM D-2369, Method 24)	6.77 lbs./gal or 811 grams/liter
HMIS Rating:	Health = 2 Fire = 1 Reactivity = 0
Recycling Parameters: (Vacuum Distillation) @ 27 [mm Hg] Pressure	300°F
Product #	02-WV409589

**RECOMMENDED MATERIALS TO USE FOR:
O-Rings, Gaskets, Hoses and Pump Packaging**

- * FEP-Teflon
- * Butyl Rubber
- * Buna-S
- * Melamine
- * Nylon 101
- * Ryton
- * Ethylene-Propylene Copolymer
- * Kalrez
- * Fluorosilicone Rubber
- * Mild Steel
- * Halar

Material to Avoid

- * Viton
- * ABS
- * Durel
- * Kynar
- * Lucite
- * PET
- * Phenolic Polyester
- * Polyurethane
- * PVC
- * Buna-N
- * Hypalon
- * Lexan
- * Noryl EN-265
- * Noryl -731
- * Polysulfone
- * Ultem
- * Valox

PACKAGING & STORAGE

HDPE UN Rated

1 Gallon EasyPour Jugs
5 Gallon Pails
55 Gallon Steel Drums (closed cap)
GO GREEN™ Wipes in an "Easy
Carry Bucket"
(90 / 12" x 12" Polypropylene
Saturated Wipes)

Freight easily shipped via local
carriers ground or LTL.

This product should be kept in its
original container above freezing
and less than 100 °F.

Store drums in a dry area.

SAFETY&HANDLING PRECAUTIONS

Refer to SDS for additional safe
handling & disposal

Direct contact of CIRR D BOND™ Crystalized Isocyanates & Resin Re-
mover will cause a skin irritation or serious eye irritation or damage.

it is important to utilize recommended gloves (Use Natural Rubber Gloves
when handling this product), safety goggles and other suitable protective cloth-
ing your company recommends. Harmful if inhaled or swallowed. **Use product
with adequate ventilation. Do Not take internally.** Keep out of reach of
children; If splashed in eyes or on skin, wash off with plenty of water. If swal-
lowed remove from exposure area. Never give anything by mouth to an uncon-
scious person. Get medical advice/attention. **Refer to SDS Section 4 First
Aid Measures**

DISPOSAL

Refer to SDS for additional safe
handling & disposal

**The spent material should not be disposed of in any
sewerage system.** Solutions containing hazardous or non-hazardous coatings
and other soils should be handled and treated according to Federal, State and
Local Environmental Laws. Discharge your waste and rinse water according to
Federal, State and Local Regulations.



10 Eagle Avenue - Suite 500 - Mount Holly, NJ 08060
Phone: 609-518-7577 / Fax: 609-518-5277

Flexible & Rigid Polyurethane Foam Remover

ENVIRONMENTAL

- ☐ Reduced VOC
- ☐ Non-Hazardous
- ☐ Non-Flammable
- ☐ Non-Toxic
- ☐ DOES NOT contain raw materials on the NJ Community Right to Know Environmental Hazardous Substance (EHS) List
- ☐ DOES NOT contain raw materials known to the State of California (Prop 65) to cause cancer, birth defects or other reproductive harm
- ☐ DOES NOT contain raw materials listed on SECTION 112 (b) of HAPs List
- ☐ No SARA 313 Ingredients
- ☐ REACH Compliant

Features & Benefits

- ☐ Low VOC
- ☐ High Resin/Polymer loading
- ☐ Recyclable via vacuum distillation - resulting in reduced disposal costs
- ☐ Residue Free
- ☐ Replaces solvents such as NMP, BLO, Acetone, MEK, Methylene Chloride, PM Acetate and 1,1,1 Trichloroethane
- ☐ Low rate of evaporation
- ☐ Multi substrate - Safe of most Ferrous and non-Ferrous Metals
- ☐ Compatible and Non Corrosive on various metals, plastics, glass and ceramics

Application

Flushing the Spray Foam Equipment – Must be used at room temperature.

Immersion Cleaning – Use at room temperature OR heated to a maximum 140°F in a well-ventilated area (when heated, a faster polymer and resin removal result is obtained).

For more difficult cleaning applications (aged & cured foam) use CIRR D-Bond™ Crystalized Isocyanate Resin Remover in an immersion cleaning tank.

Use Natural Rubber Gloves when handling this product.

For hand wipe applications, use FOAM OFF | MP™ GO GREEN™ Wipes.



TYPICAL PROPERTIES

Appearance:	Clear Amber Liquid
Flash Point: (Pensky-Martens closed cup)	169 °F
Odor:	Mild Organic Ester
Surface Tension:	24 (dynes/cm 24) (water = 1.0)
pH (50% solution in water @ 68°F)	6.8 - 7.8
Vapor Pressure: (components)	0.20 - 0.90 mmHg @ 20 °C (68 °F)
Initial boiling point/boiling range (@ 760 [mm Hg])	356 - 396 °F
Ideal Operating Temp (°F)	Room Temperature or maximum heated to 140 °F
Ideal Operating Concentration	Full Strength
Specific Gravity @ (68°F)	0.980 - 0.984
Weight/Gal. (lbs. /gal.)	8.20
VOC Content: (ASTM D-2369, Method 24)	3.85 lbs./gal or 437 grams/liter
HMIS Rating:	Health = 2 Fire = 2 Reactivity = 0
Product #	02-W179567

FOAM OFF | MP™ is highly effective in Flushing and Immersion cleaning. Designed to dissolve and flush flexible, rigid, elastomer or molded polyurethane foam. Effective for both MDI and TDI esters as well as cured reactive hot melt polyurethane adhesives, and other industrial adhesives.

Flushing and removing large amounts of liquid and hardened Isocyanate (A) from ISO lines and feed lines, including metering equipment, mixing heads, hoses, kettles, pump packaging, etc.

Effectively Removes:

- ☐ Cured Urethane Foam deposits
- ☐ Flexible and Rigid Polyurethane Foam
- ☐ Urethane and Industrial Adhesives

RECOMMENDED MATERIALS TO USE FOR:
O-Rings, Gaskets, Hoses and Pump Packaging

MATERIAL TO AVOID

Teflon	Mild Steel	Polyethylene	Viton	Phenolic	PET	Noryl EN-265	Lucite
Butyl Rubber	Halar	Polypropylene	ABS	Polyurethane	Lexan	Noryl -731	Hypalon
Silicon Rubber	Melamine	Ryton	Durel	PVC	Valox	Polysulfone	
Klarez	Nylon 101		Kynar	Buna-N	Polyester	Ultem	

PACKAGING & STORAGE
HDPE UN Rated

- 1 Gallon EasyPour Jugs
- 5 Gallon Pails
- 55 Gallon Steel Drums (closed cap)

GO GREEN™ Wipes
in an "Easy Carry Bucket"
(90 / 12" x 12" Polypropylene
Saturated Wipes)

Freight easily shipped via local
carriers ground or LTL.

This product should be kept in its
original container above freezing
and less than 100 °F.

Store drums in a dry area.

SAFETY&HANDLING PRECAUTIONS

Refer to SDS for additional safe
handling & disposal

Direct contact of FOAM OFF | MP™ cause a mild skin irritation or se-
rious eye irritation. It is important to utilize recommended gloves (natural
rubber), safety goggles and other suitable protective clothing your company
recommends. Aspiration hazard if swallowed. Keep liquid and vapor away from
heat, sparks and flames. Keep container closed. Use product with adequate
ventilation.

Do Not take internally. Keep out of reach of children. Avoid contact with
skin, eyes and clothing. Avoid breathing vapors or mist. Wash thoroughly after
handling. Never give anything by mouth to an unconscious person Get medical
advice/attention.

Refer to SDS Section 4 First Aid Measures

DISPOSAL

Refer to SDS for additional safe
handling & disposal

The spent material should not be disposed of in any
sewerage system. Solutions containing hazardous or non-hazardous coatings
and other soils should be handled and treated according to Federal, State and
Local Environmental Laws. Discharge your waste and rinse water according to
Federal, State and Local Regulations.



10 Eagle Avenue - Suite 500 - Mount Holly, NJ 08060
Phone: 609-518-7577 / Fax: 609-518-5277

NZD ISO FLUSH™

Isocyanates Cleaner
& Neutralizer

ENVIRONMENTAL

- ☐ Low VOC's
- ☐ Non-Hazardous
- ☐ Non-Flammable
- ☐ Non-Toxic
- ☐ DOES NOT contain raw materials on the NJ Community Right to Know Environmental Hazardous Substance (EHS) List
- ☐ DOES NOT contain raw materials known to the State of California (Prop 65) to cause cancer, birth defects or other reproductive harm
- ☐ DOES NOT contain raw materials listed on SECTION 112 (b) of HAPs List
- ☐ No SARA 313 Ingredients
- ☐ REACH Compliant

TYPICAL PROPERTIES

Appearance:	Clear Liquid
Flash Point: (Seta Flash)	147.50 °F
Odor:	Mild Organic Ester
Surface Tension:	24 (dynes/cm 24) (water = 1.0)
pH (50% solution in water @ 68°F)	6.8 - 8.2
Vapor Pressure: (components) @ 25 °C [mm Hg]	0.8000
Initial boiling point/ boiling range (@ 760 [mm Hg])	385 - 485 °F
Ideal Operating Temp (°F)	Room Temperature
Ideal Operating Concentration	Full Strength
Specific Gravity @ (68°F)	0.895 - 0.900
Weight/Gal. (lbs. /gal.)	7.5
VOC Content: (ASTM D-2369, Method 24)	5.9 lbs./gal or 669 grams/liter
HMIS Rating:	Health = 2 Fire = 2 Reactivity = 0
Product #	02-W359585

Isocyanates Cleaner & Neutralizer

NZD ISO FLUSH™

Isocyanate Resin Cleaner & Neutralizer is highly effective in Flushing excess Liquid Isocyanate from processing equipment (feed lines, feed tanks, mixing and metering equipment), as well as loosening and removing partially crystalized isocyanate residue and build-up from equipment and parts. No need to pre-flush Part (A) with Mineral Oil before using **NZD ISO FLUSH™**.

NZD ISO FLUSH™ effectively removes

- ∂ Liquid & semi-hardened Isocyanate Part (A), Polyol Part (B), Cured Polyurethane Reactive Hot Melt Adhesives from Roll Coating Equipment and Dispensing Equipment, as well as many other industrial adhesives
- ∂ Industrial Resins such as Polyester, Vinylester, Epoxy, and Pigmented Gel Coats, as well as, Fiberglass and Resin Mixture
- ∂ Coatings such as High & Low Solid Aliphatic, Water Borne Epoxy Primers, Polyurethane, Acrylic, Varnishes, and Alkyl Enamel

Features & Benefits

- ☐ Low VOC
- ☐ High Resin/Polymer loading
- ☐ Recyclable via vacuum distillation - resulting in reduced disposal costs
- ☐ **Replaces solvents such as NMP, Acetone, MEK, Methylene Chloride,**
- ☐ Low rate of evaporation

Application

Use **Full Strength at room temperature. Do Not heat** this product.

- ∂ Flush out the entire ISO (A) Line throughout the system by placing the Transfer Pump inside a pail containing 2-3 gallons of **NZD ISO FLUSH™ Isocyanates Cleaner & Neutralizer**
- ∂ **Allow the transfer pump to pass the solvent throughout the system by recirculating for 4 hours or until it runs clear and then finally push the spent cleaning solvent and ISO mixture into a waste bucket**
- ∂ Once the system is free of Isocyanates, **you are now ready to flush the mixture of ISO and NZD ISO FLUSH™ inside the system with SurfaLube™ Equipment Storage Fluid and store the equipment OR you decide to go back to spraying foam; you can purge the lines with a few Quarts of Isocyanates, and now you are ready to spray away**
- ∂ For **QUICK** hand wipe applications, use NZD ISO FLUSH™ **GO GREEN™ Wipes**

IMPORTANT: DO NOT leave NZD ISO FLUSH™ inside the system



**RECOMMENDED MATERIALS TO USE FOR:
O-Rings, Gaskets, Hoses and Pump Packaging**

Material to Avoid

Teflon	Mild Steel	Polyethylene	Viton	Phenolic	PET	Noryl EN-265	Lucite
Butyl Rubber	Halar	Polypropylene	ABS	Polyurethane	Lexan	Noryl -73 I	Hypalon
Silicon Rubber	Melamine	Ryton	Durel	PVC	Valox	Polysulfone	
Klarez	Nylon 101		Kynar	Buna-N	Polyester	Ultem	

PACKAGING & STORAGE

HDPE UN Rated

1 Gallon EasyPour Jugs

5 Gallon Pails

55 Gallon Steel Drums (closed cap)

GO GREEN™ Wipes

in an "Easy Carry Bucket"
(90 / 12" x 12" Polypropylene
Saturated Wipes)

Freight easily shipped via local
carriers ground or LTL.

This product should be kept in its
original container above freezing
and less than 100 °F.

Store drums in a dry area.

SAFETY&HANDLING PRECAUTIONS

Refer to SDS for additional safe
handling & disposal

Direct contact of **NZD ISO FLUSH™** will cause a mild skin irritation or **serious eye irritation**. It is important to utilize recommended gloves (natural rubber), safety goggles and other suitable protective clothing your company recommends. Aspiration hazard if swallowed. Keep liquid and vapor away from heat, sparks and flames. Keep container closed. **Use product with adequate ventilation. Do Not take internally.** Keep out of reach of children. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Never give anything by mouth to an unconscious person Get medical advice/attention.

Refer to SDS Section 4 First Aid Measures

DISPOSAL

Refer to SDS for additional safe
handling & disposal

The spent material should not be disposed of in any sewerage system. Solutions containing hazardous or non-hazardous coatings and other soils should be handled and treated according to Federal, State and Local Environmental Laws. Discharge your waste and rinse water according to Federal, State and Local Regulations.



10 Eagle Avenue - Suite 500 - Mount Holly, NJ 08060
Phone: 609-518-7577 / Fax: 609-518-5277

SURF X FLUSH²⁰⁰⁰TM

Polyurethane Foam, Resin & Coating Remover

ENVIRONMENTAL

- ☞ Reduced VOC
- ☞ Non-Hazardous
- ☞ Non-Flammable
- ☞ Non-Toxic
- ☞ DOES NOT contain raw materials on the NJ Community Right to Know Environmental Hazardous Substance (EHS) List
- ☞ DOES NOT contain raw materials known to the State of California (Prop 65) to cause cancer, birth defects or other reproductive harm
- ☞ DOES NOT contain raw materials listed on SECTION 12(b) of HAPs List
- ☞ No SARA 313 Ingredients
- ☞ REACH Compliant

SURF X FLUSH 2000TM is highly effective in Flushing and Immersion cleaning of spray equipment, mixing and metering equipment and feed lines, as well as loosening and removing cured urethane foam deposits and build-up from mixing heads, troughs, conveyor parts, side walls, rollers, foam cutting devices and molds. It is also ideal for cleaning overspray polymer, resins and coatings.

Effectively Removes:

- ☞ Polyurethane Foam (Reacted Part A & B), Flexible & Rigid Polyurethane Foam, both MDI and TDI esters and ethers, Cured Polyurethane and Reactive Hot Melt Urethane Adhesives as well as many other industrial adhesives from roll coating equipment and dispensing equipment
- ☞ Polyols, Crystallized Isocyanates, and other urethane intermediates

Polyurethane Foam, Resin & Coating Remover

- ☞ Industrial Resins such as: Polyester, Vinylester, Epoxy and Pigmented Gel Coat, as well as, Fiberglass and Resin Mixtures
- ☞ Coatings such as: High & Low Solid Aliphatic, Waterborne Epoxy Primers, Polyurethane, Acrylic, Varnishes and Alkyl Enamel

Features & Benefits

- ☞ Low VOC
- ☞ High Resin/Polymer loading
- ☞ Recyclable via vacuum distillation - resulting in reduced disposal costs
- ☞ Residue Free
- ☞ Replaces solvents such as NMP, BLO, Acetone, MEK, Methylene Chloride, PM Acetate and I,I,I Trichloroethane
- ☞ Low rate of evaporation
- ☞ Multi substrate - Safe of most Ferrous and non-Ferrous Metals
- ☞ Compatible and Non Corrosive on various metals, plastics, glass and ceramics

Application

Flushing the Spray Foam Equipment – Use Full Strength at room temperature. Completely water-miscible and reacts with liquid and hardened Isocyanates (A); therefore, a final flush with **NZD ISO FLUSHTM** is strongly recommended.

Immersion Cleaning – Use at room temperature OR heated to a maximum 140°F in a well-ventilated area (when heated, a faster polymer and resin removal result is obtained).

Use Natural Rubber Gloves when handling this product.

For hand wipe applications, use **SURF X FLUSH 2000 GO GREENTM** Wipes.



TYPICAL PROPERTIES

Appearance:	Clear Amber Liquid
Flash Point: (Pensky-Martens closed cup)	169 °F
Odor:	Mild Organic Ester
Surface Tension:	24 (dynes/cm 24) (water = 1.0)
pH (50% solution in water @ 68°F)	6.8 - 7.8
Vapor Pressure: (components)	0.20 - 0.90 mmHg @ 20 °C (68 °F)
Initial boiling point/ boiling range (@ 760 [mm Hg])	356 - 396 °F
Ideal Operating Temp (°F)	Room Temperature or maximum heated to 140 °F
Ideal Operating Concentration	Full Strength
Specific Gravity @ (68°F)	0.980 - 0.984
Weight/Gal. (lbs. /gal.)	8.20
VOC Content: (ASTM D-2369, Method 24)	3.85 lbs./gal or 437 grams/liter
HMIS Rating:	Health = 2 Fire = 2 Reactivity = 0
Product #	02-W189568

RECOMMENDED MATERIALS TO USE FOR:
O-Rings, Gaskets, Hoses and Pump Packaging

Material to Avoid

Teflon	Mild Steel	Polyethylene	Viton	Phenolic	PET	Noryl EN-265	Lucite
Butyl Rubber	Halar	Polypropylene	ABS	Polyurethane	Lexan	Noryl -73 I	Hypalon
Silicon Rubber	Melamine	Ryton	Durel	PVC	Valox	Polysulfone	
Klarez	Nylon 101		Kynar	Buna-N	Polyester	Ultem	

PACKAGING & STORAGE
HDPE UN Rated

1 Gallon EasyPour Jugs
5 Gallon Pails
55 Gallon Steel Drums (closed cap)
GO GREEN™ Wipes
in an "Easy Carry Bucket"
(90 / 12" x 12" Polypropylene
Saturated Wipes)

Freight easily shipped via local
carriers ground or LTL.

This product should be kept in its
original container above freezing
and less than 100 °F.

Store drums in a dry area.

SAFETY&HANDLING PRECAUTIONS

Refer to SDS for additional safe
handling & disposal

Direct contact of **SURF X FLUSH 2000™ Polyurethane Foam, Resin & Coating Remover** will cause a mild skin irritation or serious eye irritation. It is important to utilize recommended gloves (natural rubber), safety goggles and other suitable protective clothing your company recommends. Aspiration hazard if swallowed. Keep liquid and vapor away from heat, sparks and flames. Keep container closed. Use product with adequate ventilation. Do Not take internally. Keep out of reach of children. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Never give anything by mouth to an unconscious person Get medical advice/attention.

Refer to SDS Section 4 First Aid Measures

DISPOSAL

Refer to SDS for additional safe
handling & disposal

The spent material should not be disposed of in any sewerage system. Solutions containing hazardous or non-hazardous coatings and other soils should be handled and treated according to Federal, State and Local Environmental Laws. Discharge your waste and rinse water according to Federal, State and Local Regulations.



10 Eagle Avenue - Suite 500 - Mount Holly, NJ 08060
Phone: 609-518-7577 / Fax: 609-518-5277

PROTECT YOUR ASSET - EXTEND THE LIFE OF YOUR EQUIPMENT
WITH
**GSP's LINE OF ECO FRIENDLY - NEW GENERATION
MAINTENANCE FLUIDS**
Companion product to GSP's Resin and Urethane Foam Removers

ENVIRONMENTAL

- ☞ VOC Exempt
- ☞ Non-Flammable
- ☞ Non-HAPs
- ☞ None of the Ingredients are listed on (CA PROP 65)
- ☞ No SARA 313 Ingredients
- ☞ Recyclable
- ☞ Biodegradable
- ☞ Non-hydroscopic
- ☞ No ODC's
- ☞ Non-Corrosive
- ☞ Stable under normal storage conditions
- ☞ Compatible with machines & transfer pumps made of Carbon Steel or Stainless Steel & Aluminum Alloys

TYPICAL PROPERTIES

Appearance:	Clear liquid Colorless to slight amber
Flash Point:	116 - 120 °C (241 - 248 °F)
Odor:	Slight Characteristic
pH @50%	6.5 - 7.5
Vapor Pressure (components)	≤ 0.02 mmHg @ 20 °C (68 °F)
Ideal Operating Temp / Conc.	Room Temperature Full Strength
Vapor Density	1.2 - 7.5 @ 20 °C (68 °F) (Air= 1.0)
Specific Gravity:	1.090 - 1.095 @ 20 °C (68 °F) Reference substance: (water= 1)
Weight/Gal.	9.1 (lbs. /gal.)
Components Boiling Point @ 760 mmHg	242 - 255 °C (467.6 - 491 °F)
Solubility in water	Soluble
VOC	Exempt
HMIS Rating	Health = 1; Fire = 1; Reactivity = 0
Recycling Parameters (Vacuum Distillation)	195-253°F @ 760 mmHg Pressure
Product #	02-W400590

SurfaLube™ Equipment Storage Fluid is used as a storage fluid in Urethane Dispensing Equipment as well as Polyurea Spray Equipment. Its coalescing properties allow storage of equipment for up to 36 months.

Improved Performance with a Superior Environmental Profile, **SurfaLube™** is stable under normal storage conditions. **Compatible with machines and transfer pumps made of Carbon Steel or Stainless Steel and Aluminum Alloys.** Gentle on most O-rings, gaskets, seals and lining. Does not freeze under severe cold environment (<-90 °F).

Once the hoses and polyurethane spray equipment is thoroughly flushed, **SurfaLube™** is introduced to the equipment through spray lines, this helps eliminate the formation of Polyurea and Crystallized Isocyanates that may form when any remaining residue reacts with moisture in the air.

Eliminate disposal costs by recycling the spent **SurfaLube™** via Vacuum Distillation.



PREPARING SYSTEM FOR STORAGE

Once the hoses and polyurethane spray equipment are thoroughly flushed with **NZD ISO FLUSH™** Isocyanate Cleaner, **SurfaLube™** is introduced to the equipment through hoses and spray lines. This will help eliminate formation of Hardened Isocyanates and coatings that may form when any remaining residue reacts with moisture in the air.

Hoses & Lines

- ☞ **Flush** thoroughly with **NZD ISO FLUSH™** Isocyanate Cleaner and Neutralizer to remove all liquid and semi-liquid Isocyanate (**Part A**)
- ☞ **During Flushing**, make sure the **heaters** on the machine are **turned off**

Guns

- ☞ **Flush Spray Guns** thoroughly with **SURF X FLUSH 2000™** to remove most uncured and cured Polyurethane

Pump

- ☞ **Pump SurfaLube™** into the system so that it remains in hoses and lines
- ☞ Store unit in a cool and dry (moisture free) area for up to 36 months
- ☞ When starting up the unit, flush out **SurfaLube™** completely!
- ☞ Introduce Polyurethane into the unit (**The first few pounds of Part A & B sprayed through the system should be scrapped to avoid any adhesive failure.** Then you are Ready to Go!



Physical Attributes

Stability & Compatibility

SurfaLube™ Equipment Storage Fluid is stable under normal storage conditions. It is compatible with machines and transfer pumps made of Carbon Steel or Stainless Steel and Aluminum Alloys.

SAFETY&HANDLING

PRECAUTIONS

Refer to SDS for additional safe handling & disposal

Direct contact of **SurfaLube™** causes serious eye irritation. Causes skin irritation. It is important to utilize recommended gloves (natural rubber), safety goggles and other suitable protective clothing your company recommends. Aspiration hazard if swallowed. Avoid contact with skin, eyes and clothing. Do not heat this product. Keep liquid and vapor away from heat, sparks and flames. Keep container closed. DO NOT take internally. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

DISPOSAL

Refer to SDS for additional safe handling & disposal

SurfaLube™ has a low order of toxicity, with a low risk of environmental harm. Effluent analysis is required for proper waste disposal. The spent material can be added to your non-hazardous waste stream (cleaning solvents) to be disposed of according to Federal, State and Local Regulations.

PREFERRED HOSE AND GASKET MATERIALS ARE:

Ø Cork Ø Natural Rubber Ø Neoprene Ø EPR Ø Polyethylene Ø Teflon

Buna N, Hypalon and Viton **are not** suitable gasket materials for mid to long-term (days and weeks) storage. Information from material suppliers and specific conditions of contact should be considered in the selection of suitable materials.

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PACKAGING & STORAGE

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1 Gallon EasyPour Jugs
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