



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Antimicrobials Division (7510P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

93829-1

Date of Issuance:

1/4/2021

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Blue-Ion

Name and Address of Registrant (include ZIP Code):

Kevin Kutcel
Caribbean Chemical Industries, Corp.
PO Box 7671
Ponce, Puerto Rico 00732


Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above-named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5).

Signature of Approving Official:


Eric Miederhoff
Product Manager 31
Regulatory Management Branch I
Antimicrobials Division (7510P)
Office of Pesticide Programs

Date:

1/4/2021

1. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 93829-1.”
2. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Assurance.

Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 05/15/2020

If you have any questions, please contact Karen Leavy via email at Karen.leavy@epa.gov or Eric Miederhoff at Miederhoff.eric@epa.gov.

Enclosure; Stamped label

Blue-ION

Algicide

ACTIVE INGREDIENT

Copper Sulfate Pentahydrate (CAS #7758-99-8).....18.16%

INERT INGREDIENTS:81.84%

TOTAL100.00%

Metallic Copper not less than 4.00%

EPA Registration No. 93829-R

EPA Establishment No. 93829-PR-1

Lot. Number: _____

Net Weight: _____ Lbs



Certified to NSF/ANSI 60

Maximum use for Potable Water
19 mg/L

ACCEPTED

01/04/2021

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 93829-1

DOT [CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., CLASS 8, UN 3264, PG III, RQ]

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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.)

FIRST AID

If in eyes:	<ul style="list-style-type: none"> • 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 swallowed:	<ul style="list-style-type: none"> • Call a Poison Center or doctor/physician 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.
If on skin or clothing:	<ul style="list-style-type: none"> • 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 inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, or at <http://npic.orst.edu>.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING! / AVISO! Corrosive. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Causes skin irritation. Do not get on skin or on clothing. Harmful if absorbed through skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. Wear safety goggles or face shield, neoprene coveralls, gloves and boots. Use only with adequate ventilation.

For applications in waters destined for use as drinking water, those waters must receive additional and separate potable water treatment. **Maximum use for Potable Water 19 mg/L (1.0 ppm as metallic copper).**

Environmental Hazards

Fish Advisory Statement: This copper product is toxic to fish and aquatic organisms. Unlike most organic pesticides, copper is an element and will not break down in the environment and will therefore accumulate with repeated applications. Copper is a micronutrient, but its pesticidal application rate exceeds the amount of copper needed as a nutrient.

Stormwater Advisory Statement: This product may be applied for the purposes of root intrusion control in storm drains or storm sewers that can discharge directly or indirectly into ephemeral or permanent waterbodies. This product must not be used in any municipal or public storm sewer or "MS4" system, or any storm drain system otherwise covered under an NPDES MS4 discharge permit. Copper will accumulate with repeated applications in the waterbodies to which treated storm drains/sewers discharge.

To the extent possible, avoid simultaneous treatments of multiple drain systems that discharge to the same waterbody. Staggering applications to individual stormwater collection points to allow interceding storm events to clear the product from previously treated drains can help reduce the impact to aquatic organisms in receiving waterbodies. Development of and adherence to, a pesticide management plan for storm drains is encouraged.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Personal Protective Equipment

Mixers, loaders, applicators, and other handlers must wear the following:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any water-proof material
- Protective shoes plus socks
- Goggles or face shield
- Neoprene or Water Proof Coveralls

Some materials that are chemical-resistant to this product are polyvinyl chloride, nitrile rubber, or butyl rubber. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection chart.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated by this product. Do not reuse them. 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.

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. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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 use in residential ornamental fish ponds or other artificial aquaculture systems containing trout. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls, shoes plus socks, chemical-resistant gloves made of any waterproof material, and protective eyewear.

Treatment Instructions

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 atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or unstable 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 safety. Do not release spray at a height greater than 10 feet above the crop canopy 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.

If the algae cover more than one-third of the total water area, treat in sections.

- Begin treatment soon after plant growth has started.
- When in doubt about the concentration required for control, first use the lower concentration.
 - If needed, gradually increase to the higher concentration until the algae are killed.
- If possible, curtail the flow of water before treatment and hold dormant for approximately three days after treatment, or until the algae have begun to die.
- If treatment is delayed until a large amount of algae is present, larger quantities of Blue-ION will be required. Generally, larger quantities of Blue-ION will also be required to control algae growth when water temperatures are low (below 60°F), in hard water, and in water that is free flowing. Static water requires less chemical for algae control than does flowing water.
- For best results, treat algae on a sunny day when the heavy mats of filamentous algae are most likely to be floating on the surface, where it can be sprayed directly.

Application Rates

Pre-Application Dose Determination: For algae and aquatic plant treatments, applicators should conduct initial dose determination tests simulating a full-scale treatment program to determine the minimum efficacious concentrations for eliminating the target species, unless an effective dose is already known for the given target pest population.

To Control Algae in, Lakes, Reservoirs, Ponds and Lagoons, Livestock Watering Systems, Potable Water Supplies and Sedimentation Basins:

Disperse Blue-ION evenly throughout the body of water. For fish-bearing lakes, drinking water reservoirs, irrigation canals, ponds, and other applications, apply at the rate of 945 ml of Blue-ION per 250,000 gallons of water or 3,785 ml of Blue-ION per 1,000,000 gallons of water. This will yield a rate of 0.06 ppm metallic copper.

For drinking water applications; do not exceed 3,785 ml of Blue-ION per 60,000 gallons of water (1.0 ppm metallic copper) under any circumstances.

For wastewater lagoons, ponds or lakes without fish for apply at the rate of 945 ml of Blue-ION per 15,000 gallons of water or 3,785 ml of Blue-ION per 60,000 gallons of water. This will yield a rate of 1.0 ppm metallic copper.

Do not apply Blue-ION to water less than 40 ppm alkalinity without first doing a preliminary toxicity test on fish in the water in a separate container.

Use conversions for calculating water volume and flow rates. To calculate the capacity of water storage containment in gallons, multiply the water volume in cubic feet by 7.5

Conversions: 1 cfs/hr = 27,000 gallons
1 acre foot = 326,000 gallons

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 biomass. This oxygen loss can cause fish and invertebrate

suffocation. To minimize this hazard, do not treat more than ½ of the water body and wait at least 14 days between treatments to avoid depletion of oxygen due to decaying vegetation (excluding water infrastructure and constructed conveyances such as drainage and irrigation canals, ditches and pipelines or intakes and aqueducts for drinking water or irrigation use). Begin treatment along the shore and proceed outward 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.

Application of algacides to high density blooms of cyanobacteria can result in the release of intracellular contents into the water. Some of these intracellular compounds are known mammalian hepato- and nervous system toxins. Therefore, to minimize the risk of toxin leakage, manage cyanobacteria effectively in order to avoid applying this product when blooms of toxin-producing cyanobacteria are present at high density. In situations where rapidly reproducing toxic algal species pose a public health threat to drinking or recreational water resources, applicators must receive authorization from applicable state, local or tribal water resources authorities to apply copper at intervals shorter than 14 days should the circumstance demand.

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. The application rates on this label are appropriate for water with pH values > 6.5 , DOC levels > 3.0 mg/L, and alkalinity greater than 50 mg/L. Avoid treating waters with pH values < 6.5 , DOC levels > 3.0 , and alkalinity less than 50 ppm (e.g., soft or acid waters), as trout and other sensitive species of fish may be killed under such conditions if present. Consult your state department of natural resources or fish and game agency before applying this product to public waters. Permits may be required before treating such waters.

To Control Odor-Causing Bacteria: Application rates may vary depending on amounts of organics in application areas. Blue-ION can be applied directly from the container into the pit or pond. Several application points speed up dispersal. Blue-ION will help control odor-causing bacteria in 7 to 12 days. Repeat application when odors reoccurs.

Application Instructions

There are several methods by which to apply Blue-ION to impounded water. Probably the simplest and most satisfactory method is to dissolve the Blue-ION in water and spray the solution over the body of the water. Another method is to broadcast the Blue-ION directly on the water surface from a properly equipped boat.

A specially equipped air blower can be used to discharge the product at a specific rate over the surface of the water. When using this method, the wind direction is an important factor. Do not use this method unless completely familiar with this type of application. Begin treatment along the shoreline and proceed outward until one-third to one-half of the total area has been treated. Continue dragging the burlap bags over the treated area until the minimum dosage is achieved and all Blue-ION have been dissolved. Blue-Ion can also be applied to impounded waters by injecting the Blue-ION solution in water via a piping system.

To Control Algae and Pond Weeds on Irrigation Systems

When preparing a Blue-ION solution in water, the mixing container should be made of fiberglass or plastic. When using Blue-Ion it may be considered to control algae the following parameters: water temperature, the type and amount of vegetation to be controlled, the water hardness and the amount of water flow in. Treatment of algae can result in oxygen loss from the decomposition of dead algae. This loss can cause fish suffocation. If the algae cover more than one-third of the total water area, treat in sections.

Begin treatment soon after plant growth has started. When in doubt about the concentration required for control, first use the lower concentration. If needed, gradually increase to the higher concentration until the algae are killed. If possible, curtail the flow of water before treatment and hold dormant for approximately three days after treatment, or

until the algae have begins to die. If treatment is delayed until a large amount of algae is present, larger quantities of Blue-ION will be required. Generally, larger quantities of Blue-ION will also be required to control algae growth when water temperatures are low (below 60°F), in hard water, and in water that is free flowing. Static water requires less chemical for algae control than does flowing water. For best results, treat algae on a sunny day when the heavy mats of filamentous algae are most likely to be floating on the surface, where it can be sprayed directly.

For Irrigation Systems; do not exceed 3,785 ml of Blue-ION per 60,000 gallons of water (1.0 ppm metallic copper) under any circumstances.

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 - When using this method, the wind direction is an important factor. Do not use this method unless completely familiar with this type of application.
 - Begin treatment along the shoreline and proceed outward until one-third to one-half of the total area has been treated. Continue dragging the burlap bags over the treated area until the minimum dosage is achieved and all Blue-ION have been dissolved. Blue-Ion can also be applied to impounded waters by injecting the Blue-ION solution in water via a piping system.

Instructions for use in Sewer Treatment - Root Destroyer

Plant roots can penetrate through small cracks and poorly sealed joints of sewer lines. If not controlled, these small roots will continue to grow larger in number causing breakage, reduced flow, and eventual flow stoppage. Copper Sulfate is an effective means to control roots in residential and commercial sewers.

Do not apply Copper Sulfate through sink or tub drains, as it will corrode the metal drains.

Root destroyer added to an active 300 gallons septic tank at up to 2 lb. per treatment will temporarily reduce bacterial action, but it will return to normal approximately 15 days after treatment. Trees and shrubbery growing near a treated line normally are not affected due to only a small portion of their roots being in contact with the Root Destroyer; only those roots inside the leach line are killed.

Root Control in Pipes and Sewers: As a preventive measure and at times of reduced flow (some water flow is essential), apply Blue-Ion into each junction or terminal manhole every 6-12 months. For reduced flow due to root masses, add Blue-ION in the next manhole above the reduced flow area. For complete stoppage, first penetrate the mass with a rod to enable some flow before treatment.

For sewers that discharge effluent to a publicly owned treatment works (POTW) facility, do not apply more than maximum annual application rate of 1 lb metallic copper.

Root Control in Storm Drains: Apply when water flow is light. If no water flow, as in dry weather, use a hose to produce a flow. Do not exceed 37.85 ml of Blue-ION per 600 gallons of water (1.0 ppm metallic copper) under any circumstances.

For storm drains that directly or indirectly discharge into ephemeral or permanent waterbodies, the maximum annual application rate is 0.5 lbs metallic copper per drain per year. This product may not be used in municipal or public storm drains and storm sewers.

NOTE: Copper sulfate added to an active 300 gallons septic tank at 2 pounds per treatment will temporarily reduce bacterial action, but it will return to normal approximately 15 days after treatment. Trees and shrubbery growing near a treated line normally are not affected due to only a small portion of their roots being in contact with the copper sulfate. The copper sulfate kills only those roots inside the leach line.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep pesticide in original container. Do not use in food or drink containers.

PESTICIDE DISPOSAL: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray, mixture or reconstitute 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 HANDLING: Nonrefillable container. Do not reuse or refill this container. Completely empty IBC Tote or container into application equipment, then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration.

OPTIONAL GRAPHICS (DOT & GHS Classification)



LIMITED WARRANTY AND LIMITATION OF REMEDIES

To the extent consistent with applicable law, seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS OR MERCHANTABILITY, express or implied, or any other warranty if the product is used contrary to the label instructions, or under abnormal conditions or under conditions not foreseeable to the seller. To extend consistent with applicable law, in no case shall the seller be liable for more than the cost of this product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. To the extent consistent with applicable law, this product is offered and the buyer or user accepts it subject to the foregoing terms which may not be varied. Seller makes no warranty for the performance of product which has been frozen.

Manufacturer:

Caribbean Chemical Industries, Corp.

Road 127 KM 17.1

Tallaboa Encarnación

Peñuelas, PR 00624

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