

**BioGuard® Off Season Arctic Blue Algae  
Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

The recipient of this Safety Data Sheet is urged to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information on this sheet,(2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name: BioGuard® Off Season Arctic Blue Algae Protector®

Product Use Description: Recreational Water Product

EPA Registration Number: 5185-474

Company: Bio-Lab, Inc.  
BioGuard  
P.O. Box 300002  
Lawrenceville, GA  
30049-1002

Emergency telephone: CHEMTREC (US Transportation) :  
(800) 424-9300  
(703) 527-3887  
Poison Control Center (Medical) :  
(877) 800-5553

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Customer Service: (800) 859-7946

Prepared by: Product Safety Department  
(US) +1 866-430-2775  
(EU) +44 (0) 1753.603.000  
Email: MSDSRequest@chemtura.com

**SECTION 2. HAZARDS IDENTIFICATION**

**Emergency Overview**

**CAUTION!**

Form: liquid  
Colour: blue green  
Odour: mild acidic

Harmful if swallowed.  
Irritating to eyes.  
Avoid breathing vapors.  
Do not get in eyes, on skin, or on clothing.

OSHA Hazards:  
THIS MATERIAL IS HAZARDOUS UNDER THE  
CRITERIA OF THE FEDERAL OSHA HAZARD  
COMMUNICATION STANDARD 29CFR 1910.1200.

**BioGuard® Off Season Arctic Blue Algae  
Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

**Potential Health Effects**

- Primary Routes of Entry : Eye contact  
Ingestion
- Inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
- Skin : Not expected to cause skin irritation under normal use conditions.
- Eyes : Causes eye irritation.
- Ingestion : Harmful if swallowed.
- Chronic Exposure : None known.

**SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS**

**Hazardous components**

Component	CAS-No.	Concentration
copper	7440-50-8	3.3 %
Trade secret 020		< 2 %

**SECTION 4. FIRST AID MEASURES**

**First aid procedures**

- Inhalation : Remove to fresh air.  
Give oxygen or artificial respiration if needed.  
Call a POISON CENTRE or doctor/physician.
- Skin contact : Remove contaminated clothing and shoes.  
Rinse immediately with plenty of water for at least 15 minutes.  
Call a POISON CENTRE or doctor/physician.
- Eye contact : Rinse immediately with plenty of water for at least 15 minutes.  
Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.  
Call a POISON CENTRE or doctor/physician.
- Ingestion : Call a physician or poison control centre immediately.  
Do not induce vomiting unless told to do so by the poison control center or doctor.  
Have person sip a glass of water if able to swallow.  
Do not give anything by mouth to an unconscious person.

**BioGuard® Off Season Arctic Blue Algae  
Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

**SECTION 5. FIRE-FIGHTING MEASURES**

**Flammable properties**

Flash point : not applicable

**Protective equipment and precautions for firefighters**

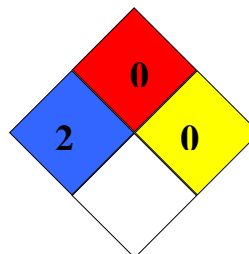
Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous decomposition products : Carbon oxides  
Copper oxides  
Sulphur oxides

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

**Further information**

**NFPA Classification** : Health Hazard: 2  
Fire Hazard: 0  
Reactivity Hazard: 0



**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Methods for containment / Methods for cleaning up : Using appropriate protective clothing and safety equipment, contain spilled material.  
Soak up with inert absorbent material.  
Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry containers for disposal.

Additional advice : Treat recovered material as described in the section "Disposal considerations".

**BioGuard® Off Season Arctic Blue Algae  
Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

**SECTION 7. HANDLING AND STORAGE**

**Handling**

Advice on safe handling : Avoid contact with skin, eyes and clothing.  
Avoid breathing vapors.  
Do not mix with other chemicals.  
Do not contaminate water, food or feed by storage or disposal or cleaning of equipment.  
Wash hands thoroughly with soap and water after handling and before eating, drinking or using tobacco.  
Do not handle until all safety precautions have been read and understood.

**Storage**

Requirements for storage areas and containers : Store in original container.  
Store in a cool, dry, well ventilated area away from heat or open flame.  
Keep out of reach of children.  
Keep away from animals.

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

**Components with workplace control parameters**

Components / CAS-No.	Value - Basis - Update	Control parameters	Further information
Trade secret 020	CEIL ; ACGIH 1994-09-01	2 mg/m3	
Trade secret 020	CEIL ; OSHA PO 1989-03-01	2 mg/m3	

**Engineering measures**

Engineering measures : Use with adequate ventilation.  
Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protective equipment**

Eye protection : Safety glasses with side-shields

Hand protection : No special protective equipment required.  
Wear as appropriate:  
Rubber gloves

Hygiene measures : Wash contaminated clothing before reuse.

**BioGuard® Off Season Arctic Blue Algae  
Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**

Form : liquid  
Colour : blue green  
Odour : mild  
acidic

**Safety data**

Flash point : not applicable  
pH : 2 - 3  
Density : 10.09 lb/gal  
Relative density : 1.18

**SECTION 10. STABILITY AND REACTIVITY**

Conditions to avoid : High temperatures.  
Poor ventilation.  
Contamination

Materials to avoid : Oxidizing agents  
Do not mix with other swimming pool/spa chemicals in their concentrated forms.

Hazardous decomposition products : Type: Hazardous decomposition products  
Carbon oxides  
Copper oxides  
Sulphur oxides

Hazardous reactions : Hazardous polymerisation does not occur.

**SECTION 11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity : LD50 rat  
Dose: 3,501 mg/kg

Acute dermal toxicity : LD50 rabbit  
Dose: > 5,000 mg/kg

**BioGuard® Off Season Arctic Blue Algae  
Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

Skin irritation : rabbit  
Result: No skin irritation

Eye irritation : Moderate eye irritation

**SECTION 12. ECOLOGICAL INFORMATION**

Additional ecological information : Toxic to aquatic organisms.  
Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**SECTION 13. DISPOSAL CONSIDERATIONS**

Further information : Dispose of waste material in compliance with all federal, state, and local regulations.

Contaminated packaging : Do not re-use empty containers.  
Rinse thoroughly before discarding in trash.  
Offer rinsed packaging material to local recycling facilities.

**SECTION 14. TRANSPORT INFORMATION**

**DOT** UN-Number : 1760  
Proper shipping name : Corrosive liquids, n.o.s.  
Proper technical name : (Contains: Copper Sulfate)  
Class : 8  
Packing group : III

**IATA** UN-Number : 1760  
Proper shipping name : Corrosive liquid n.o.s.  
Proper technical name : (Contains: Copper Sulfate)  
Class : 8  
Packing group : III

**IMDG** UN-Number : 1760

***BioGuard® Off Season Arctic Blue Algae  
Protector®***

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

Proper shipping name : CORROSIVE LIQUID, N.O.S.  
Proper technical name (Contains: Copper Sulfate)  
Class : 8  
Packing group : III

Not recommended for shipment by air  
Limited Quantity exemption possible  
ORM-D Consumer Commodity exemption possible

**BioGuard® Off Season Arctic Blue Algae  
Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

**SECTION 15. REGULATORY INFORMATION**

**National regulatory information**

**OSHA Hazards** : This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

**SARA Hazard category** : Acute Health Hazard

**US CERCLA (Component)** : US. Environmental Protection Agency (EPA); The 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Listed, No RQ is being assigned to this generic or broad class.

Copper(II) sulfate, pentahydrate (1:1:5)	7758-99-8	< 15 %
--	-----------	--------

Reportable quantity: 1,000 lbs Trade secret 020		< 2 %
--	--	-------

**US State Regulations**

**US MA RTK (Component)** : US. The Commonwealth of Massachusetts Department of Public Health; Massachusetts Right-to-know law, The Massachusetts Substance List, 105 CMR 670.000

Massachusetts hazardous substance

Trade secret 020		< 2 %
------------------	--	-------

**US NJ RTK (Component)** : US. New Jersey Department of Environmental Protection -; Bureau of Hazardous Substances New Jersey Right to Know Law, Hazardous Substance List [P.L. 1983, C. 315, NJSA 34:5A-1 et seq]

hazardous substance

Copper(II) sulfate, pentahydrate (1:1:5)	7758-99-8	< 15 %
--	-----------	--------

special health hazard substance, special health hazard, corrosive



**BioGuard® Off Season Arctic Blue Algae Protector®**

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

Trade secret 020		< 2 %
------------------	--	-------

**US PA RTK**  
(Component)

: US. Commonwealth of Pennsylvania - Department of Labor and Industry;  
Pennsylvania Code Title 34, Labor and Industry Chapter 323

environmental hazard, hazardous substance

Copper(II) sulfate, pentahydrate (1:1:5)	7758-99-8	< 15 %
--	-----------	--------

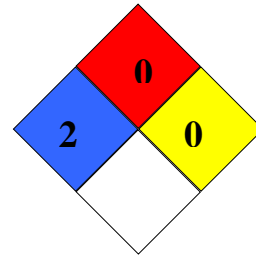
environmental hazard, hazardous substance

Trade secret 020		< 2 %
------------------	--	-------

**SECTION 16. OTHER INFORMATION**

**Further information**

**NFPA Classification** : Health Hazard: 2  
Fire Hazard: 0  
Reactivity Hazard: 0



**HMS Classification** : Health Hazard: 2  
Flammability: 0  
Physical and chemical hazards: 0

**Other Emergency Phone Number**

<u>Latin America:</u>	Brazil	+52 113 711 91 44
	All other countries	+44 (0)208 762 8322
<u>Mexico:</u>		+52 555 004 87 63

***BioGuard® Off Season Arctic Blue Algae  
Protector®***

Version:	1.1
Revision Date:	12/05/2008
Print Date:	12/05/2008

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of the seller, it is the user's obligation to determine the conditions of safe use of the products.