





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

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

<b>Product Name/ Trade name</b> <b>Pull</b>	<b>Code</b> <b>71</b>
<b>Synonym</b> Disinfectant Toilet Bowl/Urinal Cleaner	<b>Version Number</b>
<b>Chemical Family</b> Not available.	<b>Validation Date</b> <b>3/2/2010</b>
<b>Chemical Formula</b> Not applicable.	<b>Print Date</b> 3/3/2010
<b>Manufacturer/ Supplier</b> Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (419) 241-2156	<b>In Case of Emergency</b> Chemtrec (800) 424-9300
<b>TSCA</b> TSCA Inventory: All components listed or are exempt from listing.	<b>Protective Clothing</b> 
<b>DSL/ NDSL</b> All components listed unless noted elsewhere on this MSDS	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Hydrochloric Acid	7647-01-0	23	STEL: 5	Not available.
Quaternary Ammonium Chloride	68424-95-3	<1	Not available.	Not available.
Dioctyl Dimethyl Ammonium Chloride	5538-94-3	<1	Not available.	Not available.
Quaternary Ammonium Chloride	7173-51-5	<1	Not available.	Not available.
Quaternary Ammonium Chloride	68424-85-1	<1	Not available.	Not available.

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b>	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.
<b>Potential Chronic Health Effects</b>	Prolonged exposure may result in skin burns and ulcerations.
<b>Carcinogenic Effects</b>	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

## Section 4. First Aid Measures

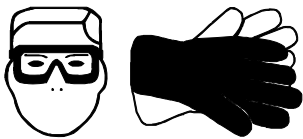
<b>Eye Contact</b>	Hold eye open and rinse slowly and thoroughly with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice.
<b>Skin Contact</b>	Remove contaminated clothing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

<b>Inhalation</b>	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.
<b>Ingestion</b>	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.

<b>Section 5. Fire Fighting Measures</b>	
<b>Products of Combustion</b>	Not available.
<b>Fire Fighting Media and Instructions</b>	N/A
<b>Special Remarks on Fire Hazards</b>	N/A
<b>Special Remarks on Explosion Hazards</b>	N/A

<b>Section 6. Accidental Release Measures</b>	
<b>Small Spill and Leak</b>	Absorb with an inert material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	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.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

<b>Section 7. Handling and Storage</b>	
<b>Precautions</b>	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.
<b>Incompatibility</b>	Strong alkalis, most metals, bleach. alkalis Incompatible with chlorinated solvents. Incompatible with alcohols and a wide variety of metals.
<b>Storage</b>	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.

<b>Section 8. Exposure Controls/Personal Protection</b>	
<b>Engineering Controls</b>	Good general ventilation should be sufficient to control airborne levels.
<b>Personal Protection</b>	
	<i>Eyes</i> Splash goggles.
	<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.
	<i>Respiratory</i> Wear appropriate respirator when ventilation is inadequate.
	<i>Hands</i> Gloves (impervious).
<b>Protective Clothing (Pictograms)</b>	
<b>Exposure Limits</b>	Not available.

## Section 9. Physical and Chemical Properties

<b>Physical State and Appearance</b>	Liquid.	<b>Odor</b>	Characteristic.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH</b>	<1 [Acidic.]	<b>Color</b>	White.
<b>Boiling/Condensation Point</b>	210°F initial		
<b>Melting/Freezing Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Instability Temperature</b>	Not available.		
<b>Specific Gravity</b>	1.1 (Water = 1)		
<b>Vapor Pressure</b>	30mm Hg @ 68°F		
<b>Vapor Density</b>	>1 (Air = 1)		
<b>Volatility</b>	95		
<b>VOC</b>	Not available.		
<b>Evaporation Rate</b>	<1		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Easily soluble in cold water.		
<b>The Product is:</b>	Non-flammable.		
<b>Auto-ignition Temperature</b>	Not available.		
<b>Flash Points</b>	Not available.		
<b>Flammable Limits</b>	Not available.		
<b>Fire Hazards in Presence of Various Substances</b>	No specific information is available in our database regarding the flammability of this product in presence of various materials.		
<b>Explosion Hazards in Presence of Various Substances</b>	Not applicable		

## Section 10. Stability and Reactivity Data

<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	Strong alkalis, most metals, bleach. alkalis Incompatible with chlorinated solvents. Incompatible with alcohols and a wide variety of metals.
<b>Hazardous Decomposition Products</b>	Will not occur.

## Section 11. Toxicological Information

<b>Routes of Entry</b>	Eye Contact Ingestion. INHALATION Skin contact.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 4610 mg/kg [Rat]. (Nonionic Surfactant).
<b>Acute Effects on Humans</b>	<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>
<b>Chronic Effects on Humans</b>	Prolonged exposure may result in skin burns and ulcerations.
<b>Special Remarks on Toxicity to Animals</b>	No additional remark.
<b>Special Remarks on Chronic Effects on Humans</b>	No additional remark.

## Section 12. Ecological Information

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

## Section 13. Disposal Considerations

<b>Waste Information</b>	Any method in accordance with applicable laws.
<b>Waste Stream</b>	Not available.

## Section 14. Transport Information

**DOT (U.S.A)  
(Pictograms)**



**TDG Classification**

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**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.

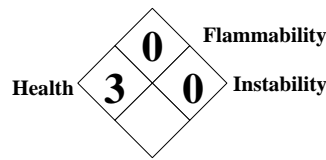
**Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

<b>Other Classifications</b>	<b>HCS (U.S.A.)</b>	HCS CLASS: Corrosive liquid.
	<b>USA Regulatory Lists</b>	<p>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 &lt;1 ppm</p> <p>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 &lt;1 ppm</p> <p>Massachusetts RTK: Ethylene Oxide</p> <p>SARA 302/304/311/312 hazardous chemicals: Hydrochloric Acid</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Hydrochloric Acid</p>
	<b>DSD (EEC)</b>	
	<b>International Regulations Lists</b>	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 3/2/2010.

Verified by CRushton.

Printed 3/3/2010.

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

Notice to Reader:

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