[MASTER LABEL – COMMERCIAL USE]

Aqua-Tec™

ALGAECIDE / HERBICIDE

FOR USE IN: LAKES; RESERVOIRS [DESTINED FOR DRINKING WATER]; SWIMMING AREAS; FARM, FISH, INDUSTRIAL, GOLF COURSE, ORNAMENTAL AND IRRIGATION PONDS; CROP AND NON-CROP IRRIGATION CONVEYANCE SYSTEMS; CANALS, DITCHES, AND LATERALS; FISH HATCHERIES.

Treats Livestock Water Supplies

FOR LISTED ALGAE & WEED CONTROL

Water treated with Aqua-Tec may be used for swimming, fishing and irrigation.

Active Ingredient:
*Copper Sulfate Pentahydrate (CAS #7758-99-8) 19.8%
Other Ingredients 80.2%
*Metallic copper equivalent 5.04% Total 100.0%

KEEP OUT OF REACH OF CHILDREN
DANGER/PELIGRO

See back/side/other panel(s) [and insert] for Additional Precautionary Statements.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

NET CONTENTS:
1, 2.5 GALLONS (3.78, 9.46 LITERS) / 1 QT (946.3 mL) / 1 PT (473 mL)

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

Have the product container or label with you when calling a poison control center or doctor or going for treatment. [You may also contact 1-800-255-3924 for emergency medical treatment information.]

NOTE TO PHYSICIAN: Probably mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage. Causes skin irritation. Do not get in eyes or on clothing. Harmful if swallowed. Harmful if absorbed through skin.

For applications in waters destined for use as drinking water, those waters must receive additional and separate potable water treatment. Do not apply more than 1.0 ppm as metallic copper in these waters.

For 24-hour assistance or information regarding spill, leak, fire, or exposure to this product, please call Chem-Tel at 1-800-255-3924.

Personal Protective Equipment (PPE):
Mixers, loaders, applicators and other handlers must wear the following:
Long-sleeved shirt and pants,
Protective eye wear such as face shield or goggles
Socks and shoes, and
Chemical-resistant gloves made of any waterproof material.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Waters treated with this product may be hazardous to aquatic organisms. Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. This oxygen loss can cause fish and invertebrate suffocation. To mimimize this hazard, do not treat more than ½ of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Consult with the State or local agency with primary responsibility for regulating pesticides before applying to public waters, to determine if a permit is required

Certain water conditions including low pH (≤6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower), and "soft" waters (i.e., alkalinity less than 50 mg/L), increases the potential acute toxicity to non-target aquatic organisms.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. 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. Do not allow others to enter the treated areas until sprays have settled.

Permits for the use of this product in public water may be required. Check with local authorities.

This product is corrosive to cotton fabrics. Do not allow clothing to come in contact with concentrate or dilution. Application, handling, or storage equipment MUST consist of fiberglass, PVC's, polypropylenes, viton, most plastics, or stainless steel. Never use mild steel, nylon, brass, or copper around full strength Aqua-Tec. Wash spray equipment after each application.

STORAGE AND DISPOSAL

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

Pesticide Storage: Aqua-Tec is a concentrate and must be stored in its original container or handled and stored as outlined above. **Do not allow Aqua-Tec to freeze; freezing may cause product separation**. Keep container closed when not in use. In case of a spill, neutralize with limestone or baking soda before disposal. May deteriorate concrete.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal: [For Containers ≤ 5 Gal] Nonrefillable container. Do not reuse or refill this container. Triple rinse all containers prior to disposal and then offer for recycling, if available, or puncture and dispose of in an approved manner, or dispose by incineration if allowed by local and state authorities. If disposal is by incineration, stay out of smoke. Triple

rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Container Disposal: [For Containers > 5 Gal] Nonrefillable container. Do not reuse or refill this container. Triple rinse all containers prior to disposal and then offer for recycling, if available, or puncture and dispose of in an approved manner, or dispose by incineration if allowed by local and state authorities. If disposal is by incineration, stay out of smoke. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition (approximately 3 to 10 mph), and there are no sensitive areas within 250 feet downwind.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atomospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of copper compounds. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

-The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

-Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the water unless a greater height is required for aircraft safety.

-When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

Do not apply with a nozzle height greater than 4 feet above the water.

PRODUCT INFORMATION

Do not use in residential ornamental fish ponds or other artificial aquaculture systems containing Koi or trout.

Aqua-Tec is effective in controlling a broad range of algae including; *Chara, Spirogyra, Cladophora, Ulothrix,* and *Oscillatoria.*
In addition, **Aqua-Tec** is effective in controlling rooted and floating aquatic plants such as *Hydrilla, Potomogeten sp.,* and Water Hyacinth.
~~The formulation of **Aqua-Tec** protects against the precipitation of copper with carbonates and bicarbonates in the treated water and results in increased time of exposure for **true residual activity**. In addition, this formulation allows for application at any time - including overcast/cloudy conditions as well as **during night-time hours, weather permitting**.~~
Water treated with **Aqua-Tec** may be used for swimming, fishing, livestock watering, and irrigation. For best results, apply when livestock water consumption is low or watering area is not in use. **Aqua-Tec** effectively controls *Chara, Spirogyra, Cladophora, Ulothrix* and *Oscillatoria;* algae growth commonly found in livestock watering tanks, troughs, and ponds.

The mimimum retreatment interval is 14 days. No more than ½ of the body of water may be treated at one time.

ALGAECIDE APPLICATION

Aqua-Tec can be applied by simply pouring into the water, as a surface spray, or by injection. For effective control, the proper chemical concentration should be maintained for a minimum of three hours duration to assure adequate uptake. The application rates in the chart below are based on static or low flow conditions. When significant dilution occurs from inflow of untreated waters within the three-hour period the chemical may need to be metered. (See drip system application)

- Identify the algae growth present as one of the following: planktonic, filamentous, or *Chara*.
- Determine the surface area and average depth to be treated.
- Refer to the chart below to determine gallons of **Aqua-Tec** to apply per surface acre.

CHART 1

Application Rates
Gallons of Product per Surface Acre

Algae Type	ppm Copper	Average Depth in Feet			
		1 ft.	2 ft.	3 ft.	4 ft.
Planktonic	**0.2**	**1.0 gal.**	**2.2 gal.**	**3.2 gal.**	**4.3 gal.**
Filamentous	**0.2**	**1.0 gal.**	**2.2 gal.**	**3.2 gal.**	**4.3 gal.**
Chara	**0.4**	**2.2 gal.**	**4.3 gal.**	**6.5 gal.**	**8.6 gal.**

For planktonic algae and free floating filamentous algal mats, application rates should be based on treating the upper 3 - 4 feet of water where the algae is growing. The minimum retreatment interval is 14 days. No more than ½ of the body of water may be treated at one time. Begin application near the shoreline and apply outward in bands to avoid trapping fish in coves or enclosed areas.

Before application, dilute at the rate of 1 gallon of **Aqua-Tec** in 10 gallons of water. For quickest results, apply when conditions are calm and sunny. However, this product can also be applied **during night time hours, weather permitting**. A hand or power sprayer may be used. Treat shoreline areas first and then continue treatment, as needed, into main water body.

For algaecide application in aquaculture systems such as fish ponds and fish hatcheries, do not exceed 0.4 ppm metallic cooper (¼ fluid ounce of Aqua-Tec per 265 gallons of water).

For algaecide application in waters used for livestock: For water holding or storage tanks, stock watering ponds, tanks, and troughs, apply ¼ fluid ounce of **Aqua-Tec** per 265 gallons of water (8 milliliters per 1,000 liters) to achieve the desired 0.4 PPM (mg/L) of copper for algae control. Product can be simply added to the water column (body of water) as the residual control will allow for even distribution throughout the water column. Where existing algae mats are present at time of treatment, most effective control will be obtained by breaking up mats and/or evenly dispersing diluted **Aqua-Tec** over the algae mats. Apply **Aqua-Tec** as needed to control and prevent algae growth; more frequent applications may be needed in times of higher water temperatures.

DETERMINE VOLUME OF TANK, TROUGH OR POND WATER TO BE TREATED.
Measure length (L), width (W), and average depth (D) in feet (ft.) or meters (m) and calculate volume using one of the following formulas:
*For square or rectangular tanks, troughs and ponds:
L(ft.) x W(ft.) x D(ft.) x 7.5 = Gallons
L(m) x W(m) x D(m) x 1000 = Liters
*For circular or elliptical tanks, troughs and ponds:
L(ft.) x W(ft.) x D(ft.) x 5.9 = Gallons
L(m) x W(m) x D(m) x 786 = Liters

HERBICIDE APPLICATION

For rooted and submerged plants

Control of many rooted and submerged plants such as *Hydrilla* and *Potomogeton* can be obtained from use of **Aqua-Tec** to give copper concentrations at 0.4 - 1.0 ppm. Choose the application rate dependent upon the density and stage of growth and the water depth from the chart below.

Application Rates
Gallons of Product per Surface Acre

Growth stage	ppm	Average Depth in Feet			
Relative Density	Copper	1	2	3	4
(Low Density)					
Early Season	0.4	2.2	4.4	6.6	8.8
(Moderate Density)					
Mid Season	0.7	3.8	7.6	11.4	15.2
(Heavy Density)					
Late Season	1.0	5.4	10.8	16.2	21.6

Before application, dilute at the rate of 1 gallon of **Aqua-Tec** in 10 gallons of water. Application rates for depths greater than 4 feet may be obtained by adding the rates above to give the proper depth. Do not exceed a copper concentration of 1.0 ppm copper in the treated water.

FOR WATER HYACINTH CONTROL

The following mixture can be used as a **control** method for water hyacinth and other floating aquatic vegetation.
Mix 1 gallon of **Aqua-Tec** per 7 gallons of water. Apply directly to exposed vegetation to cover 8,700 to 20,000 sq. ft. [Mix 1 quart of **Aqua-Tec** per 1.75 gallons of water. Apply directly to exposed vegetation to cover 2,175 to 5,000 sq. ft.] Do not exceed 5.4 gallons of **Aqua-Tec** per surface acre of treated area. In areas of heavy infestation, multiple applications may be required. Applications may be repeated after 14 days. Non-ionic adjuvants should be used with this product to improve dispersion and/or adhesion.

DRIP SYSTEM APPLICATION FOR FLOWING WATER

Aqua-Tec should be applied as soon as algae or plants begin to interfere with normal or desired water uses. Heavy infestations and flows may cause poor chemical distribution resulting in unsatisfactory control. Under these conditions, continuous feed systems offer advantage.
Prior to treatment, it is important to determine the water flow rates. In the absence of weirs or flow determining devices for this information, water flow may be estimated as shown below.

Avg. Width X Avg. Depth X Velocity in feet/sec. X 0.9 = CFS(Cubic Feet/Second)

Velocity is the time it takes for a floating object to move a given distance. For example, if a leaf travels 6 feet across the water in 60 seconds, the Velocity equals 0.1 (6/60 = 0.1) This measurement should be made as the average of at least three determinations taken at the treatment location.

Calculate the drip rate of **Aqua-Tec** from the chart below (based on heavy algae growth).

Water Flow Rate		Aqua-Tec drip rate		
CFS	**Gal./Min.**	**Qts./Hr.**	**ML/Min.**	**Fl. Oz./Min.**
1	**450**	**1.8**	**29**	**1.0**
2	**900**	**3.6**	**58**	**2.0**
3	**1350**	**5.4**	**85**	**3.0**
4	**1800**	**7.2**	**113**	**3.8**
5	**2250**	**9.0**	**142**	**5.0**

To maintain the copper level at 1.0 ppm for 4 hours, calculate the amount of **Aqua-Tec** needed by multiplying Qts./Hr., ML/Min., or Fl. Oz./Min. by 4. The chemical must be introduced at a point of turbulence.

Place the required amount of **Aqua-Tec** into a tank equipped with a needle valve and set the drip rate as required using a stop watch and a measuring tube. Readjust as required if flows change. Distance of control will vary. Treatment points should be determined in the field and placed at the required intervals for control. Periodic maintenance treatments may be required.

For Drip-system Use in Livestock Watering Tanks: Tanks fed by a continuous flow of spring or well water may be equipped with a chemical drip system designed to meter-in **Aqua-Tec** based upon water flow rates. Systems should be adjusted to maintain a concentration of 0.4 PPM (mg/L) copper in incoming stock water. Pre-dilute by mixing 1 gallon of **Aqua-Tec** with 115 gallons of water. Calibrate metering valve to establish a drip rate of 1 fl. oz./min. per 10 gal./min. water flow rate or 40 ml/min. per 50 L/min. water flow rate. Treat continuously or as needed to control and prevent algae regrowth.

TREATMENT NOTES

The following suggestions apply to the use of **Aqua-Tec** as an algaecide or herbicide:

- The product works best at temperatures at or above 60 degrees F.
- Treat when growth first appears or nuisance is first noted.
- Apply in a manner to insure even distribution in the treatment area.
- Retreat as required. The minimum retreatment interval is 14 days.

Conversion factors: ***cubic feet* X *7.48 = gallons***
***one acre/foot = 326,000 gallons* (one acre = 43,560 square feet)**

To calculate number of gallons or liters:

For square or rectangular bodies of water: L(ft.) x W(ft.) x D(ft.) x 7.5 = Gallons
L(m) x W(m) x D(m) x 1000 = Liters

For circular or elliptical bodies of water: L(ft.) x W(ft.) x D(ft.) x 5.9 = Gallons
L(m) x W(m) x D(m) x 786 = Liters

WARRANTY

Read and follow all package directions carefully. To the extent consistent with applicable law, purchaser and user assume all risks associated with improper use, or application or other factors beyond Blue Water Chem Group's control. Blue Water Chem Group warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the risks referred to above. BLUE WATER CHEM GROUP MAKES NO AND THE LAW SHALL NOT FIND ANY EXPRESSED OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Purchaser's and user's sole remedy against Blue Water Chem Group for any cause of action related to the handling or use of this product shall be for damages, the amount of which shall not exceed the price paid for the product that causes the alleged loss, damages, injury or other claim. To the extent consistent with applicable law, in no event shall Blue Water Chem Group be liable for special indirect, incidental or consequential damages or expenses.
By purchasing or using this product purchaser or user accept the foregoing conditions of sale and limitation of warranty, liability and remedies.

Blue Water Chem Group
P.O. Box 11384
Fort Wayne, IN 46857

[Batch Code to be added at production.]

OPTIONAL MARKETING TEXT/GRAPHICS THAT MAY BE FEATURED ON LABEL(S):

Is it important to know which type of algae or weed is in my pond?[stock tank?]

YES. Certain types of algae require a more concentrated treatment than others. It is important to know exactly which type of algae you are treating to ensure that you do not over treat or under treat your pond. Examples of the different types of algae can be found below. Refer to this label and attached insert for appropriate use rates.

ALGAE

PLANKTONIC ALGAE: Microscopic growth often visible as a greenish tinge suspended in the upper few feet of water. Severe blooms may resemble peas soup and actually thicken the water.

FILAMENTOUS ALGAE: Individual filaments a series of cells joined end to end that five a thread-like appearance. Often referred to as pond scum or moss. Forms surface "mats". Growth begins at the bottom and rises to the surface as a bubble-filled mass. May also form fur-like growths on logs and rocks at the bottom.

CHARA ALGAE (Chara vulgaris): Leaf-like structures whorled around hollow stem. Dense growth attached, but not rooted to bottom. May "carpet" large areas of a lake or pond bottom. Strong musky odor when crushed. May have a gritty texture due to mineral deposits on the surface. Do not confuse with higher weeds.

SUBMERSED WEEDS

HYDRILLA (Hydrilla verticillata): Leaves whorled in groups. Hydrilla leaves have a serrated edge.Whorls of leaves are compact near the growing tips. Spacing between whorls increases further down the stem.

PONDWEED (Potamogeton species): Leaves are stiff, narrow and thread like. Stems branched with leaves alternately attached. Spreading leaves resemble a fan with an overall bushy appearance. Nutlets appear like beads on a string. Tiny green flower appears on a spike along with nutlets above the water surface.

[SUB LABEL A – RESIDENTIAL USE]

Aqua-Tec™

ALGAECIDE / HERBICIDE

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Treats Livestock Water Supplies

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Water treated with Aqua-Tec may be used for swimming, fishing and irrigation.

Active Ingredient:

*Copper Sulfate Pentahydrate (CAS #7758-99-8)	19.8%
Other Ingredients	80.2%
*Metallic copper equivalent 5.04% Total	100.0%

KEEP OUT OF REACH OF CHILDREN
DANGER

See back/side/other panel(s) [and insert] for Additional Precautionary Statements.

NET CONTENTS: 1, 2.5 GALLONS (3.78, 9.46 LITERS) / 1 QT (946.3 ml)

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If Swallowed: Call a 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. [You may also contact 1-800-255-3924 for emergency medical treatment information.]

NOTE TO PHYSICIAN: Probably mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage. Causes skin irritation. Do not get in eyes or on clothing. Harmful if swallowed. Harmful if absorbed through skin. Wear goggles or face shield, long-sleeved shirt and long pants, socks, shoes and chemical resistant gloves made of any waterproof material.

For applications in waters destined for use as drinking water, those waters must receive additional and separate potable water treatment. Do not apply more than 1.0 ppm as metallic copper in these waters.

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This product is corrosive to cotton fabrics. Do not allow clothing to come in contact with concentrate or dilution. Application, handling, or storage equipment MUST consist of fiberglass, PVC's, polypropylenes, viton, most plastics, or stainless steel. Never use mild steel, nylon, brass, or copper around full strength Aqua-Tec. Wash spray equipment after each application.

STORAGE AND DISPOSAL

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

Pesticide Storage: Aqua-Tec is a concentrate and must be stored in its original container or handled and stored as outlined above. **Do not allow Aqua-Tec to freeze; freezing may cause product separation**.

Keep container closed when not in use. In case of a spill, neutralize with limestone or baking soda before disposal. May deteriorate concrete.

Pesticide Disposal: *If partly filled* – Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Container Disposal: *If empty* – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

INFORMATION

Do not use in residential ornamental fish ponds or other artificial aquaculture systems containing Koi or trout.

Aqua-Tec is effective in controlling a broad range of algae including; *Chara, Spirogyra, Cladophora, Ulothrix,* and *Oscillatoria.*

In addition, **Aqua-Tec** is effective in controlling rooted and floating aquatic plants such as *Hydrilla, Potomogeten sp.,* and Water Hyacinth.

~~The formulation of **Aqua-Tec** protects against the precipitation of copper with carbonates and bicarbonates in the treated water and results in increased time of exposure for **true residual activity**. In addition, this formulation allows for application at any time - including overcast/cloudy conditions as well as **during night-time hours, weather permitting**.~~

Water treated with **Aqua-Tec** may be used for swimming, fishing, drinking, livestock watering, and irrigation. For best results, apply when livestock water consumption is low or watering area is not in use. **Aqua-Tec** effectively controls *Chara, Spirogyra, Cladophora, Ulothrix* and *Oscillatoria;* algae growth commonly found in livestock watering tanks, troughs, and ponds.

The minimum retreatment interval is 14 days. No more than ½ of the body of water may be treated at one time.

ALGAECIDE APPLICATION

Aqua-Tec can be applied by simply pouring into the water, as a surface spray, or by injection. For effective control, the proper chemical concentration should be maintained for a minimum of three hours duration to assure adequate uptake. The application rates in the chart below are based on static or low flow conditions. When significant dilution occurs from inflow of untreated waters within the three-hour period the chemical may need to be metered. (See drip system application)

- Identify the algae growth present as one of the following: planktonic, filamentous, or *Chara*.
- Determine the surface area and average depth to be treated.
- Refer to the chart below to determine the amount of **Aqua-Tec** to apply per 1000 sq. ft. of surface area.

CHART 1

Application Rates
Amount of Aqua-Tec per 1,000 Sq. Ft. Surface Area

Algae Type	ppm Copper	Average Depth in Feet			
		1 ft.	2 ft.	3 ft.	4 ft.
Planktonic	**0.2**	**3.5 fl. oz.**	**6.5 fl. oz.**	**9.5 fl. oz.**	**13.0 fl. oz.**
Filamentous	**0.2**	**3.5 fl. oz.**	**6.5 fl. oz.**	**9.5 fl. oz.**	**13.0 fl. oz.**
Chara	**0.4**	**6.5 fl. oz.**	**13.0 fl. oz.**	**19.0 fl. oz.**	**25.5 fl. oz.**

For planktonic algae and free floating filamentous algal mats, application rates should be based on treating the upper 3 - 4 feet of water where the algae is growing. The minimum retreatment interval is 14 days. No more than ½ of the body of water may be treated at one time. Begin application near the shoreline and apply outward in bands to avoid trapping fish in coves or enclosed areas.

Before application, dilute at the rate of 1 gallon of **Aqua-Tec** in 10 gallons of water. For quickest results, apply when conditions are calm and sunny. However, this product can also be applied **during night time hours, weather permitting**. A hand or power sprayer may be used. Treat shoreline areas first and then continue treatment, as needed, into main water body.

For algaecide application in aquaculture systems such as fish ponds and fish hatcheries, do not exceed 0.4 ppm metallic cooper (¼ fluid ounce of Aqua-Tec per 265 gallons of water).

For algaecide application in waters used for livestock: For water holding or storage tanks, stock watering ponds, tanks, and troughs, apply ¼ fluid ounce of **Aqua-Tec** per 265 gallons of water (8 milliliters per 1,000 liters) to achieve the desired 0.4 PPM (mg/L) of copper for algae control. Product can be simply added to the water column (body of water) as the residual control will allow for even distribution throughout the water column. Where existing algae mats are present at time of treatment, most effective control will be obtained by breaking up mats and/or evenly dispersing diluted **Aqua-Tec** over the algae mats. Apply **Aqua-Tec** as needed to control and

prevent algae growth; more frequent applications may be needed in times of higher water temperatures.

DETERMINE VOLUME OF TANK, TROUGH OR POND WATER TO BE TREATED.
Measure length (L), width (W), and average depth (D) in feet (ft.) or meters (m) and calculate volume using one of the following formulas:
*For square or rectangular tanks, troughs and ponds:
L(ft.) x W(ft.) x D(ft.) x 7.5 = Gallons
L(m) x W(m) x D(m) x 1000 = Liters
*For circular or elliptical tanks, troughs and ponds:
L(ft.) x W(ft.) x D(ft.) x 5.9 = Gallons
L(m) x W(m) x D(m) x 786 = Liters

HERBICIDE APPLICATION

For rooted and submerged plants

Control of many rooted and submerged plants such as *Hydrilla* and *Potomogeton* can be obtained from use of **Aqua-Tec** to give copper concentrations at 0.4 - 1.0 ppm. Choose the application rate dependent upon the density and stage of growth and the water depth from the chart below.

Application Rates
Fluid Ounces of Aqua-Tec per 1,000 Sq. Ft. Surface Area

Growth stage	ppm	Average Depth in Feet			
Relative Density	Copper	1	2	3	4
(Low Density)					
Early Season	0.4	6.5 fl. oz.	13.0 fl. oz.	19.25 fl. oz.	25.5 fl. oz.
(Moderate Density)					
Mid Season	0.7	11.0 fl. oz.	22.5 fl. oz.	33.5 fl. oz.	45.0 fl. oz.
(Heavy Density)					
Late Season	1.0	16.0 fl. oz.	32.0 fl. oz.	48.0 fl. oz.	64.0 fl. oz.

Before application, dilute at the rate of 1 pint of **Aqua-Tec** in 1.25 gallons (1 quart of Aqua-Tec in 2.5 gallons)(1 gallon of Aqua-Tec in 10 gallons) of water. Application rates for depths greater than 4 feet may be obtained by adding the rates above to give the proper depth. Do not exceed a copper concentration of 1.0 ppm copper in the treated water.

FOR WATER HYACINTH CONTROL

The following mixture can be used as a **control** method for water hyacinth and other floating aquatic vegetation.
Mix 1 gallon of **Aqua-Tec** per 7 gallons of water. Apply directly to exposed vegetation to cover 8,700 to 20,000 sq. ft. [Mix 1 quart of **Aqua-Tec** per 1.75 gallons of water. Apply directly to exposed vegetation to cover 2,175 to 5,000 sq. ft.][Mix 1 pint of Aqua-Tec per 6.5 pints of water.] Do not exceed 1 pint of **Aqua-Tec** per 1,000 sq. ft. of treated surface area. In areas of heavy infestation, multiple applications may be required. Applications may be repeated after 14 days. Non-ionic adjuvants should be used with this product to improve dispersion and/or adhesion.

DRIP SYSTEM APPLICATION FOR FLOWING WATER

Aqua-Tec should be applied as soon as algae or plants begin to interfere with normal or desired water uses. Heavy infestations and flows may cause poor chemical distribution resulting in unsatisfactory control. Under these conditions, continuous feed systems offer advantage. Prior to treatment, it is important to determine the water flow rates. In the absence of weirs or flow determining devices for this information, water flow may be estimated as shown below.

Avg. Width X Avg. Depth X Velocity in feet/sec. X 0.9 = CFS(Cubic Feet/Second)

Velocity is the time it takes for a floating object to move a given distance. For example, if a leaf travels 6 feet across the water in 60 seconds, the Velocity equals 0.1 (6/60 = 0.1) This measurement should be made as the average of at least three determinations taken at the treatment location.

Calculate the drip rate of **Aqua-Tec** from the chart below (based on heavy algae growth).

Water Flow Rate		**Aqua-Tec drip rate**		
CFS	**Gal./Min.**	**Qts./Hr.**	**ML/Min.**	**Fl. Oz./Min.**
1	**450**	**1.8**	**29**	**1.0**
2	**900**	**3.6**	**58**	**2.0**
3	**1350**	**5.4**	**85**	**3.0**
4	**1800**	**7.2**	**113**	**3.8**
5	**2250**	**9.0**	**142**	**5.0**

To maintain the copper level at 1.0 ppm for 4 hours, calculate the amount of **Aqua-Tec** needed by multiplying Qts./Hr., ML/Min., or Fl. Oz./Min. by 4. The chemical must be introduced at a point of turbulence.

Place the required amount of **Aqua-Tec** into a tank equipped with a needle valve and set the drip rate as required using a stop watch and a measuring tube. Readjust as required if flows change. Distance of control will vary. Treatment points should be determined in the field and placed at the required intervals for control. Periodic maintenance treatments may be required.

For Drip-system Use in Livestock Watering Tanks: Tanks fed by a continuous flow of spring or well water may be equipped with a chemical drip system designed to meter-in **Aqua-Tec** based upon water flow rates. Systems should be adjusted to maintain a concentration of 0.4 PPM (mg/L) copper in incoming stock water. Pre-dilute by mixing 1 pint of **Aqua-Tec** with 14.25 gallons [1 quart of **Aqua-Tec** with 28.75 gallons][1 gallon of Aqua-Tec with 115 gallons] of water. Calibrate metering valve to establish a drip rate of 1 fl. oz./min. per 10 gal./min. water flow rate or 40 ml/min. per 50 L/min. water flow rate. Treat continuously or as needed to control and prevent algae regrowth.

TREATMENT NOTES

The following suggestions apply to the use of **Aqua-Tec** as an algaecide or herbicide:

- The product works best at temperatures at or above 60 degrees F.
- Treat when growth first appears or nuisance is first noted.
- Apply in a manner to insure even distribution in the treatment area.
- Retreat as required. The minimum retreatment interval is 14 days.

Conversion factors: ***cubic feet* X *7.48 = gallons***
***one acre/foot = 326,000 gallons* (one acre = 43,560 square feet)**

To calculate number of gallons or liters:

For square or rectangular bodies of water: L(ft.) x W(ft.) x D(ft.) x 7.5 = Gallons
L(m) x W(m) x D(m) x 1000 = Liters

For circular or elliptical bodies of water: L(ft.) x W(ft.) x D(ft.) x 5.9 = Gallons
L(m) x W(m) x D(m) x 786 = Liters

WARRANTY

Read and follow all package directions carefully. To the extent consistent with applicable law, purchaser and user assume all risks associated with improper use, or application or other factors beyond Blue Water Chem Group's control. Blue Water Chem Group warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the risks referred to above. BLUE WATER CHEM GROUP MAKES NO AND THE LAW SHALL NOT FIND ANY EXPRESSED OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Purchaser's and user's sole remedy against Blue Water Chem Group for any cause of action related to the handling or use of this product shall be for damages, the amount of which shall not exceed the price paid for the product that causes the alleged loss, damages, injury or other claim. To the extent consistent with applicable law, in no event shall Blue Water Chem Group be liable for special indirect, incidental or consequential damages or expenses.
By purchasing or using this product purchaser or user accept the foregoing conditions of sale and limitation of warranty, liability and remedies.

Blue Water Chem Group
P.O. Box 11384
Fort Wayne, IN 46857

[Batch Code to be added at production.]

OPTIONAL MARKETING TEXT/GRAPHICS THAT MAY BE FEATURED ON SUBREGISTRANT LABEL(S):

Is it important to know which type of algae or weed is in my pond?[stock tank?]

YES. Certain types of algae require a more concentrated treatment than others. It is important to know exactly which type of algae you are treating to ensure that you do not over treat or under treat your pond. Examples of the different types of algae can be found below. Refer to this label and attached insert for appropriate use rates.

ALGAE

PLANKTONIC ALGAE: Microscopic growth often visible as a greenish tinge suspended in the upper few feet of water. Severe blooms may resemble peas soup and actually thicken the water.

FILAMENTOUS ALGAE: Individual filaments a series of cells joined end to end that five a thread-like appearance. Often referred to as pond scum or moss. Forms surface "mats". Growth begins at the bottom and rises to the surface as a bubble-filled mass. May also form fur-like growths on logs and rocks at the bottom.

CHARA ALGAE (Chara vulgaris): Leaf-like structures whorled around hollow stem. Dense growth attached, but not rooted to bottom. May "carpet" large areas of a lake or pond bottom. Strong musky odor when crushed. May have a gritty texture due to mineral deposits on the surface. Do not confuse with higher weeds.

SUBMERSED WEEDS

HYDRILLA (Hydrilla verticillata): Leaves whorled in groups. Hydrilla leaves have a serrated edge.Whorls of leaves are compact near the growing tips. Spacing between whorls increases further down the stem.

PONDWEED (Potamogeton species): Leaves are stiff, narrow and thread like. Stems branched with leaves alternately attached. Spreading leaves resemble a fan with an overall bushy appearance. Nutlets appear like beads on a string. Tiny green flower appears on a spike along with nutlets above the water surface.