

Specimen Label and MSDS

- Algaecide

ACTIVE INGREDIENT:

Sodium Carbonate Peroxyhydrate* . . . 50%

OTHER INGREDIENTS 50%

TOTAL 100%

* Contains 27.6% Hydrogen Dioxide by weight.

KEEP OUT OF REACH OF CHILDREN DANGER – PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand this label, find someone to explain it to you in detail.)

EPA Registration No.: 70299-4

EPA Establishment No.: 68660-TX-001

FIRST AID

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 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.

If swallowed

- Call 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 the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

If inhaled

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMAN AND DOMESTIC ANIMALS – DANGER: Corrosive. Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

When handling wear protective eyewear (goggles or face shield) and chemical resistant gloves. Applicators and handlers must wear coveralls over long-sleeved shirt, long pants, and chemical resistant footwear plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply to treated, finished drinking water reservoirs or drinking water receptacles. This product is highly toxic to bees and other beneficial insects exposed to direct contact on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Do not apply this product or allow it to drift to crops where beneficials are part of an integrated pest management strategy.

PHYSICAL AND CHEMICAL HAZARDS

Strong oxidizing agent. **Corrosive.** Do not bring in contact with other pesticides, cleaners or oxidative agents.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted entry intervals (REI). The requirements in this box apply to uses of this product that are covered by the Worker Protection Standard.

For enclosed environments:

There is a restricted entry of one (1) hour for this product when applied via spraying or foaming on hard surfaces in enclosed environments. PPE requirement for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls, waterproof gloves and shoes plus socks.

There is a restricted entry of zero (0) hours for spreading, broadcasting, spot treatment, injection or other non-spraying or non-foaming application methods when used in enclosed environments.

For water treatment and applications in non-enclosed environments:

Keep unprotected persons out of treated areas until sprays have dried or dusts have settled.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are **not** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried or dusts have settled.

Apply GreenClean Granular Algaecide to any listed non-food water or surface sites except treated, finished drinking water reservoirs or drinking water receptacles.

Application sites include:

Sod Farms, Greenhouses, Nurseries, Golf Courses, Amusement Parks, Water Parks, Aquariums, Zoos, Botanical Gardens, Parks, Recreational Areas, Non-Chlorinated Swimming Areas, Raceways, Sports Facilities, Business Parks, Residential Developments, Indoor/Interiors, Malls, Hotels, Kennels, Cemeteries, Carwashes, Marinas, Boats,

WATER APPLICATION RATES

Application	Heavy Algae Growth	Low Algae Growth/Maintenance
Large Volume – Granular: Lakes, ponds, lagoons, etc.	90-500 lbs of GreenClean Granular Algaecide per million gallons of water. - OR - 30-170 lbs of GreenClean Granular Algaecide per acre-foot of water.	9-50 lbs of GreenClean Granular Algaecide per million gallons of water. - OR - 3-17 lbs of GreenClean Granular Algaecide per acre-foot of water.
Small Volume – Granular: Indoor or outdoor water gardens, fountains, ornamental waterfalls, etc.	3-16 Tbs of GreenClean Granular Algaecide per 1000 gallons of water. (16 Tbs = 1 Cup, 2 Cups = 1 lb)	1-5 tsp of GreenClean Granular Algaecide per 1000 gallons of water. (3 tsp = 1 Tbs)
Liquid Applications: Use for suspended algae and free-floating algae mats.	Solution Preparation: Due to solubility limitations, use at least 1 gallon of water to fully dissolve each 0.5 lbs of GreenClean Granular Algaecide. Dissolution of GreenClean Granular Algaecide in cold water takes approximately 5 minutes. Treatment Rates: Use same rates as the granular application above.	

Docks, Garden Centers, Power Washing, Water Gardens, Landscapes, Municipalities, Waterways, Storm Waters, Drainage Systems, Impounded Waters, and Wastewater.

Application surfaces include:

WATER SURFACES

Ponds, Lakes, Lagoons, Water Gardens, Ornamental Pools/Ponds, Ornamental Waterfalls, Fountains, Bird Baths, Golf Course Ponds, Industrial/Commercial Ponds, Impounded Waters, Standing Water, Bilge Water, Non-Potable Water Reservoirs, Waterways, Conveyance Ditches, Canals, Laterals, Drainage Systems, Catch Basins, Flooded Areas, Sewage Systems, Drain Fields, Fire Ponds, Watering Tanks (Non-Potable Water), Storage Tanks, Water Collectors and Domestic/Commercial Non-Potable Waters

NON-PAINTED SURFACES

Floors, Walkways, Storage Areas, Patios, Decks, Railings, Roofs, Asphalt Shingles, Siding, Fiberglass, Boats, Piers, Docks, Stairs, Ramps, Ground Cover Mats, Weed Control Mats, Concrete, Brick, Tile, Slate, Granite, Statues/Monuments, Outdoor Furniture, Tennis Courts (non-grass), Nursery Yards, Shorelines, Gravel, Dirt Floors, Under Benches, and Other Non-Painted Surfaces

WATER TREATMENT

Use GreenClean Granular Algaecide to treat, control, and prevent a broad spectrum of algae. Effects of treatment are immediately apparent (bubbling, bleaching/discoloration of algae). Waters treated with GreenClean Granular Algaecide are permissible to be used without interruption.

DETERMINING WATER VOLUME

Measure length (L), width (W), and average depth (D) in feet (ft) and calculate volume using one of the following formulas:

Square/Rectangular:

$$L(\text{ft}) \times W(\text{ft}) \times D(\text{ft}) \times 7.5 = \text{Gallons}$$

Circular/Elliptical:

$$L(\text{ft}) \times W(\text{ft}) \times D(\text{ft}) \times 5.9 = \text{Gallons}$$

1 acre-foot of water =

$$208.7 \text{ ft long} \times 208.7 \text{ ft wide} \times 1 \text{ ft deep} \\ 43,560 \text{ ft}^3 = 325,851 \text{ gal} = 2,780,000 \text{ lbs}$$

$$\frac{\text{Avg. L (ft)} \times \text{Avg. W (ft)} \times \text{Avg. D (ft)}}{43,560} = \text{acre-feet of water}$$

GENERAL TREATMENT NOTES

- Control is most easily achieved when algae are not yet well established. Treat when growth first begins to appear.
- Apply early in the day under calm, sunny conditions, and when water temperatures are warm. Sunlight and higher temperatures both enhance GreenClean Granular Algaecide activity.
- Apply in a manner that will ensure even distribution of GreenClean Granular Algaecide within the treatment area.
- Break up any heavy floating algae mats before or during application.
- Skim dead algae and organic matter that rises to the water's surface after treatment. Allowing dead organics to sink and decay will provide a food source and additional nutrients that stimulate algae re-growth and further blooms.
- Use GreenClean Granular Algaecide as an integral part of your water management system. If using in conjunction with other water additives (such as bacteria or enzymes), always apply GreenClean Granular Algaecide first and wait several hours before adding any other products.
- Re-treat areas if re-growth begins to appear. Allow 48 hours between consecutive treatments.
- Maintain an algae free pond with GreenClean Granular Algaecide maintenance rates at a frequency appropriate for your environmental conditions.
- In regions where water freezes in the winter, treatment with GreenClean Granular Algaecide (including skimming) 6-8 weeks before expected freeze will help prevent masses of decaying algae under the ice cover.
- After application, do not allow undiluted granules to remain in an area where humans or animals are exposed.
- Non-target plants will suffer contact burn if undiluted granules are accidentally spilled on them. Do not apply in such a way that the concentrated product comes in contact with grass, ornamentals and other foliage.
- Do not tank mix with aquatic herbicides or algaecides containing copper or bromides.

EFFECTIVENESS FACTORS

- Effects of GreenClean Granular Algaecide treatment are immediately apparent (bubbling, bleaching/discoloration of algae).

GreenClean Granular Algaecide treatments are successful when contact of the pesticide is made with the algae.

- Liquid applications will not sink through the water column as readily as a granular application.
- When treating surface mats and blooms, it is possible that GreenClean Granular Algaecide will not penetrate the water column below the infested area, and a second application is then required for treating any bottom growing algae.
- Apply more frequently during the summer months when water consumption and temperatures are high.

APPLICATION METHODS

SPREADING / BROADCASTING: Broadcast GreenClean Granular Algaecide with a mechanical spreader or by hand, directly on the water surface, from shore or from a properly equipped boat.

SPOT TREATMENT: Apply GreenClean Granular Algaecide directly over the infested area. Re-treatment is required when heavy growth occurs.

LIQUID: Make a solution with GreenClean Granular Algaecide (refer to liquid application rates). Spray this solution on the water surface from shore or a properly equipped boat. When using this method, the wind direction is important as well as the operation of the boat. If using a slurry, agitate constantly.

INJECTION: Make a solution with GreenClean Granular Algaecide (refer to liquid application rates). Inject this solution into the water via a piping system.

SUBSURFACE: Place GreenClean Granular Algaecide in burlap bags and drag through the water by means of a boat. Use granular application rates. Begin treatment along the shoreline, and proceed outward. The path of the boat shall insure an even distribution. Continue dragging until all GreenClean Granular Algaecide is dissolved.

GROUND/SURFACE APPLICATION RATES

Application	Heavy Algae Growth	Low Algae Growth/Maintenance
Granular Applications	2-3 lbs of GreenClean Granular Algaecide per 1000 sq ft of area. Make granular applications over a wet surface or activate with water immediately following application. (1 lb = 2 Cups)	1-2 lbs of GreenClean Granular Algaecide per 1000 sq ft of area. Make granular applications over a wet surface or activate with water immediately following application. (1 lb = 2 Cups)
Liquid Applications	Solution Preparation: Due to solubility limitations, use at least 1 gallon of water to fully dissolve each 0.5 lbs of GreenClean Granular Algaecide. Dissolution of GreenClean Granular Algaecide in cold water takes approximately 5 minutes. Treatment Rates: Use same rates as the granular application above.	
Foam Applications	Solution Preparation: Follow the Liquid Application instructions shown above. Add 2-5 fl oz of an alkaline-based foam, such as BioSafe Systems' "BioFoaming Agent", per gallon of finished solution. Treatment Rates: Use the same rates as the granular/ liquid application given above.	

SURFACE TREATMENT

Use GreenClean Granular Algaecide on all listed non-painted surfaces, to prevent and control algae, moss, slime molds and their spores, and the odors and conditions that these organisms cause (such as the breeding grounds for pests such as shore flies and fungus gnats).

GENERAL TREATMENT NOTES

- Control is most easily achieved when growth is not yet well established. Treat when growth first begins to appear.
- Apply in a manner that will insure even distribution of GreenClean Granular Algaecide within the treatment area.
- GreenClean Granular Algaecide is water activated. Watering before application is preferred over misting after application because it prevents over watering leading to a reduced effectiveness.
- Use GreenClean Granular Algaecide in conjunction with ZeroTol Broad Spectrum Algaecide/Fungicide® and TerraCyte Broad Spectrum Algaecide/Fungicide®, as part of a comprehensive cleanliness/treatment program.

- When applying GreenClean Granular Algaecide to soil, gravel or other similar media, incorporate the application of GreenClean Granular Algaecide into the first inch of substrate for optimum effectiveness.
- To maintain clean surfaces, apply GreenClean Granular Algaecide at maintenance rates every 5-7 days or as needed to control new or established conditions.
- After application, do not allow undiluted granules to remain in an area where humans or animals are exposed.
- Non-target plants will suffer contact burn if undiluted granules are accidentally spilled on them. Do not apply in such a way that the concentrated product comes in contact with grass, ornamentals and other foliage.
- Do not tank mix with aquatic herbicides or algaecides containing copper or bromides.

APPLICATION METHODS

SPREADING / BROADCASTING: Broadcast GreenClean Granular Algaecide with a mechanical spreader or by hand. A lawn spreader or any other applicator that will insure uniform coverage is acceptable.

SPOT TREATMENT: Apply GreenClean Granular Algaecide directly over the infested area. Re-treatment is required when heavy growth occurs.

LIQUID: Make a solution with GreenClean Granular Algaecide (refer to liquid application rates). Spray this solution on the desired treatment surface.

FOAM: Make a solution with GreenClean Granular Algaecide (refer to foam application rates). Spray this solution on the desired treatment surface. Use a foamer, such as the BioSafe BioFoamer®, to apply.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in original containers in a cool, well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water. Do not store in a manner where cross-contamination with other pesticides or fertilizers could occur.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open

dumping is prohibited. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

WARRANTY

This material conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing, unfavorable temperatures, water conditions, presence of other

materials, method of application, weather, watering practices, nature of soil, disease problem, condition of crop, incompatibility with other chemicals, pre-existing conditions and other conditions influencing the use of this product are beyond the control of the seller. Buyer assumes all risks associated with the use, storage, or handling of this material not in strict accordance with directions given herewith. **NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE.**

BiSafe Systems L.L.C.

36 Commerce Street • Glastonbury, CT 06033 • 888.273.3088 • fax 860.657.3388
www.biosafesystems.com • info@biosafesystems.com

Material Safety Data Sheet

1. IDENTIFICATION:

Product Name: GreenClean Granular Algaecide
Product Type: Algaecide
Manufacturer: BioSafe Systems L.L.C.
 36 Commerce Street
 Glastonbury, CT 06033
Office Telephone Number: (888) 273-3088
Emergency: CHEMTREC: 800-424-9300
 (24 HOURS EVERY DAY)
Creation Date: 4/04
NOTE: NOT VALID TWO YEARS AFTER CREATION DATE.

2. COMPONENTS:

Sodium Carbonate
 Peroxyhydrate: CAS 15630-89-4
 Sodium Carbonate: CAS 497-19-8

3. HEALTH HAZARDS DATA:

Inhalation: Slight nose and throat irritation
Eye contact: Severe eye irritation, risk of serious eye lesions
Skin contact: Slight irritation
Ingestion: Severe irritation of the mouth, throat, esophagus and stomach

4. FIRST AID:

If inhaled: Immediately move a person to fresh air. Consult with a physician in case of respiratory symptoms.
Eyes: Immediately flush with plenty of cool running water. Remove contact lenses. Continue flushing for at least 15 minutes, holding eyelids apart to ensure rinsing of the entire eye. Call a physician immediately.
Skin: Remove contaminated shoes, socks, and clothing. Wash the affected skin with running water. Wash clothing before reuse.
If swallowed: Consult a physician in all cases. If the subject is completely conscious, rinse mouth and administer fresh water. Do NOT induce vomiting. NEVER give anything by mouth to an unconscious person.

5. FIRE AND EXPLOSION DATA:

Special fire hazards: Oxidizing substance that causes exothermic reactions with organic materials.
Fire fighting methods: Product is not flammable and can be quickly diluted with clean water.

Specific Hazards: Reacts with oxidizing substances – decomposition may support combustion.

6. SPILL OR LEAK PROCEDURES:

Cleanup: Collect the product with suitable means, shovel, and sweep, avoiding dust formation.
Waste Disposal: Do not return spilled or contaminated material to inventory. Clean the area with large quantities of clean, cold water.

7. HANDLING AND STORAGE:

- Never return unused product to the original container
- Keep concentrate away from reactive substances
- Prevent contact with organic materials
- Keep product in original container
- Store in cool, dry area
- Keep out of direct sunlight and away from heat sources

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Respiratory: For most conditions, no respiratory protection should be needed.
Eyes: Use dust proof chemical goggles
Hands: Protective gloves – chemical resistant
Skin: Body-covering clothing

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: White, granular, solid
Odor: None
Bulk Density: 1.0 – 1.2 g/cm³
Solubility: 140 g/L @ 24° C (75° F)
pH: 1% solution: 10.4 – 10.6

10. STABILITY AND REACTIVITY:

Stability: Stable under normal conditions
Avoid: Heat/Sources of Heat • Water/Moisture • Acids • Bases • Reducing Agents • Organic Materials

11. TOXICOLOGICAL INFORMATION:

Acute Toxicity:

- Dermal = LD Lo rabbit > 2000 mg/kg
- Inhalation = LC 0 1 hour, rat > 4580 mg /m
- Oral = LD 50 rat 1034 mg/kg

12. ECOLOGICAL INFORMATION:

Toxic to simple cell organisms
 Danger to the environment is limited - due to product properties.

- No bioaccumulation
- Soil degradation = 99% in 20 minutes
- Considerable abiotic and biotic degradability
- Sediments = Non-significant adsorption
- Weak persistence of degradation products
- Degradation products = sodium carbonate, carbon dioxide, bicarbonate carbonate, hydrogen dioxide.

13. DISPOSAL CONSIDERATIONS:

Packing Treatment: Rinse empty containers with clean water. Clean and empty containers are to be recycled or disposed on accordance with local regulations.

14. TRANSPORT INFORMATION:

D.O.T. Shipping Name: Not regulated
UN Number: None
Hazard Class: None
Primary Hazard Label: None
Subsidiary Risk Label: None
Packing Group: None
WHMIS Classification: C – oxidizing material

To the extent of our knowledge, the information herein is accurate as of the date of this document. However, neither BioSafe Systems nor any of its affiliates make any warranty, expressed or implied, or accept any liability in connection with the information or its use. The information is for use by technically skilled persons at their own discretion and risk. This is not a license or a patent. The user alone must finally determine suitability of any information or material for any contemplated use, the manner or use and whether any patents are infringed.