



Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	Not a WHMIS controlled material. 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	AF79 Concentrate	Code	331
Synonym	Cleaner/Disinfectant/Mildewstat/Fungicide/Virucide/Deod.	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, Oh 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
Tetrasodium salt of ethylenediaminetetraacetic acid	64-02-8	<8	Not available.	ORAL (LD50): Acute: 3030 mg/kg [Rat].
Quaternary Ammonium Chloride	68424-85-1	<5	Not available.	Not available.
Nonionic Surfactant	9016-45-9	<5	Not available.	Not available.
Sodium Metasilicate	6834-92-0	<5	Not available.	Not available.
Nonionic Surfactant	61788-90-7	<5	Not available.	ORAL (LD50): Acute: 4610 mg/kg [Rat].
Perfume Oil	N/A	<1	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. 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. Corrosive to eyes.
Potential Chronic Health Effects	Repeated skin exposure can produce local skin destruction, or dermatitis. 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. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Call a poison control center immediately for treatment advice. Do not give any fluid to the person. 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	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures	
Small Spill and Leak	Absorb with an inert material.
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. Avoid contact with skin and eyes. DO NOT ingest.
Incompatibility	Not available.
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>	Splash goggles.
<i>Body</i>	No additional special protective clothing is required.
<i>Respiratory</i>	Wear appropriate respirator when ventilation is inadequate.
<i>Hands</i>	Gloves (impervious).
Protective Clothing (Pictograms)	
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Pleasant. (Slight.)
Molecular Weight	Not applicable.	Taste	Not available.
pH	13 [Basic.]	Color	Green.
Boiling/Condensation Point	The lowest known value is 40°C (104°F) (Nonionic Surfactant).		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.02 (Water = 1)		
Vapor Pressure	20mm Hg @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	89.7		
VOC	5.1406 (g/l).		
Evaporation Rate	<1 compared to Water		
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	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	No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	Not available.
Hazardous Decomposition Products	Not available.

Section 11. Toxicological Information

Routes of Entry	Eye Contact Ingestion. INHALATION Skin contact.
Toxicity to Animals	Acute oral toxicity (LD50): 3030 mg/kg [Rat]. (Tetrasodium EDTA).
Acute Effects on Humans	<p><i>Eyes</i> Severely irritating to the eyes. Eye contact can result in corneal damage or blindness.</p> <p><i>Skin</i> Skin contact may produce burns.</p> <p><i>Inhalation</i> Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.</p> <p><i>Ingestion</i> May cause burns to mouth, throat and stomach. Harmful if swallowed. May cause headache, dizziness, nausea, vomiting and diarrhea.</p>
Chronic Effects on Humans	Repeated skin exposure can produce local skin destruction, or dermatitis. 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	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

8




PIN UN, Proper Shipping Name, PG Shipping name: Corrosive liquids n.o.s. UNNA: 1760 PG: III

Maritime Transportation Not available.

Special Provisions for Transport Not available.

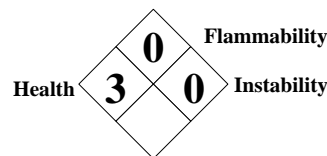
Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification)	Not a WHMIS controlled material. 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	<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 MSDS distribution - chemical inventory - hazard identification: Nonionic Surfactant: immediate health hazard</p>	
	DSD (EEC)	R35- Causes severe burns.	
	International Regulations Lists	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 3/2/2007.

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.

Continued on Next Page