



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460**

**OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION**

November 19, 2019

Amanda Burwell
Regulatory Specialist
BioSuite LLC
12625 W Airport Blvd
Sugar Land, TX 77478

Subject: Label Amendment – Revise the dosage rate in the direction section
Product Name: BIOSUITE QD10X
EPA Registration Number: 92513-4
Application Date: October 21, 2019
Decision Number: 556639

Dear Ms. Burwell:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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) list 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 Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

Page 2 of 2
EPA Reg. No. 92513-4
Decision No. 556639

with FIFRA section 6. If you have any questions, please contact Mohammad Alavi by phone at (703) 347-0522, or via email at Alavi.mohammad@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Miederhoff".

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

Enclosure

ACCEPTED

11/19/2019

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 92513-4

BioSuite QD10x

EPA Reg. No. 92513-4

June 21, 2019

Modified November 19, 2019

BioSuite QD10x

ACTIVE INGREDIENTS

Didecyl dimethyl ammonium chlorides.....10.0%

INERT INGREDIENTS.....90.0%

TOTAL100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

SEE {{SIDE}} {BACK}} PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS

FIRST AID

In case of emergency, call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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. 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 inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further 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.

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

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378. You may also contact the poison control center at 1-800-222-1222 for emergency medical treatment information.

You may contact 800-424-9300 for chemical, medical, or environmental emergencies.

EPA REG. NO. 92513-4
EPA EST. NO. 74023-TX-001

{logo}

BioSuite, LLC
12625 W. Airport Blvd
Sugar Land, TX 77478

Net Contents:

{MARKETING CLAIMS}

This product is for use in *(insert location)*

For use {in} {on} *(insert location)*.

{LOCATIONS}

- Auxiliary water {and waste water} systems
- Commercial recirculating cooling water towers
- Drilling, completion and workover fluids systems
- Gas production and transmission pipelines and systems
- Gas storage wells and systems
- Hydrotesting facilities
- Industrial {and/or} {commercial} recirculating cooling towers.
- Oil field water flood/salt water disposal systems {and fracturing fluid systems}
- Oil field injection and waste water
- Once through water cooling systems
- Once through freshwater systems
- Packer fluid systems
- Pipeline pigging and scraping operations
- Recirculating water systems
- Retort water systems
- Waste water systems
- Water cooling systems
- Fountains
- Ponds
- Swimming pools
- Whirlpools, spas, hot tubs

{WATER TREATMENT MARKETING CLAIMS}

- Algaecide
- Aids in the control of bacterial, fungal and algal slimes in evaporative condensers, heat exchange water systems, industrial and commercial cooling towers, air washers, warmers, and industrial water scrubbing systems.
- Aids in the control of bacterial, fungal and algal slimes in evaporative condensers, heat exchange water systems, industrial and commercial cooling towers, and influent systems such as flow through filters and lagoons.
- Aids in the control of bacterial, fungal and algal slimes in retorts water systems.
- A water treatment microbiocide for industrial and/or commercial recirculating cooling water towers, and oil field flood/salt water disposal systems and fracturing fluids.
- A water treatment microbiocide for use in retort water systems.
- A microbiocide for use in controlling sulfate-reducing bacteria and slime forming bacteria in oil well drilling, oil field processing applications oil field water systems, oil and gas productions and transmission pipelines and systems, and gas storage fields and equipment; sch as steam-injection water holding tanks, flood water, injection water, holding pond water, disposal-well water, water holding tanks, field storage tanks and related refinery and oil field closed systems, industrial recirculating water handling systems.
- A microbiocide for use in controlling slime forming bacterial, sulfate-reducing bacteria (SRM) and fungi (yeast and molds) and algae in air washers and industrial scrubbing systems, process water systems including those that contain reverse osmosis membranes and in service water and auxiliary system and heat transfer systems and in wastewater systems including waste water sludge and holding tanks.
- Effective against the growth of algae.
- For control of algae, algal, fungal and bacterial slimes in recirculating water systems, auxiliary water and waste water systems and water cooling systems, oil field water flood systems/salt water disposal systems.

Modified November 19, 2019

- Has been designed specifically for control of sulfate-reducing bacteria that contribute to souring, the production of sulfide, and abiotic corrosion in water cooling systems, oil field systems, gas production and transmission pipelines and systems.
- Helps inhibit the growth of unsightly algae.
- Is a water treatment microbiocide that will control algae and bacterial slimes found in recirculating cooling tower waters.
- Kills and prevents algae.
- The residual effectiveness of this algaecide tends to stabilize the total chemical treatment system.
- This product is effective for the control of odor-forming and slime-forming bacteria, fungi and algae in auxiliary service water systems such as fire protection systems and pump or screen bays, waste water systems such as storage tanks, storage piles, associated piping, setting ponds or lagoons, transport spillways or canals and disposal wells.
- To control algae and bacterial slimes, use this water treatment microbiocide as directed.

GENERAL MARKETING CLAIMS

- Efficient and non-staining when used as directed.
- Is non-staining.
- No Bleach
- Non-Acidic
- Non-Caustic
- Will not damage tile, concrete, metal or plastics.

PACKAGING CLAIMS

- Concentrate{d}.
- 10% Concentration
- Easy to use.
- Economy size. (**Note to reviewer:** To be used on applicable container)
- Is an economical concentrate.
- 1 gal. treats 50,000 gal. (*For swimming pool applications.*)
- Makes (*insert value*) [{Gal.} {Quarts} {Containers}]
- This [{container} {bottle}] is made of {at least} (x) % post-consumer recycled plastic.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
{Please read entire label and use strictly in accordance with precautionary statements and directions.}

WATER TREATMENT

Do not use water containing residues from use of this product to irrigate crops for food or feed.

(Note to Reviewer: The following sentence must be used with the air washer use listed in the direction:)
For use only in industrial air washers and air washer systems which have mist-eliminating components.

{AIR WASHERS}, INDUSTRIAL {{AND/OR} COMMERCIAL} RECIRCULATING COOLING WATER TOWERS, RETORT WATER SYSTEMS, {EVAPORATIVE CONDENSERS}, HEAT {{EXCHANGE} {TRANSFER} {WATER} SYSTEMS,} {INFLUENT SYSTEMS}: For best results, clean heavily contaminated systems before treatment with this product. If soap or anionic detergent is used, rinse thoroughly before charging with this algaecide. {Cooling tower water that are inherently low in algae growth and bacteria count may be adequately controlled by the lower range of these dosages.} Repeat every seven days or increase frequency if needed. Should slime develop again, repeat initial dosage.

Modified November 19, 2019

1. **Dosing Location:** This product is to be applied at a point in the system where it will be uniformly mixed, such as the basin area, the sump, or another reservoir or collecting area.
2. **Dosing Conditions:** This product must be applied when the system is in jeopardy of being affected or after cleaning systems where efficiency is already impaired. {Tower bleed off valves must be closed to permit a retention time of 4 hours.}
3. **Method of Application:**
 - a. **INTERMITTENT OR SLUG METHOD**

Initial Dose: When the system is noticeably fouled, apply 20 - 40 ppm active in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 5 – 15 ppm active in the system weekly or as needed to maintain control.
 - b. **MODIFIED INTERMITTENT METHOD**

Initial Dose: When the system is noticeably fouled, apply 20 - 40 ppm active in the system. Apply half this initial dose when half of the water in the system has been lost by blowdown.

Subsequent Dose: When control of microbial growth is evident, apply 5 – 15 ppm active in the system. Apply half of this subsequent dose when half of the water in the system has been lost by blowdown.
 - c. **CONTINUOUS FEED METHOD**

Initial Dose: When the system is noticeably fouled, apply 20 - 40 ppm active in the system.

Subsequent Dose: Maintain this treatment by starting a continuous feed of 5 – 15 ppm active lost by blowdown.

ONCE THROUGH FRESH {AND SEA} WATER COOLING SYSTEMS: Use of the product in either public/municipal or single or multiple family private/residential potable/drinking water systems is strictly prohibited. Use of the product in any cooling water system that discharges effluent within ¼ mile of either a public/municipal or single or multiple family private/residential potable/drinking water intake is strictly prohibited.

{For best results, slug feed. The frequency of addition of microbiocide needed depends on many factors. To optimize your use of water treatment microbiocide, follow this procedure.}

1. **Dosing Location:** This product is to be applied at a point in the system where it will be uniformly mixed, such as at the sump.
2. **Dosing Conditions:** This product must be applied when the system is in jeopardy of being affected or after cleaning systems where efficiency is already impaired.
3. **Method of Application:**
 - a. Wear safety glasses, chemist-resistant gloves and impervious apron.
 - b. To reduce foaming, mix 10 parts of water to 1 part of this product.
 - c. [{Use} {Add}] 0.6 – 6 ppm.
 - d. Do not discharge without performing proper deactivation.
 - e. Treatment time cannot exceed 120 hours/application nor exceed 4 times per year.
 - f. Avoid oxidizer and reducing agents. Product is cationic and must not be mixed with soap or anionic surfactants.

(OR)

(Note to reviewer: Alternate Method of Application language can be used in place of item #3 directly above.

3. **Method of Application:**

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, apply 0.6-6ppm active based on system flow rates. The minimum treatment is 6 to 24 hours. Repeat until control is

Modified November 19, 2019

achieved. Deactivation must be conducted prior to discharge from the system by using bentonite clay at a minimum ratio of 5 ppm clay to 1 ppm product.

Subsequent Dose: When microbial control is evident, add 0.3-3 ppm active based upon system flow rates on an as needed basis to maintain control. Frequency of feed must be tied to an in-plant monitoring program for macro clogging growth. Deactivation must be conducted prior to discharge from the system by using bentonite clay at a minimum ratio of 5 ppm clay to 1 ppm product.

(**Note to reviewer:** Deactivation instructions must be used with the above Once Through directions for use.)

DEACTIVATION: Use bentonite clay at the minimum ratio of 5 ppm clay to 1 ppm product. This product must be deactivated prior to discharge of the NPDES outfall. Do not apply this product more than 4 times a year.

AUXILIARY SYSTEMS AND SERVICE WATER: Add 5 - 180 ppm active in the system continuously. This product must be added to the system at a point of uniform mixing by slug or intermittent feed or by spraying onto a waste pile. The frequency of feed or spray and the duration of treatment will depend upon the severity of the contamination. Additions to water systems must be made during the pumping operation and as close to the pump as possible to ensure adequate mixing.

{{OIL FIELD}, {GAS PRODUCTION} AND {TRANSMISSION PIPELINE} {AND} {SYSTEMS}}: Specific treatment requirements vary among oil and/or gas field sites and subsystem components. {Oil field fluids and subsystems most commonly requiring microbial contamination control are raw water sources, separators, ballasts, storage and mixing tanks, screens, surface injection equipment, production equipment {(such as injection and production piping casing, completion and valving)} and the formation itself.} The primary point of treatment will vary among oil and/or gas field operations depending on the site problems, water-flood treatment methods and equipment. This product must be added where it will disperse rapidly and uniformly to the desired area of treatment.

Additions of this product must be made with the proper type of metering pump equipment, suction side of pumping equipment or similar device. This product must be added to the system by slug, continuous or on an intermittent basis, depending on the degree of system fouling.

OIL FIELD WATER FLOOD SYSTEMS AND FRACTURING FLUIDS: This product must be added to the water flood water disposal system at a point of uniform mixing.

1. **Continuous Use:** Add 5 — 20 ppm active to control slime forming and sulfate reducing bacteria. Levels for effective control will vary depending on conditions at the site.
2. **Intermittent Use:** Add at a rate of 5 - 20 ppm active for 4 to 8 hours per day, one to four times a week as needed to maintain control.
3. **Treatment of flow back return water:** Dose at a rate of 5 - 20 ppm active for 4 – 8 hours per day, one to four times a week as needed to maintain control.

OIL FIELD INJECTION AND WASTE WATER: This product must be added to the water handling system at a point of uniform mixing such as the area of addition of makeup water to the holding tank.

Method of Application:

1. **Continuous Injection:** Add at a rate of 30 ppm when system is noticeably fouled. When microbial control is evident, add this product at 15 ppm to maintain control.
2. **Batch Treatment:** Add at a rate of 180 ppm over a period of 4-6 hours one or more times per week when the system is noticeably fouled. When microbial control is evident, add this product at 90 ppm over a period of 4-6 hours one or more times per week

(OR)

Modified November 19, 2019

OIL FIELD INJECTION AND WASTE WATER

1. **Dosing Location** (site of use): This product is to be applied at a point in the recovery system where it will be uniformly mixed, such as at the screens, storage tanks, or other mixing device locations.
2. **Dosing Conditions**: This product is to be applied when the system is in jeopardy of being affected. Badly fouled systems must be cleaned before treatment is begun.
3. **Equipment Used**: Use the injection pump to apply the product.
4. **Use Limitations**: Dependent upon pH, temperature and salt content, adjust according to conditions found at the site as needed to maintain control.
5. **Dosage Applications**:
 - a. **[[Slug Method] [Intermittent Dosage]]**
Initial Dose: When the system is noticeably fouled, apply 60 ppm active ingredient of this product. Apply for 3 to 8 hours daily until control is achieved.
Subsequent Dose: When microbial control is evident, add 30 ppm active ingredient daily or as needed to maintain control.
 - b. **Continuous Feed Method**
Initial Dose: When the system is noticeably fouled, apply 15 ppm active ingredient of this product.
Subsequent Dose: Maintain this treatment by starting a continuous feed of 15 ppm active ingredient daily or as needed to maintain control.

[[FRACTURING] [FRAC] FLUIDS]: Add this product to the frac water storage tanks or directly into the well head injection pipeline as the water is being pumped down-hole. Dose Range: Add 5 – 60 ppm active to control slime forming and sulfate reducing bacteria. Levels for effective control will vary depending on conditions at the site.

OIL AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS: For the control of sulfate-reducing bacteria and slime forming bacteria, this product must be added to a gas production or transmission pipeline via direct injection at a point where uniform and maximum distribution will occur. The application must be conducted to ensure maximum distribution of the product through the internal surface of the pipeline by adding an amount of biocide which eventually comes out the other end of the pipeline. Criteria for success of the treatment will be reduction in bacterial count and/or corrosion rates. To facilitate application, it is desirable to dilute the product with an appropriate solvent immediately before use. The concentration in the solvent must not fall below an active concentration range of 500 - 1000 ppm based on the volume of water in the pipeline. Injections to the system must be weekly, or as needed to maintain control.

GAS STORAGE WELLS AND SYSTEMS: To treat individual injection wells add 65 – 1000 ppm active to produce an effective concentration. Update treatment rate as needed. This product must be diluted by the water present in the formation. Injection takes place before gas is injected and may be repeated yearly or as needed to maintain control.

PIPELINE PIGGING AND SCRAPING OPERATIONS: Add this product to slug of water immediately following the scraper {(keep the water volume to a minimum and contained between the scraper and the [[following] [trailing]] pig). Add an effective concentration 75 – 500 ppm actives depending on the length of the pipeline and the severity of the biofouling.

DRILLING, COMPLETION AND WORKOVER FLUIDS SYSTEMS: This product is to be added to these fluid systems at a point of uniform mixing, such as a circulating, holding or mud tank. Levels for effective control will vary depending on conditions at the site and the severity of the contamination.

1. **Initial treatment**: Add 65 – 1000 ppm actives of freshly prepared fluid.
2. **Maintenance dosage**: Add 65 – 1000 ppm actives of freshly prepared fluid.

Modified November 19, 2019

PACKER FLUIDS: This product is to be added to the packer fluid at a point of uniform mixing such as a circulating holding tank {and} {other mixing device locations}. Add 65 – 1000 ppm active to a freshly prepared fluid. Levels for effective control vary depending on conditions at the site and the severity of contamination. Seal the treated packer fluid in the wall between the casing and the production tube.

HYDROTESTING: Treat water used to hydrotest pipelines or vessels by adding 65 – 1000 ppm active depending on the water quality and length of time the equipment will remain idle.

STORAGE AND DISPOSAL

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

{PESTICIDE} STORAGE: Store only in original container. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

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 HANDLING:

(Note to Reviewer: One or more of the following paragraphs for Container Handling will be selected, depending on packaging use/type.)

{For non-refillable containers equal to or less than 5 gal.}

Non-Refillable Container. Do not reuse or refill this container. Triple rinse container {(or equivalent)} promptly after emptying. Triple rinse as follows: Fill the container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

{For non-refillable containers greater than 5 gal.}

Non-Refillable Container. Do not reuse or refill this container. Triple rinse container {(or equivalent)} promptly after emptying. Triple rinse as follows: Fill the container ¼ full with water. Replace 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 back and forth several times. Turn the container over onto its other end and tip back and forth several times. Follow Pesticide Disposal instructions for rinsate disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Corrosive. Causes irreversible eye damage and skin burns. May be fatal if inhaled. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Do not breathe spray mist. Wear goggles or face shield, chemical-resistant gloves and protective clothing when handling. 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 before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, oysters and shrimp. 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 into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.