

# **SECTION 1: Identification**

### 1.1 GHS Product identifier

	Product name	GreenClean Acid Cleaner
1.2	Recommended Use	Commercial cleaning detergent
1.3	<b>Supplier's details</b> Name Address Telephone	BioSafe Systems 22 Meadow Street East Hartford CT 06108 USA 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 mixtu

# 1 Classification of the substance or mixture GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2024)

- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1
- Corrosive to metals, Cat. 1

# 2.2 GHS label elements, including precautionary statements

# Pictograms



Signal word

Danger

Hazard statement(s) H314 H318 H290	Causes severe skin burns and eye damage Causes serious eye damage May be corrosive to metals
Precautionary statement(s) P101 P102	If medical advice is needed, have label at hand.
P102	Keep out of reach of children
P103	Read label before use.
P220	Keep/Store away from incompatible/ combustible materials.
P234	Keep only in original container.
P260	Do not breathe fume/gas/mist/vapors/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.

P280 P301+P330+P331	Wear protective gloves/protective clothing/eye protection/face protection. 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	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	Specific treatment see first aid section on this label.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents according to state, local and federal regulations.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosive resistant container with a resistant inner liner.

# SECTION 3: Composition/information on ingredients

# 3.1 Mixtures

Component	Concentration
Sulfuric acid (CAS no.: 7664-93-9)	70 - 75 % (weight)
Phosphonic acid (HEDP) (CAS no.: 2809-21-4)	1 - 5 % (weight)

# **SECTION 4: First-aid measures**

### 4.1 Description of necessary first-aid measures

General advice	Consult a physician, if you feel unwell. Show this safety data sheet to the doctor in attendance.			
If inhaled	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor			
In case of skin contact	Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation persists: Get medical advice/attention			
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.			
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.			
Most important symptoms/effects, acute and delayed				

- **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 or water spray.

# 5.2 Specific hazards arising from the chemical

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 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 breathe mist, vapors, or spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

# 7.2 Conditions for safe storage, including any incompatibilities

Store locked up in original container. Store in a well ventilated place and keep cool. 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 36 months of the date of manufacture.

# **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

# CAS: 7664-93-9 Sulfuric acid NIOSH (US): 1 mg/m3 REL inhalation; US/OSHA (US): 1 mg/m3 PEL inhalation; 1 mg/m3 TWA 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)



Safety glasses.

**Skin protection** Protective gloves.

### **Body protection**

Wear protective clothing. Clothing with full length sleeves and pants should be worn.

#### **Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties				
Physical state	Liquid			
Appearance	Clear, colorless liquid.			
Color	Colorless			
Odor	Odorless			
Odor threshold	No data available.			
Melting point/freezing point	No data available.			
Boiling point or initial boiling point and boiling range	No data available.			
Flammability	Not applicable.			
Lower and upper explosion limit/flammability limit	No data available.			
Flash point	No data available.			
Explosive properties	No data available.			
Auto-ignition temperature	No data available.			
Decomposition temperature	No data available.			
Oxidizing properties	No data available.			
рН	<1			
Kinematic viscosity	No data available.			
Solubility	Complete.			
Partition coefficient n-octanol/water (log value)	No data available.			
Vapor pressure	No data available.			
Evaporation rate	No data available.			
Density and/or relative density	10.7 lbs/gal			
Relative vapor density	No data available.			

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2 Chemical stability

Stable under normal storage conditions.

### 10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4 Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5 Incompatible materials

Sulfuric acid: Bases, Halides, Organic materials, Carbides, fulminates, Nitrates, picrates, Cyanides, Chlorates, alkali halides, Zinc salts, permanganates, e.g. potassium permanganate, Hydrogen peroxide, Azides, Perchlorates., Nitromethane, phosphorous, Reacts violently with:, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous(III) oxide, Powdered metals

#### 10.6 Hazardous decomposition products

Sulfuric acid: Hazardous decomposition products formed under fire conditions. - Sulphur oxides

# **SECTION 11: Toxicological information** Acute toxicity Sulfuric acid

LD50 Oral - Rat - 2,140 mg/kg LC50 Inhalation - Rat - 510 mg/m3 - 2 h

### Skin corrosion/irritation

Causes severe burns. Signs/symptoms may include intense burning, pain, blistering or blackened skin.

#### Serious eye damage/irritation

Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, and blurred or hazy vision.

### Respiratory or skin sensitization

No data available.

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

Sulfuric acid

Result: The International Agency for Research on Cancer (IARC) has determined that occupational exposure to strong inorganic-acid mists containing sulfuric acid is carcinogenic to humans (group 1).

### **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

Sulfuric acid

LC50 - Gambusia affinis (mosquito fish) - 42 mg/l - 96 h EC50 - Daphnia magna (water flea) - 29 mg/l - 24 h

#### Persistence and degradability

No data available.

**Bioaccumulative potential** No data available.

### Mobility in soil

No data available.

# **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**

DOT (US) UN Number: UN1760 Class: 8 Packing Group: II Proper Shipping Name: Corrosive liquids, n.o.s (Sulfuric Acid)

# IMDG

UN Number: UN1760 Class: 8 Packing Group: II Proper Shipping Name: Corrosive liquids, n.o.s (Sulfuric Acid)

IATA UN Number: UN1760 Class: 8 Packing Group: II Proper Shipping Name: Corrosive liquids, n.o.s (Sulfuric Acid)

# **SECTION 15: Regulatory information**

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

# SARA 302 Components

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

### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard for: Sulfuric acid.

### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313: Sulfuric acid

### US EPA TSCA public inventory

Chemical name: Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-CAS number: 2809-21-4 Chemical name: Sulfuric acid CAS number: 7664-93-9

### 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.

# **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.