

MATERIAL SAFETY DATA SHEET

Date Prepared: 2/08/2006

1. Chemical Product and Company Identification

Brand Name: Defense
 Trade Name: Defense
 Chemical Name: Formulation
 Formula Name: Mixture
 Preparer: WES-J Mfg.
 187 Old US 17
 Hertford, NC 27944

	HMIS	NFPA
Health	1	1
Flammability	0	0
Physical Hazards	0	0
HMIS PPE	B	

Emergency Telephone Number
 ChemTel 1-800-255-3924

2. Composition/Information on Ingredients

INCI Name	CAS#/EINECS#	Weight %
Benzalkonium Chloride	8001-54-5/263-080-8	0.10
Water	7732-18-5/231-791-2	
Dihydroxypropyl PEG-5 Linoleammonium Chloride	168677-75-6/NLP	
Glycereth-2 Cocoate	68201-46-7/NLP	
Behentrimonium Chloride	17301-53-0/241-327-0	
Dihydroxyethyl cocamine Oxide	61791-47-7/263-180-1	

3. Hazards Identification

Emergency Overview

Clear colorless to light amber solution with a mild odor.
 Repeated/prolonged contact may cause eye irritation. Inhalation may cause mucous membrane irritation. Ingestion may cause gastrointestinal discomfort including irritation, nausea and diarrhea.

This product is not combustible.
Use extinguishing media suitable for the materials that are burning.

Potential Health Effects

Primary Route(s) of Entry

Eye contact; Skin Contact; Inhalation, Ingestion

Symptoms of Exposure

Eye Contact: Direct contact can cause pain and irritation
 Skin Contact: Short periods of contact through regular use are not usually associated with skin irritation.
 Inhalation: Direct contact or exposure to high concentration of mists or vapors may cause irritation.
 Ingestion: Direct contact or exposure may cause irritation. Ingestion of large amounts may cause gastrointestinal discomfort including irritation, nausea and diarrhea.
 Chronic effects: No adverse effects are expected

Medical Conditions Aggravated by exposure
 Reported as Carcinogen or Potential Carcinogen

None Known
 Not Applicable

4. First Aid Measures

EYE CONTACT	Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists.
SKIN CONTACT	Stop use and ask a doctor if irritation or redness develops, or if condition persists for more than 72 hours.
INHALATION	Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.
INGESTION	Give 3-4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person.

5. Fire Fighting Measures

Flash Point and Method:	>200 F (PMCC)
General Hazard	This product is not combustible.
Extinguishing Media	Use media suitable for the material that is burning.
Special Fire Fighting Instructions	Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side.
Fire Fighting Equipment	As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

Spill area will be slippery. Wear appropriate protective equipment.
 Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread.
 Prevent liquid from entering sewers or waterways.

7. Handling and Storage

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Handling Wear appropriate protective equipment
Storage Keep container tightly closed. Keep away from heat and sunlight. Storage temperature range : 5-30 C. If material freezes, gently thaw prior to use. Mild agitation may be required.

8. Exposure Controls/Personal Protection

Engineering Controls In applications where the product will be exposed to elevated temperatures, use local ventilation to remove potential decomposition products.
Personal Protection for Bulk Handling.
Respirator: In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.
Eye Protection: Wear safety glasses with side shields or goggles.
Clothing: Normal working clothing is generally adequate.
Other: Eye wash; safety shower
Exposure Limits No limits established for this product

9. Physical and Chemical Properties

State	Liquid solution
Viscosity	Low viscosity
Color	Water white to straw
Odor	Mild
Melting Point	N/A
Freezing Point	ND
Boiling Point	100 C
Weight per Gallon	8.3 lb/gal
Specific Gravity @20 C	1.00+0.00
Water Solubility	Soluble
pH	5.5-7.0

10. Stability and Reactivity

Reactivity	Stable
Incompatibilities	None Known
Hazardous Decomposition Products	Oxides of Carbon and Nitrogen on combustion
Conditions to Avoid	Avoid contact with heat

11. Toxicological Information

Eye Irritation	Mild eye irritant; Toxicity Category III Mild skin irritant; Toxicity Category IV >5,00mg/kg; Toxicity Category IV >2,00mg/kg; Toxicity Category IV Not a sensitizer
Skin Irritation	
Oral LD50	
Dermal LD50	
Sensitization	

Additional toxicity information provided below for the active ingredient:

Genotoxicity/Mutagenicity
For Benzalkonium chloride:
Ames test (Salmonella sp.): Not mutagenic with or without metabolic activation.

12. Ecological Information

EC50 (Bacterium toxicity)	No data
LC50 (Daphnia)	No data
BOD	No data
COD	No data
Heavy metals	No data

13. Disposal Considerations

RCRA Waste Code:	Not regulated under RCRA, 40CFR 261 Keep away from natural water sources. Observe all applicable federal, state, and local regulations. Remove all residue when emptying.
Products:	
Empty packaging:	

14. Transportation Information

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DOT Hazard Classification:

Non-Hazardous, not regulated

15. Regulatory Information

(Not meant to be all-inclusive, selected regulations represented)

OSHA Hazard Communication Standard (26 CFR 1910.1200)
Cercla/Superfund (40 CFR 117,302)

SARA Extremely Hazardous Substances (40 CFR 365)

SARA Hazard Categories (40 CFR 370)
SARA Toxic Substances (40 CFR 372)

State Regulations

Hazardous

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

Chronic

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

None Listed.

16. Other Information

Abbreviations

C:	Ceiling Limit	N/A:	Not Applicable
N/E:	Not Established	N/K:	Not Known
TPQ:	Threshold Planning Quality	N/D:	Not Determined
		RQ:	Reportable quantity