



Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

 WHMIS (Pictograms)	WHMIS Class E: Corrosive liquid. WHMIS CLASS D-1: Material causing immediate and serious toxic effects. WHMIS (Classification)	HCS CLASS: Corrosive liquid. HCS
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Section 1. Chemical Product and Company Identification

Product Name/ Trade name Pull	Code 71
Synonym Disinfectant Toilet Bowl/Urinal Cleaner	CAS # Not applicable.
Chemical Family Not available.	Validation Date 3/20/2004
Chemical Formula Not applicable.	Print Date 3/27/2004
Manufacturer/ Supplier Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (419) 241-2156	In Case of Emergency Chemtrec (800) 424-9300
TSCA TSCA Inventory: All components listed or are exempt from listing.	
DSL/ NDSL 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) Hydrochloric Acid	7647-01-0	23	STEL: 5	Not available.
2) Quaternary Ammonium Chloride	68424-95-3	<1	Not available.	Not available.
3) Dioctyl Dimethyl Ammonium Chloride	5538-94-3	<1	Not available.	Not available.
4) Quaternary Ammonium Chloride	7173-51-5	<1	Not available.	Not available.
5) Quaternary Ammonium Chloride	68424-85-1	<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. Severe over-exposure can result in death.
Potential Chronic Health Effects	Prolonged exposure may result in skin burns and ulcerations.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

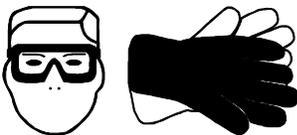
Eye Contact	Hold eye open and rinse slowly and thoroughly with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice.
Skin Contact	Remove contaminated clothing and shoes. 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. Call a poison control center or doctor for further treatment advice.

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 NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.
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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	Absorb with an inert material and place in an appropriate waste disposal container.
Large Spill and Leak	Corrosive liquid. Avoid to runoff to sewers and waterways. Wear Protective Clothing. Absorb with inert Material. Contact you local Emergency planning commission for further instructions. 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 locked up. Keep container dry. DO NOT ingest. Do not breathe gas, fumes, vapor or spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
Incompatibility	Strong alkalis, most metals, bleach. alkalis Incompatible with chlorinated solvents. Incompatible with alcohols and a wide variety of metals.
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room. Not for use or storage in or around the home. Keep out of the reach of children.

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> Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.</p> <p><i>Respiratory</i> Wear appropriate respirator when ventilation is inadequate.</p> <p><i>Hands</i> Gloves (impervious).</p>
Protective Clothing (Pictograms)	
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Characteristic.
Molecular Weight	Not applicable.	Taste	Not available.
pH	<1 [Acidic.]	Color	White.
Boiling/Condensation Point	210°F initial		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.1 (Water = 1)		
Vapor Pressure	30mm Hg @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	95		
VOC	Not available.		
Evaporation Rate	<1		
Dispersion Properties	See solubility in water.		
Solubility	Easily soluble in cold water.		
The Product is:	Non-flammable.		
Auto-ignition Temperature	Not available.		
Flash Points	Not available.		
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. alkalis Incompatible with chlorinated solvents. Incompatible with alcohols and a wide variety of metals.		
Hazardous Decomposition Products	Will not occur.		

Section 11. Toxicological Information

Routes of Entry	Eye Contact Ingestion. INHALATION Skin contact.
Toxicity to Animals	Acute oral toxicity (LD50): 4610 mg/kg [Rat]. (Nonionic Surfactant).
Acute Effects on Humans	<p><i>Eyes</i> Severe eye irritant. Liquid and mist can cause pain, tearing, possible swelling of the conjunctiva, and corneal destruction.</p> <p><i>Skin</i> Severe skin irritant. Can cause chemical burns and possible ulceration.</p> <p><i>Inhalation</i> Irritating to mucous membranes of the nose, throat, and lungs. Can cause coughing, choking, headaches, and dizziness.</p> <p><i>Ingestion</i> May cause severe burning of the mouth, pharynx, and abdomen. May be corrosive to the upper gastrointestinal tract, followed by vomiting.</p>
Chronic Effects on Humans	Prolonged exposure may result in skin burns and ulcerations.
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: 1760 PG: II

Maritime Transportation Not available.

Special Provisions for Transport

Not available.

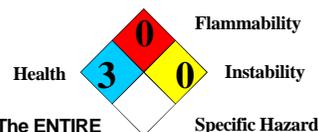
Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification)	WHMIS Class E: Corrosive liquid. WHMIS CLASS D-1: Material causing immediate and serious toxic effects.	
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 302/304/311/312 hazardous chemicals: Hydrochloric Acid SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Hydrochloric Acid
	DSD (EEC)	
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 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.

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