SAFETY DATA SHEET

according to US Regulation 29 CFR 1910.1200 and the Canadian HPA

GLB Algimycin 1000

Version 2.0 Revision Date 2020.03.12 Print Date 2020.11.07

SECTION 1. IDENTIFICATION

Product name : GLB Algimycin 1000

Manufacturer or supplier's details

Company : Innovative Water Care, LLC
1400 Bluegrass Lakes Parkway
Alpharetta, GA
30004

Telephone : 1-800-511-6737 (Outside the USA: 1-423-780-2347)
E-mail address : sds@sigurawater.com
Emergency telephone number : 1-800-654-6911 (Outside the USA: 1-423-780-2970)

Recommended use of the chemical and restrictions on use

Recommended use : Water treatment chemical

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**

P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P363 Wash contaminated clothing before reuse.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Hazardous components

Chemical name / Synonyms	CAS-No.	Concentration (% w/w)
Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	25 - 30
2,2',2''-Nitrilotriethanol	102-71-6	5 - 10
2-Aminoethanol	141-43-5	5 - 10
Copper(2+) carbonate hydroxide (2:1:2)	12069-69-1	5 - 10
Ethanol	64-17-5	3 - 4

SECTION 4. FIRST AID MEASURES

General advice : Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison con-

trol center or doctor, or going for treatment.

If inhaled	:	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
In case of skin contact	:	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
In case of eye contact	:	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed	:	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards during firefighting	:	Material will not ignite or burn.
Further information	:	Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus. Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

Environmental precautions	:	If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing vapours, mist or gas.
Conditions for safe storage	:	Store in a cool, dry and well ventilated place. Isolate from incompatible materials. Do not freeze.
Materials to avoid	:	Refer to Section 10, "Incompatible Materials."

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2,2',2''-Nitrilotriethanol	102-71-6	TWA	5 mg/m3	ACGIH
2-Aminoethanol	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		STEL	6 ppm 15 mg/m3	NIOSH/GUIDE
		REL	3 ppm 8 mg/m3	NIOSH/GUIDE
Copper(2+) carbonate hydroxide (2:1:2)	12069-69-1	REL (Dust and mist.)	1 mg/m3 (as Cu)	NIOSH/GUIDE
		(Fume.)		ACGIH
		(Dust and mist.)		ACGIH
		TWA (Dust and mist.)	1 mg/m3 (as Cu)	ACGIH
		TWA (Fume.)	0.2 mg/m3 (as Cu)	ACGIH
		REL (Fume.)	0.1 mg/m3 (as Cu)	NIOSH/GUIDE

Ethanol	64-17-5	STEL	1,000 ppm	ACGIH
		REL	1,000 ppm 1,900 mg/m3	NIOSH/GUIDE

Engineering measures : Use local exhaust ventilation to maintain levels below exposure limits.

Personal protective equipment

Respiratory protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible.
A NIOSH approved air purifying respirator with organic vapor/N95 cartridges. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit. A NIOSH approved full-face respirator as a minimum.

Hand protection

Remarks : Avoid contact with skin. Impervious gloves Boots Apron A full impervious suit is recommended if exposure is possible to a large portion of the body.

Eye protection : Chemical resistant goggles must be worn.
Face-shield

Skin and body protection : Impervious
Neoprene
butyl-rubber

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : dark blue

Odour : no data available

Odour Threshold : no data available

pH : 9.5 - 9.7

Melting point/freezing point : no data available

Boiling point/boiling range : no data available

Flash point : no data available

Evaporation rate	:	no data available
Flammability (solid, gas)	:	Product is not known to be flammable, combustible, pyrophoric or explosive.
Flammability (liquids)	:	no data available
Self-ignition	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	> 1
Relative density	:	1.049 (68 °F / 20 °C)
Density	:	no data available
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	no data available
Viscosity, dynamic	:	34.5 mPa.s (68 °F / 20 °C)
Viscosity, kinematic	:	no data available

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	:	Stable under normal conditions. Product will not undergo hazardous polymerization.
Conditions to avoid	:	Heat
Incompatible materials	:	Strong acids and oxidizing agents Clay
Hazardous decomposition products	:	Hydrogen chloride gas Carbon oxides Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Eyes
Skin
Inhalation
Ingestion

Acute toxicity

Acute oral toxicity : (Rat): 1,030 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : (Rat): 1,872 mg/kg

Skin corrosion/irritation

Result: Corrosive to skin

Serious eye damage/eye irritation

Result: Corrosive to eyes

Respiratory or skin sensitisation

Remarks: Not believed to be sensitising to skin.

Carcinogenicity

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA#s list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH Confirmed animal carcinogen with unknown relevance to humans
Ethanol 64-17-5

Repeated dose toxicity

Remarks: There are no known or reported effects from repeated exposure except those secondary to

burns.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

Components:

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Partition coefficient: n-octanol/water : log Pow: 2.75 (20 °C)
Method: OECD Test Guideline 107
GLP: yes

2,2',2''-Nitrilotriethanol:

Partition coefficient: n-octanol/water : log Pow: -2.3

2-Aminoethanol:

Partition coefficient: n-octanol/water : log Pow: -1.91 (25 °C)
Method: OECD Test Guideline 107

Copper(2+) carbonate hydroxide (2:1:2):

Partition coefficient: n-octanol/water : Remarks: no data available

Ethanol:

Partition coefficient: n-octanol/water : log Pow: -0.3

Mobility in soil

no data available

Other adverse effects

Ozone-Depletion Potential : Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-Depleting Substances (40 CFR 82, Subpt. A, App A & B)
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : Very toxic to aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.
As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number	:	3267
Proper shipping name	:	Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Transport hazard class	:	8
Packing group	:	II
Labels	:	8
Emergency Response Guidebook Number	:	153
Environmental hazards	:	no

TDG

UN number	:	3267
Proper shipping name	:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Transport hazard class	:	8
Packing group	:	II
Labels	:	8
Environmental hazards	:	no

IATA

UN number	:	3267
Proper shipping name	:	Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Transport hazard class	:	8
Packing group	:	II
Labels	:	8
Environmental hazards	:	no

IMDG

UN number	:	3267
Proper shipping name	:	Corrosive liquid, basic, organic, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Transport hazard class	:	8
Packing group	:	II
Labels	:	8
EmS Number 1	:	F-A
EmS Number 2	:	S-B
Environmental hazards	:	Marine pollutant: no

ADR

UN number	:	3267
Proper shipping name	:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Transport hazard class	:	8
Packing group	:	II
Classification Code	:	C7
Hazard Identification Number	:	80
Labels	:	8
Environmental hazards	:	no

RID

UN number	:	3267
Proper shipping name	:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Transport hazard class	:	8
Packing group	:	II
Classification Code	:	C7
Hazard Identification Number	:	80
Labels	:	8
Environmental hazards	:	no
Special precautions for user	:	none
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	:	Not applicable

SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

EPA Registration number	:	8959-14
Signal word	:	DANGER!
Hazard statements	:	Harmful if swallowed. May be fatal if absorbed through skin. Corrosive. Causes skin burns. Corrosive - causes irreversible eye damage. This pesticide is toxic to fish. This pesticide is toxic to aquatic invertebrates.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethanol	64-17-5	100	3046

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Formaldehyde	50-00-0	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 313

Components	CAS-No.	Concentration
Copper(2+) carbonate hydroxide (2:1:2)	12069-69-1	5 - 10 %

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Components	CAS-No.	Concentration
2,2'-Iminodiethanol	111-42-2	0.01 - 0.1 %
Formaldehyde	50-00-0	0.001 - 0.01 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

Components	CAS-No.	Concentration
Formaldehyde	50-00-0	0.001 - 0.01 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

Components	CAS-No.	Concentration
2-Aminoethanol	141-43-5	5 - 10 %
Ethanol	64-17-5	3 - 4 %
Formaldehyde	50-00-0	0.001 - 0.01 %
Hexa-2,4-dienoic acid	110-44-1	0.001 - 0.01 %
Sodium benzoate	532-32-1	0.0001 - 0.001 %

This product contains the following VOC exemptions listed under the U.S. Clean Air Act Section 450.

Components	CAS-No.	Concentration
Polydimethylsiloxane	63148-62-9	>= 0.01 - < 0.1 %

Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Components	CAS-No.	Component RQ (lbs)
Formaldehyde	50-00-0	100
Sodium hydroxide	1310-73-2	1000

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Components	CAS-No.	Concentration
Formaldehyde	50-00-0	0.001 - 0.01 %
Sodium hydroxide	1310-73-2	0.0001 - 0.001 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

Components	CAS-No.	Concentration
Copper(2+) carbonate hydroxide (2:1:2)	12069-69-1	5 - 10 %

US State Regulations

Massachusetts Right To Know

Components	CAS-No.
2,2',2''-Nitrilotriethanol	102-71-6
2-Aminoethanol	141-43-5
Ethanol	64-17-5
Formaldehyde	50-00-0

Pennsylvania Right To Know

Components	CAS-No.
Water	7732-18-5
Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1
2,2',2''-Nitrilotriethanol	102-71-6
2-Aminoethanol	141-43-5
Copper(2+) carbonate hydroxide (2:1:2)	12069-69-1
Ethanol	64-17-5

New Jersey Right To Know

Components	CAS-No.
Water	7732-18-5
Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1
2,2',2''-Nitrilotriethanol	102-71-6
2-Aminoethanol	141-43-5
Copper(2+) carbonate hydroxide (2:1:2)	12069-69-1
Ethanol	64-17-5

California Prop. 65

WARNING Cancer - www.P65Warnings.ca.gov.

Components	CAS-No.
2,2'-Iminodiethanol	111-42-2
Formaldehyde	50-00-0

Canadian lists

NPRI

Components	CAS-No.
Copper(2+) carbonate hydroxide (2:1:2)	12069-69-1
2,2'-Iminodiethanol	111-42-2
Formaldehyde	50-00-0

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : US. ACGIH Threshold Limit Values
NIOSH/GUIDE : US. NIOSH: Pocket Guide to Chemical Hazards, as amended

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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Date format : yyyy/mm/dd

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