

#### Safer Products for a Cleaner Environment

# Flushing & Immersion Cleaning Solvents

SURF X Flush™ - 2000 (flushing & immersion cleaning part A & B)

NZD ISO Flush™ - Isocyanates Cleaner (flushing part A)

(LOW EMISSION, NON-FLAMMABLE, NON-HAPS, NON-CORROSIVE, BIODEGRADABLE)
(DIRECT REPLACEMENTS TO ACETONE, MEK, METHYLENE CHLORIDE)

Safe, Fast and Residue-Free Flushing & Immersion Cleaning
Solvents to remove Urethanes

# **Definition:**

Polyurethane is a polymer composed of a chain of organic units joined by Carbomate (Urethane) Links, most commonly formed by reacting a di- or polyisocyanate with a polyol.

**SURF X FLUSH™ 2000** is available in 1, 5 and 55 gallon drum and Saturated Wipes "GO GREEN™ WIPES" <a href="http://gsp-usa-inc.com/go-green-wipes/">http://gsp-usa-inc.com/go-green-wipes/</a>).

**SURF X FLUSH™ 2000** (Low Emission solvent-based, non-HAPs, non-Hazardous, non-Flammable, Recyclable, <u>Water Miscible</u> and Biodegradable) <a href="http://gsp-usa-inc.com/surf-x-flush-2000/">http://gsp-usa-inc.com/surf-x-flush-2000/</a>.

Use the product FULL STREGHT at room temperature to flush or maximum 77-145 Degrees F in an immersion cleaning application with or without ultrasonic tank; spray under immersion, Saturated Wipes ("GO GREEN™ WIPES"). SURF X FLUSH™ 2000 effectively remove:

- Polyurethane Foam (Part A & B)
- Urethane Intermediates "POLYOLS" TDI and MDI Esters & Ethers (Polyether Polyols, and polyester polyols)
- Flexible and Rigid Polyurethane Foam
- Cured Reactive Hot Melt Polyurethane Adhesives and
- Resins (Orthophthalic; Isophthalic; Dicyclopentadiene; Polyester, Vinylester Polyamide and Epoxy)

**NZD ISO FLUSH™ Isocyanates Cleaner** is available in 1, 5 and 55 gallon drum and Saturated Wipes

"GO GREEN™ WIPES" http://gsp-usa-inc.com/go-green-wipes/).

**NZD ISO FLUSH™ Isocyanates Cleaner** (Low Emission solvent-based, non-HAPs, non-Hazardous, non-Flammable, Recyclable) <a href="http://gsp-usa-inc.com/nzd-iso-flush-isocyanates-cleaner/">http://gsp-usa-inc.com/nzd-iso-flush-isocyanates-cleaner/</a>.

Use the product FULL STREGHT at room temperature ONLY to flush the lines, hoses, equipment, parts, etc. Saturated Wipes (Go GTREEN™ WIPES.

NZD ISO FLUSH™ Isocyanates Cleaner effectively remove:

- Isocyanates (Part A & B)
- Cured Reactive Hot Melt Polyurethane Adhesives and
- Resins (Orthophthalic; Isophthalic; Dicyclopentadiene; Polyester, Vinylester Polyamide and Epoxy)

**CIRR D-BOND™ Crystallized Isocyanates Resin Remover** is available in 1 and 5 gallon pails and 55 gallon drums.

**CIRR D-BOND™** (Low Emission solvent-based, non-HAPs, non-Hazardous, non-Flammable, Recyclable) <a href="http://gsp-usa-inc.com/cirr-d-bond-crystalized-isocyanates-resin-remover/">http://gsp-usa-inc.com/cirr-d-bond-crystalized-isocyanates-resin-remover/</a>.

Use the product FULL STREGHT at room temperature in an immersion tank to clean equipment, parts, pump packaging, lines, etc.

**CIRR D-BOND™** effectively remove fully (OLD) crystallized:

- Polyurethane Foam (Part A & B)
- Urethane Intermediates "POLYOLS" TDI and MDI Esters & Ethers (Polyether Polyols, and polyester polyols)
- Flexible and Rigid Polyurethane Foam
- Cured Reactive Hot Melt Polyurethane Adhesives and
- Resins (Orthophthalic; Isophthalic; Dicyclopentadiene; Polyester, Vinylester Polyamide and Epoxy)
- Adhesives: Polyurethane adhesive, High Performance Adhesives, Adhesives for Composite Bonding, Glass Glue Adhesives, Cyanoacrylate Adhesives, Epoxy Adhesives, Vinyl Ester Adhesives, pigmented gel coats, high & low solid aliphatic, waterborne epoxy primers, acrylic paints, varnish and alkyd enamel, latex polymer and coatings.

#### Industries:

- Polyurethane Spray Equipment (removal of urethane foam deposits and buildup from Spray Guns, Mixing Heads, Gear Pumps, Troughs, Side Walls, Conveyor Parts, Hot Melt Roller Coaters, Molds, Foam Cutting Devices, Holding Tanks, Feeding Lines, Hoses, & Mixing Equipment
- Urethane-Wood Laminates (Polyurethane Doors);
- Roofing (Spray Foam)
- Converting & Molding (Flexible and Rigid Polyurethane Foam): Polyurethanes are used in the manufacture of flexible and high-resilience foam seating; rigid foam insulation panels; microcellular foam seals and gaskets; durable elastomeric wheels and tires (such as roller Coaster and escalator wheels); automotive suspension bushings; electrical potting compounds; high performance adhesives; surface coatings and surface sealants; Synthetic Fibers; Carpet Underlay; Hard Plastic Parts (electronic instruments); Hoses and Skateboard wheels; Shoes Sole (footwear); etc.
- Polyurethane Foam Machinery
- Marine (Boat Manufacturers, Navy)
- Fiberglass-Reinforced and Composites Plastics (Injection Mold)

# Environmental Compliance: "Working together to put employee safety and the environment first"

Global Specialty Products-USA, Inc. (Mount Holly, NJ) (<u>www.gsp-usa-inc.com</u>) hereby certifies that:

SURF X Flush<sup>™</sup> - 2000 (part A & B) and NZD ISO Flush<sup>™</sup> - Isocyanates Cleaner (part A) are manufactured by Global Specialty Products-USA, Inc. (NJ) to specifications in which:

Do not contain any substances that are listed on the:

- Canada List SOR/2012-285 Prohibition of Certain Toxic Substances Regulation, 2012 (Schedule 1 – Part 1-2); (Schedule 2 – Part 1-4); (Schedule 3 – subsections (3(2) – 50 (4)); (Schedule 4 – subsections (9(4) – 10 (3)); (Schedule 5 – subsections 12)
- NPIR 2011 List
- California SARA (Superfund Amendments and Reauthorization Act) Title 111
   Section 313 List
- EPA's HAPs (Hazardous Air Pollutants) List
- RCRA List (No RCRA Metals are added as ingredients; however, some of the raw materials in the product do carry PPM of certain RCRA Metals; please review the MSDS for handling the SPENT MATERIAL).

Do not contain any of the following ingredients or family of the ingredients:

- Contains NO Ketones (ACETONE, MEK, MIBK, etc.)
- Contains NO Chlorinated Solvents (MeCl2; 1,1,1 TCE; PERC; etc.)
- Contains NO Aromatic Solvents
- Contains NO Benzene
- Contains NO Phenol
- Contains NO Aliphatic Solvents (Mineral Spirits, etc.)
- Contains NO OZONE Depleting Chemicals
- Contains NO Butoxy Ethanol Chemicals
- Contains NO Primary Alcohol (no chance of oxidation of primary alcohol to carboxylic acid)

SURF X Flush $^{TM}$  - 2000 (part A & B)

**AND** 

NZD ISO Flush™ - Isocyanates Cleaner (part A) are considered:

- Non-Flammable (lower insurance premium)
- Non- Corrosive & compatible (safe on most commonly used O-rings, gaskets and hoses)
- Non-Reactive (does not form any zoetrope, does not cause explosion)
- Low order of toxicity
- Low VOC (6.6 Lbs. / Gallon)
- Low Rate of Evaporation (Low Vapor Pressure / High Boiling Point)
- Workers have no exposure to harmful fumes (exposure to vapors are minimized)
- Whatever quantity product you purchase, you will use (it does not evaporate like acetone, MEK and MeCl2)

#### **OPERATION**

Use

SURF X Flush™ - 2000 (part A & B)

**AND** 

NZD ISO Flush™ - Isocyanates Cleaner (part A)

<u>FULL STRENGTH AT ROOM TEMPERATURE</u> to flush lines or in a clean and totally DRY (free of moisture) <u>metal container with a fitted lid</u>.

PERFORMANCE WILL BE COMPROMISED

DO NOT USE WATER TO RINSE OFF TOOLS OR PARTS.

Use:

SURF X Flush™ - 2000 (part A & B)

AND

NZD ISO Flush™ - Isocyanates Cleaner (part A) in:

- To flush lines
- Flush spray "chopper guns", pumps and resin lines at room temperature only
- An immersion tank
- An immersion with or without ultrasonic cavitation (if used in an ultrasonic tank, be sure your ultrasonic tank is set up with a temperature control thermostat; do not exceed operating temperature of 140 Degrees F). Be sure to use the product at room temperature to avoid volatility, loss of product and moisture contamination (the product is hygroscopic).
- A <u>LOW PRESSURE</u> Parts Washer (please do not atomize this product; it is combustible (flash point: 169 Degree F)

#### RECOMMENDED MATERIALS TO USE "COMPATIBILITY":

SURF X Flush<sup>™</sup> - 2000 (part A & B) and NZD ISO Flush<sup>™</sup> - Isocyanates Cleaner (part A) <u>Are safe on:</u>

Teflon, Buna-S, Butyl Rubber, Karlez, Ethylene-Propylene Copolymer and Fluorosilicone Rubber

MATERIALS TO AVOID (LONG-TERM):

SURF X Flush™ - 2000 (part A & B) and NZD ISO Flush™ - Isocyanates Cleaner (part A) will effect with long-term (hours) exposure: PVC, Viton, ABS, Buna-N, Kynar, Lexan, Noryl EN-265, PET

#### **PACKAGING AVAILABILITY:**

SURF X Flush<sup>TM</sup> - 2000 (part A & B) and NZD ISO Flush<sup>TM</sup> - Isocyanates Cleaner (part A) are available in:

1, 5 and 55 gallon UN-Rated Packaging and Saturated Wipes.

### RECOMMENDED PARAMETERS TO RECLAIM "RECYCLE":

SURF X Flush™ - 2000 (part A & B) and NZD ISO Flush™ - Isocyanates Cleaner (part A) are recyclable via VACUUM Distillation at 300 Degrees F and 27 mm HG pressure. Most key solvents will boil off; however the wetting agents, surfactant and corrosion inhibitors will remain in the distilled bottom. Please add VIRGIN SURF X Flush™ - 2000 (part A & B) and NZD ISO Flush™ - Isocyanates Cleaner (part A) to the recycled "Distillate Portion" to maintain steady cleaning performance.

# PROPER DISPOSAL OF WASTE "SPENT PRODUCT" OR DISTILLED BOTTOM (IF RECYCLED):

Solutions containing hazardous or non-hazardous soils should be handled and treated according to Federal, State and Local Environmental Laws. Even though SURF X Flush<sup>TM</sup> - 2000 (part A & B) and NZD ISO Flush<sup>TM</sup> - Isocyanates Cleaner (part A) are mostly biodegradable, the spent material should not be disposed of in any sewerage system. The used material can be recycled via vacuum distillation on-site or by a mobile reclamation service company. Discharge your distill bottom and screened out solids according to Federal, State and Local Regulations.

PLEASE REVIEW THE MSDS FOR BOTH PRODUCTS CAREFULLY BEFORE USING THESE PRODUCTS AND OR HANDLING WASTE (Dispose of the spent product)

For more technical support, please be sure to contact us at 609-518-7577 or <a href="mailto:support@gsp-usa-inc.com">support@gsp-usa-inc.com</a>
<a href="mailto:www.gsp-usa-inc.com">www.gsp-usa-inc.com</a>; <a href="www.urethanefoamcleaners.com">www.urethanefoamcleaners.com</a>

