Material Safety Data Sheet

KEYSTONE QUATERNARY SANITIZER

Section 1. Chemical product and company identification

Trade name : KEYSTONE QUATERNARY SANITIZER
Product use : Sanitizer.
Supplier : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326
Code : 918599-01
Date of issue **11-August-2008**
EPA Registration No. : 47371-180-1677

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

Name	CAS number	% by weight
didecyldimethylammonium chloride	7173-51-5	5 - 20
quaternary ammonium compounds, benzyl-c12-c16-alkyldimethyl, chlorides	68424-85-1	5 - 20
ethanol	64-17-5	1 - 5

Section 3. Hazards identification

Physical state : Liquid. [Liquid.]
Emergency overview : DANGER!
CAUSES EYE AND SKIN BURNS.
MAY BE FATAL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
HARMFUL IF SWALLOWED.
COMBUSTIBLE LIQUID AND VAPOR.
Do not ingest. Do not get in eyes, on skin or on clothing. Keep away from heat, sparks and flame. Use only with adequate ventilation. Keep container closed. Wash thoroughly after handling.

Potential acute health effects

Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Slightly irritating 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. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation : If inhaled, remove to fresh air.
Ingestion : If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire fighting measures

Flash point : 59.4444 °C (Closed cup)

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides

Fire-fighting media and instructions : Use dry chemical, CO_2, water spray (fog) or foam.

Use water spray to keep fire-exposed containers cool. Dike area of fire to prevent runoff.

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

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

Personal precautions : Immediately contact emergency personnel. Stop leak if without risk. Use suitable protective equipment. Keep unnecessary personnel away. Do not touch or walk through spilled material.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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), scoop up material and place in a sealable, liquid-proof container for disposal. 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 it 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 away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Wash thoroughly after handling.

Storage : Keep out of 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 the following temperature: 50°C

Section 8. Exposure controls/personal protection

Engineering measures : 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

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 : A respirator is not needed under normal and intended conditions of product use.

Name	Exposure limits

ethanol

ACGIH TLV (United States, 1/2007).
TWA: 1880 mg/m³ 8 hour(s).
TWA: 1000 ppm 8 hour(s).
OSHA PEL (United States, 11/2006).
TWA: 1900 mg/m³ 8 hour(s).
TWA: 1000 ppm 8 hour(s).

Section 9. Physical and chemical properties

Physical state : Liquid. [Liquid.]
Color : Blue.
Odor : Sweetish.
pH : 7 [Conc. (% w/w): 100%]
Relative density : 0.987

Section 10. Stability and reactivity

Stability : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Potential acute health effects

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

Potential chronic health effects

Target organs : Contains material which may cause damage to the following organs: blood, liver, upper respiratory tract, central nervous system (CNS).

Section 12. Ecological information

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.

Consult your local or regional authorities.

Section 14. Transport information

See shipping documents for specific transportation information.

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**: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

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

California Prop. 65 : No products were found.

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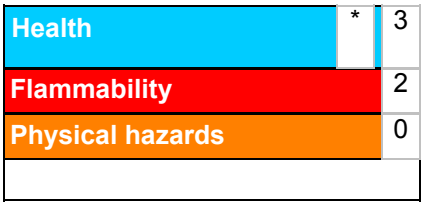
Section 16. Other information

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



Date of issue : **11-August-2008.**

Responsible name : **Regulatory Affairs**

Date of previous issue : **12-August-2005.**

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.