



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

Product Name: CottonQuik™
Chemical Name: 1-Aminomethanamide dihydrogen tetraoxosulfate + 2-Chloroethylphosphonic acid

HAZARD CLASSIFICATION (0-minimal, 1-slight, 2-moderate, 3-serious, 4-severe)

NFPA: HEALTH-3 FIRE-1 REACTIVITY-1
HMIS: HEALTH-3 FIRE-1 REACTIVITY-1

MANUFACTURER

Company Name: Griffin Corporation
Address: P O Box 1847, Rocky Ford Road
Valdosta, GA 31603-1847

EMERGENCY PHONE NUMBERS

Griffin Corporation: (800) 237 1854
Chemtrec: (800) 424 9300

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Component Name	% by Wt.	CAS#	ACGIH TLV	OSHA PEL
2-Chloroethylphosphonic acid	18.3	16672-87-0	Not established	Not established
1-Aminomethanamide dihydrogen tetraoxosulfate	58.6	21351-39-3	Not established	Not established
Inert Ingredients	23.1		Not established	Not established

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This product is a strong acid and corrosive. The hazards associated with this product are mainly due to its irritant properties on mucosal surfaces. See below for route-specific details.

POTENTIAL HEALTH EFFECTS

Inhalation: Harmful if inhaled. Sprays (mists) are irritating to the respiratory tract. Signs and symptoms may include choking, coughing, burning of the throat.
Eye Irritation: Corrosive. Causes irreversible eye damage, seen as corneal opacity. Vapors or sprays (mists) are irritating to the eyes. Causes tearing, redness, and possible swelling of the conjunctiva.
Skin Irritation: Causes skin irritation, seen as marked redness and swelling.
Skin Absorption: Harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause severe irritation of the mouth, throat, esophagus and stomach with severe abdominal and chest pain.

Hazards Identification continued:

Chronic:	Repeated overexposure may cause bronchial irritation, with persistent cough and predisposition to respiratory infections.
Existing Medical Conditions Possibly Aggravated by Exposure:	Skin irritation may be aggravated in persons with existing skin lesions. Breathing of vapor or sprays (mists) may aggravate acute and chronic asthma and other chronic pulmonary diseases.

4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air. If not breathing, give artificial respiration. Administer oxygen if necessary. Get professional medical attention.
Eye Contact:	Hold eyelids open and flush with a steady, gentle stream of water for 15-20 minutes. Get professional medical attention, preferably an ophthalmologist.
Skin Contact:	Remove contaminated clothing and shoes. Immediately wash skin with plenty of soap and water for 15-20 minutes. Shoes and clothing contaminated by substantial spillage of concentrated product should be discarded in a manner which limits further exposure. Otherwise, wash clothing separately before reuse. Get professional medical attention.
Ingestion:	If patient is conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting. Get professional medical attention.
Emergency Medical Treatment:	PRECAUTION: Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair. Remove patient from immediate source of exposure and assure that the individual is breathing. Use artificial respiration if necessary, to assure continued breathing. Get professional medical attention.
Notes to Physician:	No specific antidote is available. Treat symptomatically. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. The primary toxicity of this product is due to its irritant properties on mucosal surfaces. Victims of severe overexposure, by inhalation, should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema. In a victim of overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophageal perforation.

First Aid Measures continued:

Notes to Physician:

This material is an acid, but the use of alkaline substances to neutralize is contraindicated. Based on the results of animal studies, this product may cause mild to moderate peripheral cholinesterase inhibition, depending on the degree and duration of exposure. Central nervous system cholinesterase depression has not been observed in any of the animal studies. Signs and symptoms of cholinergic poisoning have not been observed in any of the animal studies. The usefulness of conventional treatment for cholinesterase inhibiting agents, i.e. atropinization, has not been established for this product.

5. FIRE FIGHTING MEASURES

Flash Point & Method: Noncombustible
Flammable Limits: Not determined
Autoignition Temperature: Not determined

FIRE FIGHTING HAZARDS & PROCEDURES

Extinguishing Media: Not combustible. Use appropriate extinguishing media for material that is supplying fire.

Fire Fighting Instructions: Dike off area to prevent runoff and contamination of water sources. Thermal decomposition products of this material may be hazardous. These may include hydrogen chloride gas. Isolate damage area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from danger area if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapors. Cool equipment exposed to fire with water if it can be done with minimal risk.

Fire Fighting Equipment: Wear protective clothing and self-contained breathing apparatus. Wear other appropriate equipment as conditions warrant.

Hazardous Combustion Products: Thermal decomposition products may be hazardous. These may include hydrogen chloride. This material will vigorously decompose, releasing carbon dioxide, if heated above 230° F (110° C). The potential for tank rupture exists if material is heated to decomposition. Closed containers exposed to extreme heat can rupture due to pressure buildup. Dilute material in contact with common metals can generate hydrogen, which can form flammable mixtures with air.



6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Dike large spills using absorbent or impervious materials such as sand or clay. Recover and contain as much free liquid as possible. Recover remaining spilled material as appropriate. Collect and contain contaminated absorbent and dike material for disposal. Absorb small spills on sand or vermiculite. Place contaminated material in appropriate container for disposal. If spilled on the ground, the affected area should be removed to a depth of one or two inches and placed in an appropriate container for disposal. Do not flush material to public sewer systems or any waterways. Wear appropriate protective clothing and equipment (see below) during cleanup activities. Ensure adequate decontamination of tools and equipment following cleanup.

7. HANDLING AND STORAGE

Handling: Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29 CFR 1910.146. The use of respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8). Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practices.

Storage: Keep container(s) closed. Use and store this material in cool, dry, well-ventilated areas. Store only in approved containers. Small amounts of carbon dioxide may be generated on prolonged storage. Small containers may require periodic venting. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Product degradation may occur if heated above 176° F (80° C). Prolonged storage in mild steel containers is not recommended.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

PESTICIDE APPLICATORS & WORKERS

These workers must refer to the Product Label and Directions For Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170.

Protective equipment should be used during the following procedures:

- Manufacture or formulation of this product
- Repair and maintenance of contaminated equipment
- Clean-up of leaks and spills

Exposure Controls / Personal Protection continued:

Ventilation:	Mechanical (general) ventilation.
Respiratory Protection:	Use NOSH/MSHA approved respirator for pesticide mist when handling spills or leaks, or when airborne concentrations are high.
Eye Protection:	Face shield, goggles, eye bath.
Protective Clothing:	Chemical-resistant gloves, ie PVC or neoprene. Full-body protective clothing, safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	Not determined
Vapor Density:	0.6 water
Specific Gravity:	1.49 at 20°C
Solubility in Water:	Soluble
Bulk Density:	12.1 lb/gal
pH:	< 2.0
Boiling Point:	Decomposes >230°F (110° C)
Freezing Point:	Not determined
Decomposition Point:	170°C (338°F)
Odor:	None
Color:	Clear yellow orange
Physical State:	Liquid

10. STABILITY AND REACTIVITY

General:	This material is stable under normal conditions. Stable up to 176° F (80° C). Product will decompose in the range 176-230° F (80-110° C).
Incompatible Materials:	Concentrated oxidizing agents and alkaline materials. Corrosive to metals such as iron, aluminum and copper.
Conditions to Avoid:	Decomposes at temperatures above 170°C (338°F). Decomposes at pH greater than 3.
Hazardous Decomposition:	Hydrogen chloride may be produced upon decomposition. Reaction with bases causes evolution of ethylene gas.
Hazardous Polymerization:	Material is not known to polymerize.

11. TOXICOLOGICAL INFORMATION

For detailed toxicological information, write to the address listed in Section 1 of this Material Safety Data Sheet or call 912/242-8635 and ask for Regulatory Affairs.



12. ECOLOGICAL INFORMATION

For detailed ecological information, write to the address listed in Section 1 of this Material Safety Data Sheet or call 912/242-8635 and ask for Regulatory Affairs.

13. DISPOSAL CONSIDERATIONS

Comply with appropriate disposal regulations. Landfill solids at permitted sites. Use registered transporters.

14. TRANSPORT INFORMATION

Department of Transportation (DOT)/International Air Transport Association (IATA)/International Maritime Organization (IMO):

Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S. (1-Aminomethanamide dihydrogen tetraoxosulfate + 2-Chloroethylphosphonic acid)
Class: 8
UN Number: UN 3265
Packing Group: III

15. REGULATORY INFORMATION

OSHA: This product is considered hazardous under the OSHA Hazardous Communication Standard (29 CFR 1910.1200).
TSCA: All product components are on the TSCA Chemical Inventory.
CERCLA: Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to the state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304 and 40 CFR Part 302.
RCRA: When a decision is made to discard this material as supplied, it does meet RCRA's characteristic definition of corrosivity and is listed in 40 CFR 261.33.
SARA TITLE III
302: Not listed
311/312 Hazard Categories: This product has been reviewed according to the EPA "Hazard Categories" and is categorized as a corrosive, acute health hazard (40 CFR 370.41).
313 Reportable Ingredients: This product does not contain a chemical which is listed in Section 313 above de minimis concentrations (40 CFR 372).
STATE REGULATIONS: None listed



16. OTHER INFORMATION

REVISION SUMMARY

This Material Safety Data Sheet has been created using the standard Griffin Corporation ANSI Z400.1 compliant format.

CottonQuik™ is a trademark of Entek Corporation.

The information in this Material Safety Data Sheet relates to this specific material. It may not be valid for this material if used in combination with any other materials or in any process. It is the users' responsibility to satisfy themselves as to the suitability and completeness of this information for their own particular use.