

Material Safety Data Sheet



KEYSTONE ANTIBACTERIAL FOAM HAND SOAP

Section 1. Chemical product and company identification

Trade name : KEYSTONE ANTIBACTERIAL FOAM HAND SOAP

Product use : Skin antiseptic

Supplier : Ecolab Co.
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326

Code : 901410-01

Date of issue : 18-March-2005

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

Section 2. Composition, Information on Ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
Ethanol	64-17-5	1 - 5
poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-(dodecyloxy)-, sodium salt	9004-82-4	1 - 5
2-Methylpentane-2,4-diol	107-41-5	1 - 5
1-propanaminium, 3,3',3"-[phosphinylidynetris(oxy)]tris[n-(3-aminopropyl)	83682-78-4	0.5 - 1.5
-2-hydroxy-n,n-dimethyl-, n,n',n"-tri-c6-18 acyl derivs. trichlorides		
boric acid	10043-35-3	0.1 - 1

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)

Emergency overview : CAUTION

COMBUSTIBLE LIQUID AND VAPOUR.
VAPOUR MAY CAUSE FLASH FIRE.
MAY CAUSE EYE IRRITATION.

Avoid contact with eyes. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation.

Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion

Potential acute health effects

Eyes : Moderately irritating to eyes.

Skin : No known significant effects or critical hazards.

Inhalation : Slightly irritating to the respiratory system.

Ingestion : No known significant effects or critical hazards.

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 if irritation persists.

Skin Contact : Flush contaminated skin with a copious amount of water. Wash clothing before reuse.

Inhalation : If inhaled, remove to fresh air.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Section 5. Fire fighting measures

- Auto-ignition temperature** : Not available.
- Flash point** : 46.1111 °C (Closed cup)
- Flammable limits**
- Upper:** Not available.
- Lower:** Not available.
- Products of combustion** : Not available.
- Fire-fighting media and instructions** : In case of fire, use water spray (fog), foam, dry chemical or CO₂ extinguisher or spray.
- Dike area of fire to prevent product run-off.
- Combustible liquid and vapour. Vapour may cause flash fire. Vapours may accumulate in low or confined areas, travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- 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.
- Risks of explosion of the product in presence of mechanical impact: Not available.
- Risks of explosion of the product in presence of static discharge: Not available.

Section 6. Accidental release measures

- Personal Precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). 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.
- 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 sealed, 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** : Avoid contact with eyes. Keep away from heat, sparks and flame. To avoid fire, minimise 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 vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

- Eyes** : Eye protection recommended.
- Hands** : No protective equipment is needed under normal use conditions.
- Skin** : No protective equipment is needed under normal use conditions.
- Respiratory** : No protective equipment is needed under normal use conditions.

Name Exposure limits

Ethanol

ACGIH TLV (United States, 5/2004). Notes: 1996 Adoption**Refers to Appendix A -- Carcinogens.**TWA: 1880 mg/m³ 8 hour(s). Form: All forms

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

2-Methylpentane-2,4-diol

ACGIH TLV (United States, 9/2004).CEIL: 121 mg/m³ Form: All forms

CEIL: 25 ppm Form: All forms

Section 9. Physical and chemical properties

Physical state	: Liquid. (Liquid.)
Colour	: Blue.
Odour	: citrus
pH	: 8.6 (100%)
Boiling/condensation point	: Not available.
Melting/freezing point	: Not available.
Specific gravity	: 1.01 (Water = 1)
Vapour pressure	: Not applicable.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK _{ow}	: Not available.

Section 10. Stability and reactivity

Stability	: The product is stable.
Conditions of instability	: Not available.
Incompatibility with various substances	: Not available.
Hazardous Decomposition Products	: Not available.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Moderately irritating to eyes.
Skin	: No known significant effects or critical hazards.
Inhalation	: Slightly irritating to the respiratory system.
Ingestion	: No known significant effects or critical hazards.
Irritancy of Product	: Hazardous by WHMIS criteria.

Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: Hazardous by WHMIS criteria.
Reproductive effects :	Hazardous by WHMIS criteria.
Sensitization to Product	: No known significant effects or critical hazards.
Synergistic Products (Toxicologically)	: Not available.

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
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Ethanol	LD50	7060 mg/kg	Oral	Rat
	LD50	6300 mg/kg	Oral	Rabbit
	LD50	3450 mg/kg	Oral	Mouse
	LDLo	1400 mg/kg	Oral	human
	LDLo	5500 mg/kg	Oral	Dog
poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.- (dodecyloxy)-, sodium salt 2-Methylpentane-2,4-diol	LD50	1600 mg/kg	Oral	Rat
	LD50	3700 mg/kg	Oral	Rat
boric acid	LD50	3200 mg/kg	Oral	Rabbit
	LD50	2800 mg/kg	Oral	Guinea pig
	LD50	2660 mg/kg	Oral	Rat
	LD50	3450 mg/kg	Oral	Mouse
	LDLo	200 mg/kg	Oral	woman
	LDLo	429 mg/kg	Oral	man
	LDLo	934 mg/kg	Oral	infant
	LDLo	1200 mg/kg	Dermal	infant
	LDLo	1500 mg/kg	Dermal	child
LDLo	2430 mg/kg	Dermal	man	

Target organs : Contains material which causes damage to the following organs: blood, the reproductive system, liver, mucous membranes, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Section 12. Ecological information

Ecotoxicity data

Ingredient name

Ingredient name	Species	Period	Result
Ethanol	Daphnia magna (EC50)	48 hour(s)	2 mg/l
	Daphnia magna (EC50)	48 hour(s)	9.3 mg/l
	Daphnia magna (EC50)	48 hour(s)	>100 mg/l
	Pimephales promelas (LC50)	96 hour(s)	>100 mg/l
	Daphnia magna (LC50)	96 hour(s)	>100 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	13000 mg/l
2-Methylpentane-2,4-diol	Daphnia magna (EC50)	48 hour(s)	3200 mg/l
	Daphnia pulex (EC50)	48 hour(s)	3300 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>10000 mg/l
	Pimephales promelas (LC50)	96 hour(s)	10700 mg/l
boric acid	Daphnia magna (EC50)	48 hour(s)	133 mg/l
	Daphnia magna (EC50)	48 hour(s)	226 mg/l
	Daphnia magna (EC50)	48 hour(s)	777 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	>800 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>1021 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	>1100 mg/l

Products of degradation : These products are carbon oxides (CO, CO₂) and water, nitrogen oxides (NO, NO₂...), sulphur oxides (SO₂, SO₃, etc.). Some metallic oxides.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised 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

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional Information
TDG Classification	Not regulated.	-	-	-	-

APPLIES ONLY DURING ROAD TRANSPORT

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

Section 15. Regulatory information

WHMIS : Not a WHMIS controlled material.
DIN02244052

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

Section 16. Other information

Date of issue : 18-March-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.**