

1. IDENTIFICATION:

Product Name: GreenCleanPRO
Granular Algaecide
Product Type: Algaecide
Manufacturer: BioSafe Systems L.L.C.
36 Commerce Street
Glastonbury, CT 06033
US Patent Number: 5723406
Office Telephone Number: (888) 273-3088
Emergency: CHEMTREC: 800-424-9300
(24 HOURS EVERY DAY)
Creation Date: 7/04

**NOTE: NOT VALID TWO YEARS AFTER
CREATION DATE.**

2. COMPONENTS:

Sodium Carbonate
Peroxhydrate: CAS 15630-89-4

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 strong
reducing agents – 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: Oxidizing Solid
N.O.S.

UN Number: UN # 1479

Hazard Class: 5.1

Primary Hazard Label: Oxidizer

Subsidiary Risk Label: None

Packing Group: III

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 contem-
plated use, the manner or use and whether
any patents are infringed.



Specimen Label and MSDS

- Algaecide

ACTIVE INGREDIENT:

Sodium Carbonate Peroxyhydrate* ... 85%

OTHER INGREDIENTS 15%

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.: 70299-6

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.

Applications Rates	Heavy Algae Growth	Low Algae Growth/ Maintenance
<p>Granular: Large Volume For example: Lakes, Ponds, Lagoons.</p>	<p>20-90 pounds of GreenClean Pro Granular Algaecide per acre-foot of water -or- 50-250 pounds of GreenClean Pro Granular Algaecide per million gallons of water.</p>	<p>2-9 pounds of GreenClean Pro Granular Algaecide per acre-foot of water -or- 5-25 pounds of GreenClean Pro Granular Algaecide per million gallons of water.</p>
<p>Granular: Small Volume For example: water gardens, fountains, ornamental waterfalls.</p>	<p>2-10 Tablespoons of GreenClean Pro Granular Algaecide per 1000 gallons of water.</p>	<p>1-3 teaspoons of GreenClean Pro Granular Algaecide per 1000 gallons of water.</p>
<p>Granular: Ground/Surface: For use on non-painted surfaces to control algae, moss, slime molds and their spores.</p>	<p>1-2 pounds of GreenClean Pro Granular Algaecide per 1000 square feet of area. Make granular applications over a wet surface or activate with water immediately following application.</p>	<p>0.5-1 pounds of GreenClean Pro Granular Algaecide per 1000 square feet of area. Make granular applications over a wet surface or activate with water immediately following application.</p>
<p>Liquid Applications: For Ground/Surface or Water applications.</p>	<p>Solution Preparation: Due to solubility limitations, use at least 1 gallon of water to fully dissolve each 0.5 pounds of GreenClean Pro Granular Algaecide. Dissolution in cold water takes approximately 5 minutes.</p> <p>Treatment Rates: Use same rates at the granular application above.</p>	
<p>Foam Applications: For Ground/Surface applications.</p>	<p>Solution Preparation: Follow the liquid solution preparation instructions above. Add 2.0 - 5.0 fluid ounces of an alkaline-based foam, such as BioSafe Systems "BioFoaming Agent®", per gallon of finished solution.</p>	

Apply GreenClean Pro 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, 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, Golf Course Ponds, Impounded Waters, Industrial/Commercial Ponds,

Standing Water, Bilge Water, Non-Potable Water Reservoirs, Waterways, Canals, Laterals, Conveyance Ditches, 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, Outdoor Furniture, Statues/Monuments, Tennis Courts (non-grass), Nursery Yards, Shorelines, Gravel, Dirt Floors, Under Benches, and Other Non-Painted Surfaces.

WATER TREATMENT

Use GreenClean Pro 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 Pro Granular Algaecide are permissible to be used without interruption.

SURFACE TREATMENT

Use GreenClean Pro 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).

APPLICATION METHODS

- **SPREADING / BROADCASTING:** Broadcast GreenClean Pro Granular Algaecide with a mechanical spreader or by hand, directly on the surface. A lawn spreader or any other applicator that will ensure uniform coverage is acceptable.
- **SPOT TREATMENT:** Apply GreenClean Pro Granular Algaecide directly over the infested

area. Re-treatment is required when heavy growth occurs.

- **LIQUID:** Make a solution with GreenClean Pro Granular Algaecide (refer to liquid application rates). Spray this solution on the desired treatment surface. If using a slurry, agitate constantly.
- **FOAM:** Make a solution with GreenClean Pro 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.
- **INJECTION:** Make a solution with GreenClean Pro Granular Algaecide (refer to liquid application rates). Inject this solution into the water via a piping system.
- **SUBSURFACE:** Place GreenClean Pro 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 ensure an even distribution. Continue dragging until all GreenClean Pro Granular Algaecide is dissolved.

DETERMINING WATER VOLUME

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

1 acre-foot of water =
208.7 ft long x 208.7 ft. wide x 1 ft. deep
43,560 ft.³ = 325,851 gal. = 2,780,000 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.
- GreenClean Granular is water activated.
- When applying GreenClean Granular to soil, gravel or other similar media, incorporate the product into the first inch of substrate for optimum effectiveness.
- Apply early in the day under calm, sunny conditions, and when water temperatures are warm. Sunlight and higher temperatures both enhance GreenClean activity.
- Apply in a manner that will ensure even distribution of GreenClean Granular within the treatment area.
- Break up any heavy algae 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.

- If using in conjunction with other water additives (such as bacteria or enzymes), always apply GreenClean Granular first and wait several hours before adding other products.
- Re-treat areas if re-growth begins to appear. Allow 48 hours between consecutive treatments.
- Maintain with maintenance rates at a frequency appropriate for your environmental conditions.
- In regions where water freezes in the winter, treatment with GreenClean Granular (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 Pro Granular Algaecide treatment are immediately apparent (bubbling, bleaching/discoloration of algae).
- **GreenClean Pro 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 Pro 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.

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.**
