Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration

(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072

IDENTITY *(As Used on Label and List)* UTIKEM MINI 1" CHLORINATING TABLETS	*Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*

Section I – General Information

Manufacturer's Name: QUALCO, INC.	Telephone Number for Information: 973-473-1222
Address *(Number, Street, City, State and ZIP Code)* 225 Passaic Street	Emergency Telephone Number (973) 473-1222 or (CHEMTREC) 1-800-424-9300
Passaic, NJ 07055	Date Prepared AUGUST 2006
	Signature of Preparer *(optional)*

Section II – Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
Trichloro-s-triazinetrione	1 PPM CL	1 PPM CL		
(CAS #87-90-1)(Trichloroisocyanuric Acid)	Other Limits			
	Oral LD 50	(Rats)	750-150 Mg/Kg	
	Inhal. LC50	2 to 200 Mg/Liter		
	Dermal LD50	(Rabbit)	10,000 Mg/Kg	
	Material Corrosive			

D.O.T. Trichloroisocyanuric Acid, Dry Oxidizer UN2468

Material considered a severe eye & skin irritant

EPA Registered Pesticide 3525-113

NFPA Class I Oxidizer

Section III – Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H_2O = 1) Bulk Density	< 1
Vapor Pressure (mm Hg.)	N/A	Melting Point – Decomposes @	350°F
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water Moderate		pH: (1% Solution): 2.5 to 3.7	

Appearance and Odor Solid White Tablets With A Chlorinous Odor

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits Non-Flammable	LEL ND	UEL ND

Extinguished Media

Deluge with water.

Special Fire Fighting Procedures:

Use NIOSH certified gas mask with canister for chlorine. If possible, remove container to open air and flood with water. Damp or decomposing material may be shock sensitive. Rap container sharply with a pole from a distant, protected position prior to handling.

Unusual Fire and Explosion Hazards

Decomposition products: Chlorine, cyanogens chloride, carbon dioxide, ammonia, nitrogen trichloride.

(Reproduce locally)

Utikem Mini 1" Chlorinating Tablets

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid: Open storage, excessive heat, moisture, moist air, combinations with oxidizers or oxidizable materials.
	Stable	X	Wet material decomposes at room temperature.

Incompatibility *(Materials to Avoid)* Nitrogen compounds – Ammonia, Amines, Ammonium compounds, Reducing Agents, Oxidizable or Combustible organics, Strong Oxidizers, Acids, Alkali.

Hazardous Decomposition of Byproducts Chlorine, Cyanogen chloride, Nitrogen trichloride, Ammonia, Carbon dioxide.

Hazardous Polymerization	May Occur		Conditions to Avoid N/A
	Will Not Occur	X	

Section VI – Health Hazard Data

Route(s) of Entry	Inhalation? Yes	Skin? Yes	Ingestion? Yes

Health Hazards *(Acute and Chronic)* Acute: Eye: Extreme irritant, cornea damage, Inhalation: Extreme irritant.

Chronic: Eye damage, Lung damage.

Carcinogenicity N/A	NTP? N/A	IARC Monographs? N/A	OSHA Regulated? N/A

Signs and Symptoms of Exposure: Eye & Skin: Irritation, burning, redness, eye tearing. Inhalation: Coughing, irritation to nose, throat, and mouth; headache, dizziness.

Ingestion: GI discomfort, nausea, vomiting.

Medical Conditions

Generally Aggravated by Exposure Persons with pre-existing eye, skin and respiratory disorders may be susceptible to aggravation due to irritant nature of product.

Emergency and First Aid Procedures Eyes & Skin: Immediately flush with water. Call physician immediately. Inhalation: Move to fresh air. Call physician. Aid breathing, if necessary.

Ingestion: If conscious, feed milk, followed by olive oil. Induce vomiting if large amount has been ingested. Call physician and follow all instructions.

Section VII – Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Wear proper protective gear. Keep away from combustibles. Major spills or bulk decomposition should be deluged with water and retained in a dyked area (use inert material such as dirt or absorbent pads) until reaction has been quenched.

Do not drain into fresh water, streams, or lakes. Considered toxic.

Waste Disposal Method Spilled or wet material should be dissolved in water and dechlorinated with a reducing agent. (Hydrogen peroxide, sodium nitrate, sodium thiosulfate).

Dispose of material as per all local, state and federal regulations.

Precautions To Be Taken In Handling And Storing

Store in a cool, dry, well ventilated area away from combustibles and reactive materials. Keep container tightly closed when not in use. Do not reuse container. Wear proper protective gear when handling to minimize contact with product.

Other Precautions

Keep away from children. Use product only as directed. Handle with care.

Section VIII – Control Measures

Respiratory Protection *(Specify Type)*

Wear NIOSH certified gas mask with canister for chlorine if above permissible limits.

Ventillation	Local Exhaust Adequate	Special If permissible limits are exceeded, additional ventilation/exhaust is necessary.
	Mechanical *(General)*	Other

Protective Gloves Liquid Proof Rubber	Eye Protection Do not wear contact lenses. Use gas tight chemical goggles.

Other Protective Clothing or Equipment Eye wash & safety shower in work/storage areas. Wear full cover clothing as necessary to minimize contact with product.

Work/Hygienic Practices Remove contaminated clothing and launder before reuse. Wash well after use and observe good, personal hygiene.

*U.S.G.P.O.: 1986-491-529/45775

Handling & Storage of: Trichloroisocyanuric Acid

Keep Out Of Reach Of Children

Danger: Do not mix with anything but water. Replace container cover after use.

Strong Oxidizer: Contact with other material may cause fire or explosion.

Keep from contact with clothing and other combustible materials. Do not store near combustible materials. Remove and wash contaminated clothing promptly and before reuse.

1. Do not smoke when handling material.

2. While product by itself is not a combustible material, it must not be mixed or contaminated with any foreign materials such as: household products, soap products, paint products, solvents, acids, pool chemicals, garbage, vinegar, beverages, oils, pine oil, dirty rags, etc.
   Contamination or mixing with these type of items may result in fire or explosion, and the fire can be of great intensity. NOTE: Dampened material and/or excessive moisture to product can also result in fire or reaction.

3. Prevent any burning material, such as a lighted cigarette from falling into any container of product.

4. If fire occurs, wear proper protective gear. Drench with water and cool the surrounding drums and area with water.

5. Use only a clean, dry cup or measuring device to remove product from container. Any contamination or foreign matter on the cup/measuring device may result in fire. Always keep material in original container to avoid contamination.

6. Keep in a cool, dry, well ventilated area which is clean. Keep in original container. Always replace container cover. Do not store in any other container.

7. Handle material with care. Do not drop, roll or skid. Keep upright.

8. Dispose of spilled material by dissolving in large amounts of water. (Always add SMALL amounts of product to LARGE amounts of water. Let stand after dissolving and check for PPM (parts per million) available chlorine using a pool water test kit. If regulations and/or your sewer authority permit discharge of material (usually less than 1 ppm available chlorine, then material can be discharged to sewer. Do not discharge without prior approval of authority.

9. Do not reuse empty container. Wash thoroughly with plenty of water and discard to trash.

10. Product may produce severe chemical burns. Do not allow contact with eyes, skin, mucous membranes or clothing. **Harmful or fatal if swallowed.**

TRICHLOROISOCYANURIC ACID

FIRST AID: EXTERNAL: Flood skin or eyes with copious amounts of water for 15 minutes. For eyes, call physician immediately. If skin irritation persists, get medical attention.
INTERNAL: If conscious, promptly drink large quantities of water. Do not induce vomiting, (unless instructed by physician). Get immediate medical attention.
INHALATION: Move victim to fresh air. Call physician. Aid breathing, if necessary.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
NOTE: Use extreme caution in handling spilled material. Contamination with organic or combustible material may cause fire or violent decomposition.
If fire or composition occurs in area of spill, immediately dose with large amounts of water. Otherwise, sweep up all visible material using a CLEAN, DRY shovel or broom, and dissolve in large amounts of water before disposing of wastes.
Dispose of waste materials as outlined below.
Wear proper protective gear: Coveralls, splash apron, goggles, impervious gloves, NIOSH certified gas mask with canister for chlorine.

WASTE DISPOSAL METHOD: Spilled material that has been swept up and dissolved in large amounts of water should be used immediately in the normal application for which the product is being consumed. If this is not possible, CAREFULLY neutralize material as follows:
This procedure can only be used for small spills of 10 pounds or less, and only if regulation permits disposal of solutions containing 1 ppm (or less) available chlorine to the sewer. DO NOT discharge to sewer without prior approval of authority.
Place clean drum (about 55 gallon size) outdoors away from spill. Fill drum with tap water (3/4 full). Add spilled chemical (10 pounds maximum). Allow to dissolve in solution and let stand until available chlorine is less than 1 ppm (as determined by a pool water test kit). Then flush to sewer if permitted.
NOTE: Only properly neutralized material should be flushed to sewer. Un-neutralized material can cause environmental damage to receiving water, or can interfere with treatment plant operations.

STORAGE AND HANDLING PRECAUTIONS:

- Do not get in eyes, on skin or on clothing.
- Keep in original container in cool, dry, well ventilated area.
- Keep container tightly closed when not in use.
- Keep away from heat, sparks, flame, fire and sources of ignition.
- Use only a clean, dry scoop/measuring aid each time material is taken from container.
- Fire can result if material is contaminated with acids, combustibles, organic materials and dirt.
- Wear protective gear required when handling. Wash well after handling.
- Do not reuse empty container. Rinse well with plenty of water to dissolve all materials before discarding container.