




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	AF315 (At 5 fl. oz/ Gallon Dilution)	Code	3 1 5 (A t Dilution)
Synonym	Neutral pH Disinfectant/Deodorant/Detergent	CAS #	Not applicable.
Chemical Family	Not available.	Validation Date	8/22/2005
Chemical Formula	Not applicable.	Print Date	8/22/2005
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
Water	7732-18-5	>93	Not available.	Not available.
Quaternary Ammonium Chloride	68424-85-1	2	Not available.	Not available.
Isopropyl Alcohol	67-63-0	<2	TWA: 400 (ppm) TWA: 400 (ppm) from OSHA (PEL) [United States] STEL: 500 (ppm)	Not available.
Nonionic Surfactant	9016-45-9	<1	Not available.	Not available.
Perfume Oil	N/A	<1	Not available.	Not available.
Dye	N/A	<1	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	Harmful if swallowed. Inflammation of the eye is characterized by redness, watering, and itching.
Potential Chronic Health Effects	Over-exposure by inhalation may cause respiratory irritation. May aggravate existing respiratory conditions such as asthma. May aggravate existing skin conditions such as dermatitis.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	Flush eyes with large quantities of water. Seek medical attention if irritation persists.
Skin Contact	Flush with water. Seek medical attention if irritation persists.
Inhalation	N/A
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	Safety glasses recommended.
Large Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Call for assistance on disposal.
Personal Protection in Case of a Large Spill	Gloves. Boots. Safety glasses.

Section 7. Handling and Storage

Precautions	Keep away from incompatibles. Keep away from sources of ignition.
Incompatibility	acids alkalis oxidizing agents
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	
<i>Eyes</i>	Eye contact with the concentrate is unlikely when dispensing through a dilution control system. Eye protection should be worn in operations where splashing may occur .
<i>Body</i>	No special recommendations.
<i>Respiratory</i>	A respirator is not needed under normal and intended conditions of product use. May not be suitable for use by persons with existing respiratory conditions.
<i>Hands</i>	Skin contact with concentrate is unlikely when using through a dilution control system. Persons with sensitive skin or existing skin conditions should wear gloves when using cleaning and maintenance products.
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	Pleasant.
Molecular Weight	Not applicable.	Taste	Not available.
pH	6.5 to 8.5	Color	Blue. (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	Not Determined		
Vapor Density	>1 (Air = 1)		
Volatility	90		
VOC	Not available.		
Evaporation Rate	(Water=1):<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	Non-flammable.		
Explosion Hazards in Presence of Various Substances	Not applicable		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	acids alkalis oxidizing agents
Hazardous Decomposition Products	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Acute Effects on Humans	<p><i>Eyes</i> Eye irritant. May cause redness and swelling of the conjunctiva.</p> <p><i>Skin</i> Defatting to skin on repeated contact.</p> <p><i>Inhalation</i> May cause headache, dizziness. May cause slight respiratory irritation. Symptoms dissipate upon removal from the area.</p> <p><i>Ingestion</i> May be irritating to the gastrointestinal system. Vomiting and diarrhea expected with large doses.</p>
Chronic Effects on Humans	Over-exposure by inhalation may cause respiratory irritation. May aggravate existing respiratory conditions such as asthma. May aggravate existing skin conditions such as dermatitis.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.

Section 12. Ecological Information

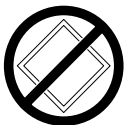
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation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

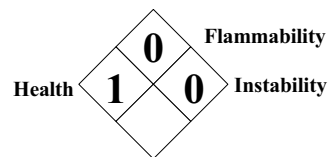
Other Regulations Not available.

Other Classifications

HCS (U.S.A.)	HCS Class: Irritating substance.
USA Regulatory Lists	<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 < 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 < 1 ppm</p> <p>Massachusetts RTK: Ethylene Oxide</p> <p>SARA 311/312: Isopropyl Alcohol; Quaternary Ammonium Chloride</p> <p>SARA 313: No Components were found</p>
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	1	National Fire Protection Association (U.S.A.)
Flammability	0	
Physical Hazard	0	



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 8/22/2005.

Verified by CRushton.

Printed 8/22/2005.

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 8/22/2005.

AF315 (At 5 fl. oz/ Gallon Dilution)

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