

Material Safety Data Sheet



MIKRO QUAT

Section 1. Chemical product and company identification

Trade name : MIKRO QUAT
Product use : Cleaner and disinfectant
Supplier : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326
Code : 930818
Date of issue : 28-October-2005
EPA Registration No. : 1677-21

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
quaternary ammonium compounds, benzyl-c12-c16-alkyldimethyl, chlorides	68424-85-1	5 - 20
2-aminoethanol	141-43-5	1 - 5
ethanol	64-17-5	1 - 5

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)
Emergency overview : DANGER!

CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.
HARMFUL IF SWALLOWED.
COMBUSTIBLE LIQUID AND VAPOR.
VAPOR MAY CAUSE FIRE.

Do not ingest. Do not get in eyes, on skin or clothing. Do not breathe vapor or mist. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Corrosive to the respiratory system.
Ingestion : Harmful if swallowed. Causes burns to mouth, throat and stomach.
See toxicological information (section 11)

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion : Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire fighting measures

- Flash point** : 51.6667 °C (Closed cup)
- Fire-fighting media and instructions** : In case of fire, use water spray (fog), foam, dry chemicals, or CO₂.
- Dike area of fire to prevent runoff.
Combustible liquid and vapor. Vapor may cause fire. May burn, but does not ignite readily. Under high temperatures or under moderate heating might release vapor in sufficient quantities to produce hazardous atmospheres with air.
- Special protective equipment for fire-fighters** : Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.--

Section 7. Handling and storage

- Handling** : Do not ingest. Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapor or mist. Keep away from heat, sparks and flame. To avoid fire, minimize ignition sources. Wash thoroughly after handling.
- Storage** : Keep out of the reach of children. Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
Do not store above 50°C

Section 8. Exposure controls, personal protection

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Provide eyewash and safety shower in area if contact or splash hazard exists.

Personal protection

- Eyes** : Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
- Hands** : Use chemical-resistant, impervious gloves.
- Skin** : Wear suitable protective clothing.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Name

2-aminoethanol

Exposure limits

ACGIH TLV (United States, 1/2004).

STEL: 15 mg/m³ 15 minute/minutes. Form: All forms

STEL: 6 ppm 15 minute/minutes. Form: All forms

TWA: 7.5 mg/m³ 8 hour(s). Form: All forms

TWA: 3 ppm 8 hour(s). Form: All forms

OSHA PEL (United States, 8/1997).

TWA: 6 mg/m³ 8 hour(s). Form: All forms

TWA: 3 ppm 8 hour(s). Form: All forms

ethanol

ACGIH TLV (United States, 1/2004).

TWA: 1880 mg/m³ 8 hour(s). Form: All forms

TWA: 1000 ppm 8 hour(s). Form: All forms

OSHA PEL (United States, 8/1997).TWA: 1900 mg/m³ 8 hour(s). Form: All forms

TWA: 1000 ppm 8 hour(s). Form: All forms

Section 9. Physical and chemical properties

Physical state	: Liquid. (Liquid.)
Color	: Red. (Dark.)
Odor	: citrus
pH	: 11.35 (100%)
Specific gravity	: 1.01 (Water = 1)

Section 10. Stability and reactivity

Stability	: The product is stable.
Reactivity	: Slightly reactive to reactive with acids.

Section 11. Toxicological information**Potential acute health effects**

Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin.
Inhalation	: Corrosive to the respiratory system.
Ingestion	: Harmful if swallowed. Causes burns to mouth, throat and stomach.

Potential chronic health effects

Chronic effects on humans	: Contains material which causes damage to the following organs: blood, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
---------------------------	---

Section 12. Ecological information

Products of degradation	: These products are carbon oxides (CO, CO ₂) and water, nitrogen oxides (NO, NO ₂ ...). Some metallic oxides.
-------------------------	---

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste classification : Unused product is D001 (Ignitable)

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
DOT Classification	UN2491	Ethanolamine solution	8	III	<p>Limited quantity Yes.</p> <p>Special provisions IB3, T4, TP1</p>

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

HCS Classification : Combustible liquid
 Corrosive material
 Target organ effects
U.S. Federal regulations : SARA 302/304/311/312 extremely hazardous substances: None.
 SARA 302/304 emergency planning and notification: None.
TSCA 8(b) inventory : All materials are listed or exempt.
California Prop. 65 : No products were found.
EPA Registration No. : 1677-21

Section 16. Other information

Hazardous Material Information System (U.S.A.) :	Health *	3
	Fire hazard	2
	Reactivity	0
	Personal protection	C

Date of issue : 28-October-2005.
Responsible name : Regulatory Affairs
Date of previous issue : No previous validation.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.