





Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	WHMIS CLASS D-2: Material causing other toxic effects. Controlled under the Pest Control Products Act (PCP)	HCS CLASS: Corrosive liquid.
WHMIS (Pictograms)	WHMIS (Classification)	HCS
Section 1. Chemical Product and Company Identification		
Product Name/ Trade name Betco 256		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.		Protective Clothing 
DSL/ NDSL All components listed unless noted elsewhere on this MSDS		

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
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.

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

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

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Good general ventilation should be sufficient to control airborne levels.
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Personal Protection

Eyes Splash goggles.

Body Long Pants and Long Sleeves to avoid skin cotact.

Respiratory Not applicable.

Hands Gloves (impervious).

Protective Clothing (Pictograms)



Exposure Limits	Not available.
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Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Pleasant.
Molecular Weight	Not applicable.	Taste	Not available.
pH	9.5 to 10.5 [Basic.]	Color	Red.
Boiling/Condensation Point	214°F initial		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.03 (Water = 1)		
Vapor Pressure	20mm Hg @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	70		
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 combustible at high temperature.		
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	None known.
Hazardous Decomposition Products	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 InformationDOT (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

WHMIS (Classification)

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



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: Nonionic Surfactant: immediate health hazard

DSD (EEC)

This product is not classified according to the EU regulations.

International Regulations Lists

No products were found.

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

	3
Flammability	0
Physical Hazard	0

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

		Flammability
Health	3	0
		Instability
		Specific Hazard

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
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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.

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