





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

 WHMIS (Pictograms)	WHMIS CLASS D-2: Material causing other toxic effects. Controlled under the Pest Control Products Act (PCP) WHMIS (Classification)	HCS CLASS: Corrosive liquid. HCS
---	---	-------------------------------------

## Section 1. Chemical Product and Company Identification

Product Name/ Trade name	<b>Betco 256</b>	Code	306
Synonym	Cleaner/Disinfectant/Deodorizer/Fungicide/Mildewstat/Virucide	CAS #	Not applicable.
Chemical Family	Not available.	Validation Date	3/22/2004
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 <sub>50</sub> /LD <sub>50</sub>
1) Quaternary Ammonium Chloride	7173-51-5	3.75	Not available.	Not available.
2) Dioctyl Dimethyl Ammonium Chloride	5538-94-3	1.5	Not available.	Not available.
3) Quaternary Ammonium Chloride	68424-95-3	2.25	Not available.	Not available.
4) Quaternary Ammonium Chloride	68424-85-1	5	Not available.	Not available.
5) Nonionic Surfactant	9016-45-9	5-10	Not available.	Not available.
6) Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	1-5	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].
7) Sodium Sesquicarbonate	533-96-0	1-5	Not available.	Not available.

## Section 3. Hazards Identification

Potential Acute Health Effects	Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Corrosive to eyes and skin.
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	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

<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>	Chemical anti-splash goggles. Absorb with an inert material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	Avoid to runoff to sewers and waterways. Wear Protective Clothing. Absorb with inert Material. Contact you local Emergency planning commission for further instructions.
<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>	Avoid contact with skin and eyes. DO NOT ingest.
<b>Incompatibility</b>	None known.
<b>Storage</b>	Keep out of reach of children. For Institutional and Commercial Use

<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>	Long Pants and Long Sleeves to avoid skin cotact.
<i>Respiratory</i>	Not applicable.
<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>	Pleasant.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH</b>	9.5 to 10.5 [Basic.]	<b>Color</b>	Red.
<b>Boiling/Condensation Point</b>	214°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>	1.03 (Water = 1)		
<b>Vapor Pressure</b>	20mm Hg @ 68°F		
<b>Vapor Density</b>	>1 (Air = 1)		
<b>Volatility</b>	70		
<b>VOC</b>	Not available.		
<b>Evaporation Rate</b>	<1 compared to Water		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Easily soluble in cold water.		
<b>The Product is:</b>	May be combustible at high temperature.		
<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>	None known.
<b>Hazardous Decomposition Products</b>	Will not occur.

### Section 11. Toxicological Information

Routes of Entry	Skin contact. Ingestion. INHALATION
Toxicity to Animals	Acute oral toxicity (LD50): 3030 mg/kg [Rat]. (Tetrasodium EDTA).
Acute Effects on Humans	<p><i>Eyes</i> Eye irritant. Liquid and mist may damage the eyes causing corneal injury.</p> <p><i>Skin</i> Skin irritant. Prolonged or repeated contact may cause dermatitis.</p> <p><i>Inhalation</i> N/A</p> <p><i>Ingestion</i> May be irritating to the mouth, throat, and gastrointestinal system. Burning pain, vomiting, and diarrhea expected with large doses.</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	Class 8: Corrosive material	
PIN UN, Proper Shipping Name, PG	Not applicable.	
Maritime Transportation	Not available.	
Special Provisions for Transport	Not applicable.	

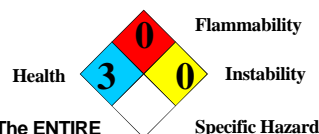
## Section 15. Other Regulatory Information and Pictograms

<b>WHMIS (Classification)</b>	WHMIS CLASS D-2: Material causing other toxic effects. Controlled under the Pest Control Products Act (PCP)	
<b>Regulatory Lists</b>	No products were found.	
<b>Other Regulations</b>	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>	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: Nonionic Surfactant: immediate health hazard
	<b>DSD (EEC)</b>	This product is not classified according to the EU regulations.
	<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 3/22/2004.

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.*

Validated on 3/22/2004.

**Betco 256**

Page: 5/5

**Continued on Next Page**