

Material Safety Data Sheet

WHMIS (Pictograms)

WHMIS (Classification)

HCS



E D-1B

HCS CLASS: Corrosive liquid.

Section 1. Chemical Product and Company Identification

Product Name/ Trade name Step Saver Plus	Code 154
Synonym Very Aggressive No-Rinse Stripper	CAS # Not applicable.
Chemical Family Not available.	Validation Date 7/30/2003
Chemical Formula Not applicable.	Print Date 8/13/2003
Manufacturer/ Supplier Arnold Sales Complete Janitorial Supply, Inc	In Case of Emergency Chemtrec (800) 424-9300
TSCA TSCA Inventory: All components listed or are exempt from listing.	
DSL DSL : All components listed unless noted elsewhere on this MSDS	
Protective Clothing 	

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
1) Water	7732-18-5	>52	Not available.	Not available.
2) 2-Butoxyethanol	111-76-2	<21	TWA: 20 (ppm) from ACGIH (TLV) [United States] TWA: 50 (ppm) from OSHA (PEL) [United States]	ORAL (LD50): Acute: 1746 mg/kg [Rat].
3) Potassium Hydroxide	1310-58-3	<10	Not available.	Not available.
4) Sodium Xylene Sulfonate	1300-72-7	<7	Not available.	Not available.
5) Monoethanolamine	141-43-5	<5	TWA: 3 (ppm) TWA: 6 (ppm) from OSHA (PEL) [United States] STEL: 6 (ppm)	Not available.
6) Tetrapotassium Pyrophosphate	7320-34-5	<1	Not available.	Not available.
7) Anionic Surfactant	68130-47-2	<1	Not available.	ORAL (LD50): Acute: 3950 mg/kg [Rat].
8) Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	<1	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].
9) Triethanolamine	102-71-6	<1	Not available.	ORAL (LD50): Acute: 4000 mg/kg [Rat].
10) Perfume Oil	N/A	<1	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	Corrosive to skin and eyes on contact. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.
Potential Chronic Health Effects	May aggravate existing respiratory conditions such as asthma. Severe over exposure may cause nervous system damage and kidney damage. Repeated or prolonged exposure to the substance may produce liver damage, blood disorders.

Carcinogenic Effects

Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	Avoid contact with eyes. Call a poison control center or doctor immediately for treatment advice. Hold eye open and rinse slowly and thoroughly with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Skin Contact	Rinse skin immediately with plenty of water for 15 to 20 minutes.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.
Ingestion	Call a poison control center immediately for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	Non-flammable substance.
Special Remarks on Fire Hazards	No additional remark.
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and place in an appropriate waste disposal container.
Large Spill and Leak	Corrosive liquid. Do not touch damaged container or spilled material. Isolate the area, do not attempt to clean-up spill, notify your manager for additional instructions.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Section 7. Handling and Storage

Precautions	After handling, always wash hands thoroughly with soap and water. Do not breathe gas/fumes/vapor/spray. Do not ingest. Good general ventilation should be sufficient to control airborne levels.
Incompatibility	acids, oxidizing materials, metals
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room. Handle and open container with care. Keep out of the reach of children. Not for use or storage in or around the home.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Good general ventilation should be sufficient to control airborne levels.
Personal Protection	<p><i>Eyes</i> Splash goggles.</p> <p><i>Body</i> Wear overalls or long sleeved shirt and long trousers, nitrile rubber or neoprene gloves, rubber boots.</p> <p><i>Respiratory</i> Wear appropriate respirator when ventilation is inadequate. Be sure to use a MSHA/NIOSH approved respirator or equivalent.</p> <p><i>Hands</i> Gloves (impervious).</p>

Protective Clothing (Pictograms)



Exposure Limits	2-Butoxyethanol TWA: 25 (ppm) TWA: 50 (ppm) from OSHA (PEL)
	Monoethanolamine TWA: 3 (ppm) TWA: 6 (ppm) from OSHA (PEL) STEL: 6 (ppm)
Consult local authorities for acceptable exposure limits.	

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid. (Liquid.)	Odor	Characteristic.
Molecular Weight	Not applicable.	Taste	Not available.
pH	13.5 to 14 [Basic.]	Color	Colorless.
Boiling/Condensation Point	214°F initial		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.04 (Water = 1)		
Vapor Pressure	20mm Hg @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	90		
VOC	Not available.		
Evaporation Rate	<1 compared to Water		
Dispersion Properties	See solubility in water.		
Solubility	Easily soluble in cold water.		
The Product is:	May be combustble at high temperature.		
Auto-ignition Temperature	Not available.		
Flash Points	Not available.		
Flammable Limits	Not available.		
Fire Hazards in Presence of Various Substances	Non-flammable.		
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.		

Section 10. Stability and Reactivity Data	
Stability	The product is stable.
Incompatibility with Various Substances	acids , oxidizing materials, metals
Hazardous Decomposition Products	Will not occur.

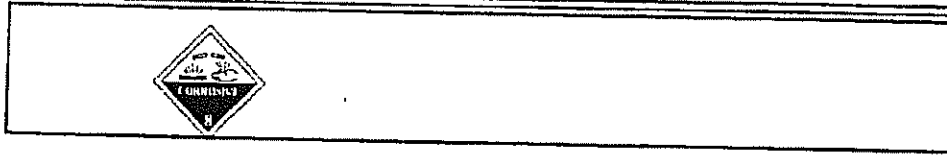
Section 11. Toxicological Information	
Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 1746 mg/kg [Rat]. (2-Butoxyethanol). Acute toxicity of the gas (LC50): 926 ppm 4 hour(s) [Mouse]. (2-Butoxyethanol).
Acute Effects on Humans	<i>Eyes</i> Corrosive to eyes on contact. Eye contact can result in corneal damage or blindness. <i>Skin</i> Corrosive to skin and eyes on contact. Tissue Destruction Possible. Skin contact may produce burns. <i>Inhalation</i> The product is a severe irritant for lungs and respiratory tract. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. <i>Ingestion</i> Harmful if swallowed. Burns to mouth, throat and stomach. May be fatal if swallowed.
Chronic Effects on Humans	May aggravate existing respiratory conditions such as asthma. Severe over exposure may cause nervous system damage and kidney damage. Repeated or prolonged exposure to the substance may produce liver damage, blood disorders.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.

Section 12. Ecological Information	
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations	
Waste Information	Any method in accordance with applicable laws.
Waste Stream	Not available.

Section 14. Transport Information

DOT (U.S.A)
(Pictograms)



TDG Classification 8



PIN UN, Proper Shipping Name, PG Shipping name: Corrosive liquids n.o.s. UNNA: UN1760 PG: II

Maritime Transportation Not available.

Special Provisions for Transport Not available.

Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) E D-1B



Regulatory Lists No products were found.

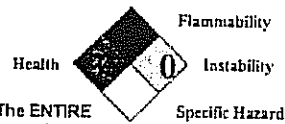
Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications	HCS (U.S.A.)	HCS CLASS: Corrosive liquid.
	USA Regulatory Lists	SARA 311/312 MSDS distribution - chemical inventory - hazard identification: 2-Butoxyethanol: immediate health hazard, delayed health hazard; Potassium Hydroxide: immediate health hazard SARA 313 toxic chemical notification and release reporting: 2-Butoxyethanol
	DSD (EEC)	R35- Causes severe burns.
	International Regulations Lists	No products were found.

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		0
Physical Hazard		0

National Fire Protection Association (U.S.A.)



The Hazard Ranking systems presented on this MSDS provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

Section 16. Other Information

Validated by CRushton on 7/30/2003.

Verified by CRushton.

Printed 8/13/2003.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Validated on 7/30/2003.

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