

Material Safety Data Sheet



A-456-N

Section 1. Chemical product and company identification

Trade name : A-456-N
Product use : Cleaner and disinfectant
Supplier : Ecolab, Professional Products Division
370 Wabasha Street N
St. Paul MN 55102
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326

Code : 910580

Date of issue : 16-February-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>
Didecyldimethylammonium chloride	7173-51-5	7 - 13
alkyl dimethyl benzyl ammonium chloride	8001-54-5	5- 10
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	3 - 7
1-octanamine, n,n-dimethyl-, n-oxide	2605-78-9	1 - 5
Ethanol	64-17-5	1 - 5

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)

Emergency overview : Danger!

CAUSES EYE AND SKIN BURNS.
MAY BE HARMFUL IF SWALLOWED.

Do not ingest. Do not get in eyes, on skin or clothing. Avoid breathing vapour or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

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

Potential acute health effects

Eyes : Corrosive to eyes.

Skin : Corrosive to the skin.

Inhalation : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed. May cause 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. Obtain medical attention immediately.

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

Inhalation : If inhaled, remove to fresh air.

Ingestion : Rinse mouth; then drink one or two large glasses of water. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.

Section 5. Fire fighting measures

Auto-ignition temperature : Not available.

Flash point : > 100°C

Flammable limits

Upper: Not available.

Lower: Not available.

Products of combustion : These products are halogenated compounds, hydrogen chloride.

Fire-fighting media and instructions : Use an extinguishing agent suitable for surrounding fires.

Dike area of fire to prevent product run-off.

No specific 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 : 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) scoop up material and place in a sealed, liquid-proof 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. Avoid breathing vapour or mist. Wash thoroughly after handling.

Storage : Keep out of the reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area.
Do not store below 0°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 : Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.

Hands : Use chemical resistant, impervious gloves.

Skin : Use synthetic apron, other protective equipment as necessary to prevent skin contact.

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

Section 9. Physical and chemical properties

Physical state	: Liquid. (Liquid.)
Colour	: Red.
Odour	: Odourless.
pH	: 7.8 (100%)
Boiling/condensation point	: >100 °C
Melting/freezing point	: Not available.
Specific gravity	: 0.998 (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	: These products are halogenated compounds, hydrogen chloride.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin.
Inhalation	: No known significant effects or critical hazards.
Ingestion	: Harmful if swallowed. May cause burns to mouth, throat and stomach.
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	: No known significant effects or critical hazards.
Reproductive effects :	No known significant effects or critical hazards.
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>
Didecylmethylammonium chloride	LD50	84 mg/kg	Oral	Rat
alkyl dimethyl benzyl ammonium chloride	LD50	268 mg/kg	Oral	Mouse
	LD50	240 mg/kg	Oral	Rat
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

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	Species	Period	Result
Didecyldimethylammonium chloride	Daphnia magna (EC50)	48 hour(s)	0.018 mg/l
	Daphnia magna (EC50)	48 hour(s)	0.059 mg/l
	Daphnia magna (EC50)	48 hour(s)	0.094 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	0.27 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	0.32 mg/l
	Pimephales promelas (LC50)	96 hour(s)	0.33 mg/l
alkyl dimethyl benzyl ammonium chloride	Daphnia magna (EC50)	48 hour(s)	0.018 mg/l
	Daphnia magna (EC50)	48 hour(s)	0.039 mg/l
	Daphnia magna (EC50)	48 hour(s)	0.056 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	0.32 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	1.15 mg/l
	Poecilia reticulata (LC50)	96 hour(s)	1.3 mg/l
acetic acid, (ethylenedinitrilo) tetra-, tetrasodium salt	Lepomis macrochirus (LC50)	96 hour(s)	486 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	1030 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	2070 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	3092 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	3092 mg/l
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

Products of degradation : These products are carbon oxides (CO, CO₂) and water, nitrogen oxides (NO, NO₂...), halogenated compounds. 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.
DIN02067234

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 : 16-February-2005.

Responsible name : Regulatory Affairs

Date of previous issue : 14-October-2004.

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.**