





Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	Not controlled under WHMIS (Canada).	HCS Class: Irritating substance.
WHMIS (Pictograms)	WHMIS (Classification)	HCS

Section 1. Chemical Product and Company Identification

Product Name/ Trade name	Betco Lemon	Code	313
Synonym	Neutral pH Disinfectant/Deodorant/Detergent	CAS #	Not applicable.
Chemical Family	Not available.	Validation Date	3/2/2007
Chemical Formula	Not applicable.	Print Date	3/24/2007
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
Quaternary Ammonium Chloride	68424-85-1	2	Not available.	Not available.
Isopropyl Alcohol	67-63-0	1-5	TWA: 400 (ppm) TWA: 400 (ppm) from OSHA (PEL) [United States] STEL: 500 (ppm)	ORAL (LD50): Acute: 16971 mg/kg [Rat].
Nonionic Surfactant	9016-45-9	1-5	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	No specific information is available in our database regarding the acute toxic effects of this material for humans. Irritating to mouth, throat and stomach. This product is a severe eye irritant. This product may irritate eyes and skin upon contact.
Potential Chronic Health Effects	Over-exposure by inhalation may cause respiratory irritation. Repeated skin exposure can produce local skin destruction, or dermatitis.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention.
Skin Contact	Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Seek medical attention.
Inhalation	Allow the victim to rest in a well ventilated area.
Ingestion	Dilute with two glasses of water. Seek medical attention.

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 Safety glasses recommended.

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 After handling, always wash hands thoroughly with soap and water.

Incompatibility None known.

Storage Keep out of the reach of children. Not for use or storage in or around the home.

Section 8. Exposure Controls/Personal Protection

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

Personal Protection

Eyes Safety glasses.

Body No special recommendations.

Respiratory Not applicable.

Hands Gloves.

Protective Clothing (Pictograms)



Exposure Limits **Isopropyl Alcohol**
 TWA: 400 (ppm)
 TWA: 400 (ppm) from OSHA (PEL)
 STEL: 500 (ppm)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance Liquid.

Odor Lemon like.

Molecular Weight Not applicable.

Taste Not available.

pH 6.5 to 8.5

Color Yellow. (Light.)

Boiling/Condensation Point 212°F initial

Melting/Freezing Point Not available.

Critical Temperature Not available.

Instability Temperature	Not available.
Specific Gravity	1 (Water = 1)
Vapor Pressure	20mm Hg @ 68°F
Vapor Density	>1 (Air = 1)
Volatility	90
VOC	Not available.
Evaporation Rate	<1
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	Not available.
Toxicity to Animals	Acute oral toxicity (LD50): 4610 mg/kg [Rat]. (Nonionic Surfactant).
Acute Effects on Humans	
<i>Eyes</i>	Eye irritant. May cause redness and swelling of the conjunctiva.
<i>Skin</i>	Defatting to skin on repeated contact.
<i>Inhalation</i>	Slightly irritating to the respiratory system.
<i>Ingestion</i>	May be irritating to the gastrointestinal system. Vomiting and diarrhea expected with large doses.
Chronic Effects on Humans	Over-exposure by inhalation may cause respiratory irritation. Repeated skin exposure can produce local skin destruction, or dermatitis.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.

Section 12. Ecological Information

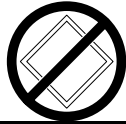
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation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

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.

Section 14. Transport Information

DOT (U.S.A)
(Pictograms)



TDG Classification Not controlled under TDG (Canada).



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) Not controlled under WHMIS (Canada).



Regulatory Lists No products were found.

Other Regulations Not available. or of its ingredients

Other Classifications

HCS (U.S.A.)

HCS Class: Irritating substance.

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: Isopropyl Alcohol: fire

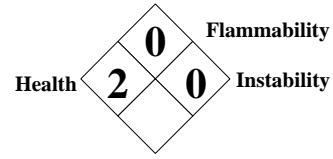
DSD (EEC) This product is not classified according to the EU regulations.

International Regulations Lists No products were found.

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

Health	2
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. **Specific Hazard**

Section 16. Other Information

Validated by CRushton on 3/2/2007.

Verified by CRushton.

Printed 3/24/2007.

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 3/2/2007.

Betco Lemon

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