Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

HCS CLASS: Corrosive liquid.

WHMIS (Pictograms)	WHMIS (Classification)	HCS
	WHMIS Class D-2A: Material causing other toxic effects (VERY TOXIC). WHMIS Class E: Corrosive liquid.	

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	**AC114**
Synonym	Multi-Purpose Acid Cleaner/Delimer
Chemical Family	Not available.
Chemical Formula	Not applicable.
Manufacturer/Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (419) 241-2156
TSCA	**TSCA Inventory: All components listed or are exempt from listing.**
	All components listed unless noted elsewhere on this MSDS
DSL/ NDSL	

Code	114
CAS #	Not applicable.
Validation Date	**6/07/2006**
Print Date	**6/07/2006**
In Case of Emergency	Chemtrec (800) 424-9300

Protective Clothing

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC_{50}/LD_{50}
1) Hydrochloric Acid	7647-01-0	10-15	STEL: 5	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	Severe over-exposure can produce lung damage, choking, unconsciousness or death.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	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. Call a poison control center or doctor immediately for treatment advice.
Skin Contact	Rinse skin with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for further treatment advice.
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	N/A
Special Remarks on Fire Hazards	N/A
Special Remarks on Explosion Hazards	N/A

Section 6. Accidental Release Measures

Small Spill and Leak	Chemical anti-splash goggles.
Large Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
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	Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe gas, fumes, vapor or spray. Never add water to this product. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible.
Incompatibility	Strong alkalis, most metals, bleach.
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room. Keep out of reach of children.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Good general ventilation should be sufficient to control airborne levels.
Personal Protection	
Eyes	Splash goggles.
Body	Lab coat.
Respiratory	Wear appropriate respirator when ventilation is inadequate.
Hands	Gloves (impervious).
Protective Clothing (Pictograms)	
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.
Molecular Weight	Not applicable.
pH	<1 [Acidic.]
Boiling/Condensation Point	212°F initial
Melting/Freezing Point	Not available.
Critical Temperature	Not available.
Instability Temperature	Not available.

Odor	Characteristic.
Taste	Not available.
Color	Blue.

Specific Gravity	1.07 (Water = 1)
Vapor Pressure	26mm Hg @ 68°F
Vapor Density	>1 (Air = 1)
Volatility	95
VOC	Not available.
Evaporation Rate	<1 compared to Water
Dispersion Properties	See solubility in water.
Solubility	not available
The Product is:	May be combustible at high temperature.
Auto-ignition Temperature	Not available.
Flash Points	CLOSED CUP: >98.889°C (210°F).
Flammable Limits	Not available.
Fire Hazards in Presence of Various Substances	No specific information is available in our database regarding the flammability of this product in presence of various materials.
Explosion Hazards in Presence of Various Substances	Not applicable

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	Strong alkalis, most metals, bleach.
Hazardous Decomposition Products	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Acute Effects on Humans	
Eyes	Severe eye irritant. Liquid and mist can cause tearing, possible swelling of the conjunctiva, and corneal injury.
Skin	Skin irritant. Prolonged or repeated exposure can cause dermatitis.
Inhalation	May be irritating to mucous membranes of the nose, throat, and lungs.
Ingestion	May be irritating or corrosive to the mouth, throat, and upper gastrointestinal tract. Large doses can cause vomiting.
Chronic Effects on Humans	Severe over-exposure can produce lung damage, choking, unconsciousness or death.
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 Class 8: Corrosive material

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) WHMIS Class D-2A: Material causing other toxic effects (VERY TOXIC).
WHMIS Class E: Corrosive liquid.

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 California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Ethylene Oxide <1 ppm
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethylene Oxide <1 ppm

Massachusetts RTK: Ethylene Oxide

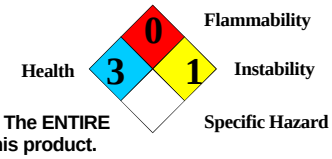
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Hydrochloric Acid

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	1

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 3/20/2004.

Verified by CRushton.

Printed 3/27/2004.

Information Contact **Betco Corporation**
1001 Brown Avenue
Toledo, Ohio 43607

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.

Continued on Next Page