

SAFETY DATA SHEET

ECOLAB®

MIKRO QUAT

Section 1. Chemical product and company identification

Product name : MIKRO QUAT
Recommended use and restrictions : Cleaner and disinfectant
Use only for the purpose on the product label.

Product dilution information : Up to 1 oz/gal in water

Supplier's information : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326

Code : 930818

Date of issue : 30 Jan 2014

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. Hazards identification

Product AS SOLD
GHS Classification : ACUTE TOXICITY: ORAL - Category 4
SKIN CORROSION/IRRITATION - Category 1B
SERIOUS EYE DAMAGE/ EYE IRRITATION -
Category 1

GHS label elements

Signal word : Danger

:



Hazard statements : Harmful if swallowed.
Causes severe skin burns and eye damage.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.

Response : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes.

Product AT USE DILUTION

Not classified.

No signal word.

No known significant effects or critical hazards.

Wash thoroughly after handling.

Get medical attention if symptoms appear.

Section 2. Hazards identification

	Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.	
Storage	: No other specific measures identified.	No other specific measures identified.
Disposal	: See section 13 for waste disposal information.	See section 13 for waste disposal information.
Other hazards	: None known.	None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product AS SOLD

Hazardous ingredients	Concentration Range (%)	CAS number
Alkyl (50% C14, 40% C12, 10% C16)	9.5	68424-85-1
dimethylbenzyl ammonium chloride		
oxirane, methyl-, polymer with oxirane	5 - 20	9003-11-6
ETHANOLAMINE	1 - 5	141-43-5
ALCOHOL	1 - 5	64-17-5
2-benzothiazolethiol, sodium salt	<1.0	2492-26-4

Product AT USE DILUTION

Hazardous ingredients	Concentration Range (%)	CAS number
Alkyl (50% C14, 40% C12, 10% C16)	9.5	68424-85-1
dimethylbenzyl ammonium chloride		

Section 4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.	No known effect after eye contact. Rinse with water for a few minutes.
Skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.	No special measures required. Treat symptomatically.
Ingestion	: Get medical attention immediately. Rinse mouth. Do not induce vomiting.	Get medical attention if symptoms occur.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	

See toxicological information (section 11)

Section 5. Fire-fighting measures

Product AS SOLD

Suitable fire extinguishing media : Use water spray, fog or foam.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Specific fire-fighting methods : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Product AS SOLD

Personal precautions : Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.

Environmental precautions : Avoid contact of spilled material and runoff with soil and surface waterways.

Methods for cleaning up : Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Use a water rinse for final clean-up.

Product AT USE DILUTION

Use personal protective equipment as required.

Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.

Use a water rinse for final clean-up.

Section 7. Handling and storage

Product AS SOLD

Handling : Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling.

Storage : Keep out of reach of children. Keep container tightly closed.

Store between the following temperatures: 0 and 50°C

Product AT USE DILUTION

Wash thoroughly after handling.

Keep out of reach of children.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
ETHANOLAMINE	<p>ACGIH TLV (United States, 3/2012). STEL: 15 mg/m³ 15 minutes. STEL: 6 ppm 15 minutes. TWA: 7.5 mg/m³ 8 hours. TWA: 3 ppm 8 hours.</p> <p>OSHA PEL (United States, 6/2010). TWA: 6 mg/m³ 8 hours. TWA: 3 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). TWA: 3 ppm 10 hours. TWA: 8 mg/m³ 10 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes.</p>
ALCOHOL	<p>ACGIH TLV (United States, 3/2012). STEL: 1000 ppm 15 minutes.</p> <p>OSHA PEL (United States, 6/2010). TWA: 1900 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours.</p>

Appropriate engineering controls	Product AS SOLD	Product AT USE DILUTION
	<ul style="list-style-type: none"> : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. 	<p>Good general ventilation should be sufficient to control worker exposure to airborne contaminants.</p>
Personal protection		
Eye protection	<ul style="list-style-type: none"> : Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles. 	No protective equipment is needed under normal use conditions.
Hand protection	<ul style="list-style-type: none"> : Use chemical-resistant, impervious gloves. 	No protective equipment is needed under normal use conditions.
Skin protection	<ul style="list-style-type: none"> : Use suitable protective equipment. 	No protective equipment is needed under normal use conditions.
Respiratory protection	<ul style="list-style-type: none"> : A respirator is not needed under normal and intended conditions of product use. 	A respirator is not needed under normal and intended conditions of product use.
Hygiene measures	<ul style="list-style-type: none"> : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. 	

Section 9. Physical and chemical properties

	Product AS SOLD	Product AT USE DILUTION
Physical state	: Liquid.	Liquid.
Color	: Red [Dark]	Red [Light]
Odor	: citrus	citrus
pH	: 11.35 to 0 (100%)	9.724 to 10.093
Flash point	: > 100°C Product does not support combustion.	> 100°C
Explosion limits	: Not available.	
Flammability (solid, gas)	: Not available.	
Melting point	: Not available.	
Boiling point	: Not available.	
Evaporation rate (butyl acetate = 1)	: Not available.	
Vapor pressure	: Not available.	
Vapor density	: Not available.	
Relative density	: 1.01 (Water = 1)	
Solubility	: Not available.	
Partition coefficient: n-octanol/water	: Not available.	
Auto-ignition temperature	: Not available.	
Decomposition temperature	: Not available.	
Odor threshold	: Not available.	
Viscosity	: Kinematic (room temperature): 0 cm ² /s (0 cSt)	

Section 10. Stability and reactivity

Product AS SOLD

Stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Materials to avoid	: Slightly reactive or incompatible with the following materials: acids.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Route of exposure	: Skin contact, Eye contact, Inhalation, Ingestion
	Product AS SOLD

Symptoms

Eye contact	: Adverse symptoms may include the following: pain watering redness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur

Product AT USE DILUTION

No specific data.

No specific data.

Section 11. Toxicological information

Inhalation	: Adverse symptoms may include the following: coughing Respiratory tract irritation	No specific data.
Ingestion	: Adverse symptoms may include the following: stomach pains	No specific data.
Acute toxicity		
Eye contact	: Causes serious eye damage.	No known significant effects or critical hazards.
Skin contact	: Causes severe burns.	No known significant effects or critical hazards.
Inhalation	: May cause respiratory irritation.	No known significant effects or critical hazards.
Ingestion	: Harmful if swallowed. May cause burns to mouth, throat and stomach.	No known significant effects or critical hazards.

Toxicity data

Product/ingredient name

quaternary ammonium compounds, benzyl-c12-c16-alkyldimethyl chlorides	LD50 Dermal	Rabbit	3340 mg/kg
oxirane, methyl-, polymer with oxirane	LD50 Oral	Rat	344 mg/kg
	LC50 Inhalation	Rat	0.147 mg/l
	Dusts and mists		
	LD50 Dermal	Rabbit	>2000 mg/kg
2-aminoethanol	LD50 Oral	Rat	>2000 mg/kg
	LD50 Dermal	Rabbit	1025 mg/kg
	LD50 Oral	Rat	1089 mg/kg
ethanol	LC50 Inhalation	Rat	117 mg/l
	Vapor		
	LD50 Dermal	Rabbit	15800 mg/kg
	LD50 Oral	Rat	10470 mg/kg
2-benzothiazolethiol, sodium salt	LD50 Dermal	Rabbit	7980 mg/kg
	LD50 Oral	Rat	2100 mg/kg

Chronic toxicity

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Section 12. Ecological information

Product AS SOLD

Ecotoxicity : No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Not available.			
Other adverse effects	: No known significant effects or critical hazards.		

Section 13. Disposal considerations

	Product AS SOLD	Product AT USE DILUTION
Disposal methods	: Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.	Diluted product can be flushed to sanitary sewer. Discard empty container in trash.
RCRA classification	: Unused product is D001 (Ignitable)	

Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

DOT

DOT Classification Not regulated.

IMO/IMDG

IMO/IMDG Classification UN3082

IMO/IMDG Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(quaternary ammonium compounds, benzyl-c12-c16-alkyldimethyl, chlorides, solution). Marine pollutant

Class 9

Packing group III

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION

Not intended for transport.

Section 15. Regulatory information

Product AS SOLD

U.S. Federal regulations

TSCA 8(b) inventory : All components are listed or exempted.

EPA Registration No. : 1677-21

SARA 302/304/311/312 extremely hazardous substances: No listed substance

SARA 302/304 emergency planning and notification: No listed substance

SARA 313	Product name	CAS number	Concentration
-----------------	---------------------	-------------------	----------------------

Form R - Reporting requirements : No listed substance

California Prop. 65 : No listed substance

Section 16. Other information

Product AS SOLD

Hazardous Material Information System (U.S.A.) :

Health	*	3
Flammability		0
Physical hazards		0

Product AT USE DILUTION

Health	0
Flammability	0
Physical hazards	0

Section 16. Other information

National Fire Protection Association (U.S.A.) :



Date of issue : 30 Jan 2014

Prepared by : Regulatory Affairs
1-800-352-5326

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.