SAFETY DATA SHEET



SePRO Total Pond – Clear G*

Contains SeClear G Algaecide & Water Quality Enhancer Granule*

Section 1. Identification

GHS product identifier Other means of identification	: SePRO Total Pond – Clear G* Contains Algaecide and Water Quality Enhancer Granule* : Not available.
EPA Registration No.	: 67690-72
-	of the substance or mixture and uses advised against
Aquatic algaecide.	
Supplier's details	: SePRO Corporation 11550 North Meridian Street Suite 600 Carmel, IN 46032 U.S.A. Tel: 317-580-8282 Toll free: 1-800-419-7779 Fax: 317-580-8290 Monday - Friday, 8am to 5pm <u>E.S.T.</u> <u>www.sepro.com</u>
Emergency telephone number (with hours of operation)	: INFOTRAC - 24-hour service 1-800-535-5053
Section 2. Haza	rds identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 191 0.1200).
Classification of the substance or mixture	: ACUTE TOXICITY: ORAL - Category 4 ACUTE TOXICITY: INHALATION - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B AQUATIC TOXICITY (ACUTE) - Category 2 AQUATIC TOXICITY (CHRONIC) - Category 2
GHS label elements	
Hazard pictograms Signal word Hazard statements	: Danger : Toxic if inhaled. Harmful if swallowed. Causes skin and eye irritation.
	Causes skin and eye irritation. Toxic to aquatic life with long lasting effects.

Section 2. Hazards identification

Prevention	: Wear protective gloves. Wear eye or face protection. Use only outdoors or in a well- ventilated area. Avoid accidental release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: Collect spillage. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise	: None known.
Classified	

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

Ingredient name	%	CAS number
Active ingredient Copper Sulfate Pentahydrate Inert ingredient	59.53	7758-99-8
Proprietary ingredient	34-40	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Immediately flush eyes with plenty of room temperature water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Do not use mouth to mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.



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Administer oxygen if breathing is difficult. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

Dermal exposure: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. **Ingestion:** NO NOT INDUCE VOMITING. Wash out mouth with water if victim is conscious. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Immediately call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Note to Physician: Provide general supportive measures and treat symptomatically. Basic Treatment: Establish a patient airway. Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if necessary. Administer oxygen by nonrebreather mask at 10 to 15 L/minutes. Monitor for shock and treat if necessary. For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with normal saline during transport. Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 mL

Indication of immediate medical attention and special treatment needed. if necessary

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Potentially fatal if swallowed. May cause severe irritation to eyes, respiratory system and skin.

Protection of first aid givers: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)



Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: sulfur oxides, copper fumes metal oxide/oxides
Special protective actions for fire-fighters	: No special protection is required.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Runoff from fire control or dilution water may be corrosive and /or toxic and cause pollution.

Section 6. Accidental release measures

Personal precautions. prote	ctive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	s : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Methods and materials for c	containment and cleaning up
Spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Shovel material into waste container, thoroughly wash the area after a spill or leak clean up (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or
	on skin or clothing. Do not breathe fumes. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general coccupational hygiene	 Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, : including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in corrosion resistant container. Floors should be sealed to prevent absorption of this material. Have appropriate extinguishing equipment in this area. Empty containers may contain residual particles and should be handled carefully. Do not cut, grind, weld or drill near this container.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Given as Copper and Inorganic compounds, as Cu; Copper fume as Cu; or Copper dusts, as Cu	ACGIH: 1 mg/m3 TWA (dusts); 0.2 mg/m3 (fume) OSHA: 1 mg/m3 TWA (dusts); 0.1 mg/m3 (fume) NIOSH: 1 mg/m3 TWA (dusts); 0.1 mg/m3 (fume) DFG MAKS: 1 mg/m3 TWA peak (CU and inorganics); 0.1 mg/m3 (fume)

Appropriate engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use corrosion resistant ventilation system and exhaust directly to the outside. Supply ample air replacement. Provide dust collectors with explosion vents.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures	
Hygiene measures Eye/face protection	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead. See NIOSH Guidelines for Copper dust and mists
Skin protection	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Solid . [Granule]
Color	Blue
Odor	: None
Odor threshold	Not available.
рН	÷ 4.1
Melting point	Not available.
Boiling point	: Not available.
Flash point	: Not applicable.
Burning time	: Not applicable.
Burning rate	: Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive	: Not available.
(flammable) limits	- Net evelleble
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 53 lbs/cu ft.
Solubility	: Not available.
Solubility in water	: yes
Partition coefficient: n	: Not available.
octanol/water	
Auto-ignition temperature	: Not available.
Decomposition temperatur	e: Not available.
SADT	: Not available
Viscosity	: Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Copper Sulfate Pentahydrate is hygroscopic, but stable when kept dry, under normal conditions. .

Possibility of hazardous: Under normal conditions of storage and use, hazardous reactions will not occur. **reactions**

Conditions to avoid: High temperatures, exposure to air, incompatible materials.

Incompatible materials: Reactive or incompatible with the following materials: magnesium, strong bases, alkalines, phosphates, acetylene, hydrazine, zinconium.

MSDS

Hazardous decomposition products: Sulfur oxides and copper dioxides.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Copper sulfate pentahydrate	LD50 IP LD50 Oral	Rat Rat	20 mg/kg 300 mg/kg	-

Irritation/Corrosion

NO data available	Result	Species	Score	Exposure	Observation

Sensitization

NO data available		

<u>Mutagenicity</u>

NO data available

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

<u>Teratogenicity</u>

No reports in humans. Animals studies show deficiency or excess of copper in the body can cause significant harm to developing embryos. The net absorption of copper is limited and toxic levels are unlikely from industrial exposure.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely	: Routes of entry anticipated: Oral, Dermal, Inhalation.
routes of exposure	

Potential acute health effects

Eye contact	:	Causes serious eye irritation.
Inhalation	:	Toxic if inhaled.
Skin contact	:	Causes skin irritation.
Ingestion	:	Harmful if swallowed. Irritating to mouth, throat and stomach.

Symptoms related to the physical. chemical and toxicological characteristic

Eyes: Exposure to particulates or solution of this product may cause redness and pain. Prolonged contact may cause conjunctivitis, ulceration, and corneal abnormalities.

Skin: This product can cause irritation of the skin with pain, itching and redness. Severe overexposure can cause skin burns. Prolonged exposure may cause dermatitis and eczema.

Ingestion: Harmful or fatal if swallowed. May cause gastrointestinal irritation with symptoms such as nausea, vomiting, and diarrhea. Ingestion may cause degeneration of liver, kidney, or renal failure. Persons who survive ingestion may develop granulomatous lesions of the kidney. Ingestion of large amounts may lead to convulsions, coma or death.

Inhalation: May irritate the nose, throat, respiratory tract. Symptoms can include sore throat, coughing, shortness of breath. In severe cases, ulceration and perforation of the nasal septum can occur. If this material is heated, inhalation of fumes may lead to development of metal fume fever. This is a flu-like illness with symptoms of metallic taste, fever and chills, aches, coughs. Repeated inhalation exposure can cause shrinking of the lining of the inner nose.

Delaved and immediate effects and also chronic effects from short and long term exposure

Short term exposure	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Long term exposure Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

Numerical measures of toxicity Acute toxicity estimates

There is no data available.

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Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Proprietary ingredient	Acute EC50 6570 µg/l Fresh water Acute IC50 3200 µg/l Fresh water Acute LC50 0.41 mg/L Fresh water Chronic NOEC 4 µg/l Fresh water	Crustaceans - Asellus aquaticus - Adult Daphnia - Daphnia magna Fish - Oncorhynchus mykiss Fish - Salvelinus fontinalis - Eyed stage, eyed embryo	48 hours 48 hours 96 hours 30 days

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

<u>Mobility in soil</u>

Soil/water partition coefficient (Koc)	Not available.

Other adverse effects

Section 13. Disposal considerations

Not available.

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

	DOT Classification	IMDG	ΙΑΤΑ
UN number	UN3077	UN3077	UN3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Solid, N.O.S. (Copper Sulfate Pentahydrate). Marine pollutant (Copper Sulfate Pentahydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Solid N.O.S. (Copper Sulfate Pentahydrate). Marine pollutant (Copper Sulfate Pentahydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Solid N.O.S. (Copper Sulfate Pentahydrate)
Transport hazard class(es)	9	9	9

SePRO Total Pond – Clear G

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Packing group	111	Ш	111	
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Environmental	Yes.	Yes.	Yes.	

Environmental hazards	Yes.	Yes.	Yes.
Additional information	- Limited Quantity Exemption	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Environmentally hazardous substance, solid, n.o.s. (cupric sulfate) Proper shipping name: 9 Hazard Class: Ш Packing Group: Passenger and Aircraft 911 Packing Instructions: Passenger and Cargo Not regulated for air transportation in packages less than 25 lbs. Aircraft Max Net Quantity: Limited Quantity packing instruction (passenger and Not regulated for air transportation in packages less than 25 lbs. cargo aircraft): Limited quantity max net quantity (Passenger and Not regulated for air transportation in packages less than 25 lbs. cargo aircraft): A97 Special provisions: 9L ERG Code: Not regulated for ground or air transportation in packages less than 25 lbs. Limited quantity shipments:



Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	United States inventory (TSCA 8b): All components are listed or exempted.
	Clean Water Act (CWA) 307: Copper Sulfate Pentahydrate
	Clean Water Act (CWA) 311: Proprietary ingredient
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed
SARA 302/304 Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.
<u>SARA 311/312</u>	
Classification	: Immediate (acute) health hazard

Section 15. Regulatory information

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Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Proprietary ingredient	34-40	No.	No.	Yes.	Yes.	No.
Copper Sulfate Pentahydrate	59.53	No.	No.	No.	Yes.	No.

<u>SARA 313</u>

	Product name	CAS number	%
Form R - Reporting requirements	Copper Sulfate Pentahydrate	7758-99-8	59.53
Supplier notification	Copper Sulfate Pentahydrate	7758-99-8	59.53

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	: The following components are listed: Proprietary ingredient	
New York	: The following components are listed: Proprietary ingredient	
New Jersey	: The following components are listed: Proprietary ingredient; Copper Sulfate Pentahydrate	
Pennsylvania	: The following components are listed: Proprietary ingredient; Copper Sulfate Pentahydrate	
<u>California Prop. 65</u>		
No products were found.		
International regulations International lists Chemical Weapons Convention List Schedule I Chemicals Chemical Weapons Convention List Schedule II Chemicals	 Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: All components are listed or exempted. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined. Not listed 	
Chemical Weapons Convention List Schedule	: Not listed	
III Chemicals	Not listed	

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 2 * Flammability: 0 Physical hazards: 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health: 2 Instability: 1 Flammability: 0 Other:

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Historv

Date of issue	: 05/13/15
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.