

SECTION 1: Identification

1.1 GHS Product identifier

Product name GreenClean Liquid 5.0

1.2 Recommended use Algaecide / Fungicide / Bactericide

1.3 Supplier's details

Name BioSafe Systems Address 22 Meadow Street

East Hartford CT 06108 USA

Telephone 1.888.273.3088

1.4 Emergency phone number CHEMTREC: 1-800-424-9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2024)

- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, oral, Cat. 4
- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1
- Organic peroxides, Type F

2.2 GHS label elements, including precautionary statements

Pictograms



Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H332 Harmful if inhaled
H242 Heating may cause a fire
H290 May be corrosive to metals

Precautionary statement(s)

P101 If medical advice is needed, have label at hand.

P102 Keep out of reach of children P103 Read label before use.

P234 Keep only in original container.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220 Keep/Store away from incompatible/ combustible materials.

P260 Do not breathe fumes, mist, vapors, or spray.
P262 Do not get in eyes, on skin or on clothing
P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 If swallowed: Call a poison center if you feel unwell, 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+P312 If inhaled: Call a poison center if you feel unwell.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do. Continue rinsing.

P321 For specific treatment see first aid section on label

P370+P378 In case of fire: Use water to extinguish.
P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P406 Store in a corrosive resistant container with resistant inner liner.
P411+P235 Store at temperatures not exceeding 25°C (77°F). Keep cool.
P410+P403 Protect from sunlight. Store in a well-ventilated place.

P410+P403 Protect from sunlight. Store in a well-ventive P420 Store away from other materials.

P501 Dispose of contents according to local, state and/or federal regulations.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Component	Concentration
Hydrogen peroxide (CAS no.: 7722-84-1)	15 - 30 % (weight)
Acetic acid (CAS no.: 64-19-7)	5 - 15 % (weight)
Peracetic acid (CAS no.: 79-21-0)	5 - 10 % (weight)

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled Remove person to fresh air and keep comfortable for breathing. Call a poison

center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing,

wheezing, or shortness of breath.

In case of skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower

for at least 15 minutes. Call a poison center or doctor if irritation develops or

persists. Wash contaminated clothing before reuse.

Acute and delayed symptoms and effects: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense

pain, or blistering.

In case of eye contact Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Immediately call a poison center or

doctor.

Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical

burns, severe pain, or significantly impaired vision.

If swallowed

Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: Harmful if swallowed. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, or vomiting.

4.2 Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation: May cause respiratory irritation.

Symptoms/effects after skin contact: Burns.

Symptoms/effects after eye contact: Serious damage to eyes.

Symptoms/effects after ingestion: Burns.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray.

5.2 Specific hazards arising from the chemical

Fire hazard: Heating may cause a fire.

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3 Special protective actions for fire-fighters

Do not attempt to take action without suitable protective equipment. Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection if necessary. Avoid breathing gas, mist, vapors, or spray. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains and avoid releases to the environment.

6.3 Methods and materials for containment and cleaning up

Stop leak if you can do it without risk. Contain spillage, and then collect with inert absorbent material, (e.g. sand, diatomaceous earth) and place in non-metal container for disposal according to local, state, and federal regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not swallow. Do not breathe mist, vapors, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Keep away from heat and sources of ignition - No smoking. See Section 8 for information on Personal Protective Equipment.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up and in original container only. Keep container in a dry and well-ventilated place. Keep cool and protect from sunlight. Store away from incompatible materials. See Section 10 for information on Incompatible

Materials. Keep out of the reach of children. This product should be used within 24 months of the date of manufacture.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 64-19-7 Acetic acid

NIOSH (US): 10 ppm, (ST) 15 ppm REL inhalation; 15 ppm, 37 mg/m3 ST inhalation; 10 ppm, 25 mg/m3 TWA inhalation; US/OSHA (US): 10 ppm PEL inhalation; 25 mg/m3 PEL inhalation

CAS: 7722-84-1 Hydrogen peroxide

US/OSHA (US): 1 ppm PEL inhalation; 1.4 mg/m3 PEL inhalation

8.2 Appropriate engineering controls

Use ventilation adequate to keep exposures below recommended exposure limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms









Eye/face protection

Safety glasses or goggles. If splash hazard, wear face shield.

Skin protection

Protective gloves rubber/latex/neoprene. Do not use leather or cotton gloves.

Body protection

Wear protective clothing. Clothing with full length sleeves and pants should be worn. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

Physical state Liquid

Appearance Color Odor

Odor threshold Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flammability

Lower and upper explosion limit/flammability limit

Flash point

Auto-ignition temperature Decomposition temperature

pΗ

Kinematic viscosity

Solubility

Partition coefficient n-octanol/water (log value)

Vapor pressure Evaporation rate

Density and/or relative density

Clear, colorless liquid

Colorless Vinegar-like No data available. -30 °C (-22°F) No data available. Non-flammable. No data available. No data available.

55 °C SADT > 55°C (131°F)

1.5

No data available.

No data available.

Complete.

No data available. 22 mm Hg (30°C) No data available. 9.26 lbs/gal

Relative vapor density

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Contact with incompatible materials. Sources of ignition. Exposure to heat.

10.2 Chemical stability

Stable under normal storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Incompatible products. High temperatures. Direct sunlight. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Hydrogen peroxide: Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

Acetic acid: Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Metals, Peroxides, permanganates, e.g. potassium permanganate, Amines, Alcohols, Nitric acid

10.6 Hazardous decomposition products

Thermal decomposition generates corrosive vapors, acetic acid and oxygen which supports combustion.

SECTION 11: Toxicological information

Acute toxicity

Acetic acid

LD50 Oral - Rat - 3,310 mg/kg, LC50 Inhalation - Mouse - 5620 ppm - 1 h, LC50 Inhalation - Rat - 11.4 mg/l - 4h LD50 Skin - Rat - 1,112 mg/kg

Skin corrosion/irritation

Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, or blistering.

Serious eye damage/irritation

Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, or significantly impaired vision.

Respiratory or skin sensitization

May cause respiratory tract irritation.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information

Toxicity

Acetic acid

LC50 - Oncorhynchus mykiss (rainbow trout) - >1,000 mg/l - 96 h

EC50 - Daphnia magna (water flea) - >300.82 mg/l - 48 h

Persistence and degradability

Peracetic acid is completely miscible with water. Product is biodegradable due to chemical properties.

Bioaccumulative potential

Does not bioaccumulate.

Mobility in soil

Non-significant adsorption soil degradation, >99% in 20 minutes.

SECTION 13: Disposal considerations

Product disposal

Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Packaging disposal

Dispose of as unused product. Do not reuse containers.

SECTION 14: Transport information

UN3109

UN Number: UN3109

Class: 5.2

Packing Group: N/A

Proper Shipping Name: Organic peroxide type F, liquid (Peroxyacetic acid)

IMDG

UN Number: UN3109

Class: 5.2

Packing Group: N/A

Proper Shipping Name: Organic peroxide type F, liquid (Peroxyacetic acid)

IATA

UN Number: UN3109

Class: 5.2

Packing Group: N/A

Proper Shipping Name: Organic peroxide type F, liquid (Peroxyacetic acid)

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard for: Acetic acid.

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard for: Hydrogen peroxide.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302: Hydrogen peroxide

US EPA TSCA public inventory

Chemical name: PERACETIC ACID

CAS number: 79-21-0

Chemical name: Hydrogen peroxide

CAS number: 7722-84-1 Chemical name: Acetic acid CAS number: 64-19-7

FIFRA

This product is a registered pesticide with the United States Environmental Protection Agency (EPA). These requirements may differ from the classification criteria and hazard information required for a safety data sheet under the Global Harmonized Systems (GHS), and for workplace labels of non-pesticide chemicals. It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Always refer to product label for further precautionary information and use directions

NSF

Maximum use for potable water is 3mg/L.

SECTION 16: Other information

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall BioSafe Systems be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if BioSafe Systems has been advised of the possibility of such damages.

16.2 Revision History

Revised on 11/10/2025 – Version 2 includes NSF information in Section 15.