

For Chemical Emergency, Spill, Leaf, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call: 1-877-325-1840

Voluntary Purchasing Groups, Inc. 230 FM 87 Bonham, Texas 75418

Effective Date: January 9, 2009

1. PRODUCT AND COMPANY IDENTIFICATION:

Ferti-lome® Aqueduct® L&G

PRODUCT: Ferti-lome® Aqueduct® L&G

CHEMICAL NAME: Non-ionic surfactant blend for use with water-soluble fertilizers

COMPANY IDENTIFICATION:

Voluntary Purchasing Groups, Inc. 230 FM 87 Bonham, TX. 75418

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Component	CAS Reg No.	Weight %
Non-ionic surfactant blend	proprietary*	99.37
Microbicide	none	0.25
Foamex AD-300	none	0.38

**Trade secret as allowed by 29 CFR 1910.1200-48

3. HAZARDS IDENTIFICATION:

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor: Clear, viscous, brown liquid with mild characteristic odor.

Warning Statements: Warning! Causes eye irritation!

B. POTENTIAL HEALTH EFFECTS:

Primary Route of Entry: Skin

Effect of Overexposure:

Acute Eye: Contact with eyes causes severs irritation. Acute Skin: May cause skin irritation Acute Inhalation: Inhalation not likely. Mists may cause upper respiratory tract irritation. Acute Ingestion: Practically non-toxic.

Chronic Effects: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

4. FIRST AID MEASURES

EYE CONTACT: DO NOT RUB EYES. Immediately flush eyes with large amounts of water for 15 minutes lifting the lower and upper lids. Seek medical attention if necessary.

SKIN CONTACT: Remove contaminated clothing and immediately wash affected area with large amounts of water for at least 5 minutes. If irritation or redness persists, seek medical attention as needed.



For Chemical Emergency, Spill, Leaf, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call: 1-877-325-1840

Voluntary Purchasing Groups, Inc. 230 FM 87 Bonham, Texas 75418

Effective Date: January 9, 2009

IF SWALLOWED: Call a physician or poison control center promptly. If victim is conscious and alert, give 1-2 glasses of water to drink. Induce vomiting only upon advice from a physician.

INHALATION: Inhalation is not an expected route of exposure. Move individual to fresh air and check to assure adequate respiration. Seek medical attention if necessary.

Medical Conditions Possibly Aggravated by Exposure: Skin contact may aggravate existing skin conditions.

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

5. FIRE FIGHTING MEASURES::

FIRE HAZARD DATA

Flash Point: >200°F

Method Used: Pensky-Martens Closed Cup

Ferti-lome® Aqueduct® L&G

Flammability Limits (vol/vol%): Lower: No Data Upper: No Data

Extinguishing Media: Water spray, dry chemical, carbon dioxide, and/or foam are recommended

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. This product may foam when mixed with water.

Unusual Fire and Explosion Hazards: Product will burn under fire conditions.

Hazardous Decomposition Materials (Under Fire Conditions): Oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES:

Evacuation Procedures and Safety: See Personal Protection information in Section 8.

Cleanup and Disposal of Spill: Contain spilled material by diking. Absorb with an inert absorbent. Shovel into an appropriate closed container (See Section 7: Handling and Storage). A comprehensive spill response plan should be developed and implemented.

Environmental and Regulatory Reporting: Do not flush to drain. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE:

Minimum/Maximum Storage Temperature:

Handling: Avoid breathing vapors and mists. Avoid direct or prolonged contact with skin and eyes. Use non-sparking tools and grounded/bonded equipment and containers when transferring. In cold weather, this product may stratify and freeze. This does not damage the product. If freezing occurs, thaw and remix before using. Frozen material may be thawed in a warm room. Avoid localized overheating. Vent drums while heating. Mix thoroughly to assure homogeneity. Ethylene oxide may collect in container headspace. Although concentrations are expected to remain below established exposure limits, provide adequate ventilation when accessing or working with open containers and tanks.

Storage: Store in tightly closed containers. Store in an area that is dry, well ventilated, away from ignition sources and away from incompatible materials (see Section 10: Stability and Reactivity).



For Chemical Emergency, Spill, Leaf, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call: 1-877-325-1840

Voluntary Purchasing Groups, Inc. 230 FM 87 Bonham, Texas 75418

Effective Date: January 9, 2009

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Ferti-lome® Aqueduct® L&G

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from this procedure should be handled in accordance with Section 13: Disposal Considerations.

Exposure Guidelines: No exposure limits were found for this product or any of its ingredients.

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for exposure exists. The following traditional exposure control techniques may be used to effectively minimize employee exposures: General area dilution/exhaust ventilation.

Respiratory Protection: When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations in accordance with the appropriate ANSI Z87.1 approved equipment should be selected for the particular use intended for this material. Wear appropriate protective safety goggles/glasses. An emergency eyewash station is recommended.

Skin Protection: Skin contact should be minimized through use of appropriate clothing and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance. USDA accepted Nitrile (CFR-20) or neoprene rubber (CFR-21 gloves are recommended.

Work Practice Controls: Personal hygiene is an important work practice exposure control measure and the following general measure should be taken when working with or handling this material.

- 1. Do not store, use, and/or consume food, beverages, tobacco products, or cosmetics in area where this material is stored.
- 2. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3. Wash exposed skin promptly to remove accidental splashes of contact with this material.

9. PHYSICAL AND CHECMICAL PROPERTIES:

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for exact specifications.

Physical Appearance: Clear viscous brown liquid Odor: Mild characteristic odor PH: Not determined Specific Gravity: Not determined Water Solubility: Soluble Freezing Point Range: Not determined Boiling Point Range: Not determined Vapor Density: 25°C 1.11 g/ml Vapor Pressure: Not determined

10. STABILITY AND REACTIVITY:

Chemical Stability: This material is stable under normal handling and storage conditions described in Section 7.

Conditions to be Avoided: Heat, open flame and spark.



For Chemical Emergency, Spill, Leaf, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call: 1-877-325-1840

Voluntary Purchasing Groups, Inc. 230 FM 87 Bonham, Texas 75418

Effective Date: January 9, 2009

Materials/Chemical to be Avoided: Strong acid and oxidizing agents

Ferti-lome® Aqueduct® L&G

The following Hazardous Decomposition Products might be Expected:

Decomposition Type: Thermal Oxides of carbon Hazardous Polymerization: Will not occur Avoid the Following to Inhibit Hazardous Polymerization: N/A

11. TOXICOLOGICAL INFORMATION:

Acute Eye Irritation: No data available Toxicological Information and Interpretation:
Acute Skin Irritation: No data available Toxicological Information and Interpretation:
Acute Derman Toxicity: No data available Toxicological Information and Interpretation:
Acute Respiratory Irritation: No data available. Toxicological Information and Interpretation:
Acute Respiratory Irritation: No data available. Toxicological Information and Interpretation:
Acute Inhalation Toxicity: No data available Toxicological Information and Interpretation:
Acute Inhalation Toxicity: No data available Toxicological Information and Interpretation:
Acute Oral Toxicity: No data available Toxicological Information and Interpretation:
Chronic Toxicity: No data available

Toxicological Information and Interpretation: This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be ""probable" or "suspected" human carcinogens.

12. ECOLOGICAL INFORMATION:

Ecotoxicity Information:No data availableEnvironmental Fate Information:No data availableChemical/Physical Information:No data available.

13. DISPOSAL CONSIDERATIONS:

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

All recovered materials should be packaged, labeled, transported, and disposed or reclaimed in conformance with applicable laws and regulations and good industrial hygiene practices. Avoid landfilling liquids; recycle when possible.

Container Handling and Disposal:

Any containers or equipment used should be decontaminated immediately after use.

14. TRANSPORTATION INFORMATION:

Transportation Status: The listed Transportation Classification does not address regulatory variations due to changed in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation Shipping Name: NOT REGULATED



Ferti-Iome® Aqueduct® L&G

For Chemical Emergency, Spill, Leaf, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call: 1-877-325-1840

Voluntary Purchasing Groups, Inc. 230 FM 87 Bonham, Texas 75418

Effective Date: January 9, 2009

15. REGULATORY INFORMATION:

Inventory Status:

Inventory	Status	
UNITED STATES (TSCA)		Υ
CANADA (DSL)	Ν	
EUROPE (EINECS/ELINCS)	Р	
AUSTRALIA (AICS)	Y	
JAPAN (MITI)	Ν	
SOUTH KOREA (KECL)		Ν

- Y: All ingredients are on the inventory.
- E: All ingredients are on the inventory or exempt from listing.
- P. One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.
- N: Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS:

Inventory Issues: All functional components of this produict are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard	NO	
Reactive Hazard		NO
Release of Pressure	NO	
Acute Health Hazard	YES	
Chronic Health Hazard	NO	

SARA Title III Section 313: This product contains the following material regulated under SARA Title III Section 313: Glycol ethers (per the current EPA definition) at a level estimated to be 4%.

OTHER FEDERAL REGULATIONS:

FDA Status: N/A

FIFRA Status: N/A

STATE REGULATIONS: This product contains the following components that are regulated under California Proposition 65:

	Cancer	Reprod.	No Sig. Risk Lvl.	RPI
Ingredient	List	List	(ug/day	
Ethylene	Y	Y	2	ND
Dioxane	Y	N	30	ND



Ferti-lome® Aqueduct® L&G

For Chemical Emergency, Spill, Leaf, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call: 1-877-325-1840

Voluntary Purchasing Groups, Inc. 230 FM 87 Bonham, Texas 75418

Effective Date: January 9, 2009

16. OTHER INFORMATION:

National Fire Protection Association Hazard Ratings - NFPA®:

- 1 Health Hazard Rating Slight
- 1 Flammability Rating Slight
- 0 Reactivity Rating Minimal

National Paint and Coating Hazardous Materials Identification System-HMIS®

- 1 Health Hazard Rating Slight
- 1 Flammability Rating Slight
- 0 Reactivity Rating Minimal

Key Legend Information

ACGIH America Conference of Governmental Industrial Hygienists OSHA Occupational Safety and Health Administration TLV Threshold Limit Value PEL Permissible Exposure Limit TWA Time Weighted Average STEL Short-Term Exposure Limit NTP National Toxicology Program IARC International Agency for Research on Cancer ND Not determined

Disclaimer:

While the information and recommendations set forth herein are believed to be accurate, we make no warranty with respect hereto and disclaim all liability from reliance thereon.