



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 2, 2020

Christina M. Swick
Agent for Solenis LLC
Solenis LLC
500 Hercules Road
Wilmington, DE 19808-1599

Subject: PRIA Label Amendment – To revise the product label by adding an optional generation method
Product Name: BIOSPERSE™ CX3400
EPA Registration Number: 74655-39
Application Date: August 13, 2020
Decision Number: 554163

Dear Ms. Swick:

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.

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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 with FIFRA section 6. If you have any questions, please contact Emilia Oiguenblik by phone at 703 347 0199, or via email at Oiguenblik.emilia@epa.gov or Eric Miederhoff by phone at 703 347 8028, or via email at Miederhoff.eric@epa.gov.



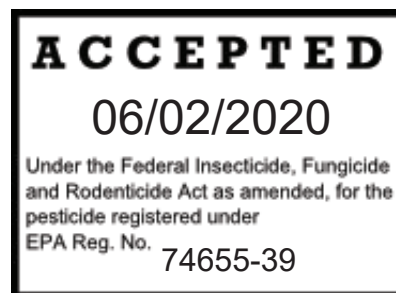
Eric Miederhoff
Product Manager 31
Regulatory Management Branch I
Antimicrobials Division (7510P)
Office of Pesticide Programs

Enclosure; Stamped label, Efficacy review

BIOSPERSE™ CX3400

MICROBIOCIDAL FOR USE IN PULP AND PAPER MILL WATER SYSTEMS AND INDUSTRIAL WATER SYSTEMS

ACTIVE INGREDIENT
Ammonium Sulfate.....40.00%
INERT INGREDIENTS.....60.00%
TOTAL.....100.00%



KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID

If on Skin: 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 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

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 further treatment advice.

Note: Have the product container or label with you when calling a Poison Control Center or doctor
Hot Line Number: 1-844-SOLENIS (1-844-765-3647)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or inhaled. Avoid breathing vapor. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

The pesticide is toxic to fish and aquatic organisms. 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.

PHYSICAL AND CHEMICAL HAZARDS

Direct mixing of this product with sodium hypochlorite solutions and other strong oxidizing and alkali chemicals will release hazardous gases. Only mix with other chemicals or materials as specified in the Directions for Use of this product.

EPA Reg. No. 74655-39
EPA Est. No. 74655-GA-001

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product must be used in conjunction with: 1) EPA registered sodium hypochlorite (12.5%) to produce monochloramine and 2) the Biosperse CX3400 feeder/delivery system, at a pH of ≥ 8.5 , is programmed to automatically and optimally produce a dilute solution of monochloramine. The installation, calibration and operation of the feeder/delivery system must be conducted only by Solenis authorized and trained personnel.

To achieve a minimum molar ratio of 1:2, Biosperse CX3400 to sodium hypochlorite, combine 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). To ensure both handling safety and effectiveness, the monochloramine solution must be generated and fed into the treatment water systems through a proper chemical feed skid only by a trained Solenis representative. Use of this product for any other purpose or contrary to the use directions specified below is prohibited.

PULP AND PAPER MILLS: This product is used as a microbicide in the manufacture of paper and paperboard that contacts food. This product is applied in conjunction with sodium hypochlorite, using a closed delivery system, to form monochloramine, a slower acting less aggressive oxidizing microbicide.

Dosage Rates: When noticeably fouled, apply sufficient product and sodium hypochlorite to achieve a total chlorine residual of at least 1 ppm in excess of the system oxidant demand. Once control is achieved, treatment rates can be reduced to sub-demand rates from 50% to 80% of system demand. The product may be added to the system continuously or intermittently as needed to any area of the system where uniform mixing can be obtained.

For intermittent treatment, mix 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 1 to 2 ppm in excess of the system oxidant demand (maximum of 10 ppm measured) as total chlorine in the water being treated for 5 to 60 minutes every 1 to 6 hours. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems must be cleaned before initial treatment.

For continuous treatment, mix 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 0.5 to 1 ppm in excess of system oxidant demand (maximum of 10 ppm measured) as total chlorine in the water being treated on a continuous basis. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems should be cleaned before initial treatment.

INDUSTRIAL WATER SYSTEMS: Biosperse CX3400 is used for the control of algal, bacterial and fungal deposits in industrial recirculating cooling towers, recirculating cooling water systems, evaporative condensers, influent water systems*, brewery and food pasteurizers*, airwashers, reverse osmosis systems*, paint spray booth sumps, non-fish containing decorative fountains*, and ponds used for cooling purposes, sewage and wastewater systems.

***Brewery and food pasteurizers, reverse osmosis systems and non-fish containing decorative fountains and influent systems for once through industrial water systems NOT APPROVED FOR USE IN CALIFORNIA**

When this product is used to treat sewage and wastewater systems, seawater, and freshwater influent systems for once-through industrial water systems and seawater desalination and reverse osmosis systems, and the system water is not sent to a POTW; residual levels of chloramine in the effluent must be monitored and neutralized using on-line monitoring and control equipment.

When this product is used to treat recirculating cooling water systems, evaporative condensers, influent water systems (not part of once-through industrial water systems), brewery and food pasteurizers,

airwashers, paint spray booth sumps, and non-fish containing decorative fountains and ponds used for cooling purposes; effluent detection of chloramine should be conducted at least once per shift. If chloramine is detected in the effluent, it can be neutralized by the addition of sodium metabisulfite until the chloramine is no longer detected.

Dosage Rates: When noticeably fouled, apply sufficient product and sodium hypochlorite to achieve a total chlorine residual of at least 1 ppm in excess of the system oxidant demand. Once control is achieved, treatment rates can be reduced to sub-demand rates from 50% to 80% of system demand. The product may be added to the system continuously or intermittently as needed to any area of the system where uniform mixing can be obtained.

For intermittent treatment, mix 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 1 to 2 ppm in excess of the system oxidant demand (maximum of 5 ppm measured) as total chlorine in the water being treated for 5 to 60 minutes every 1 to 6 hours. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems must be cleaned before initial treatment.

For continuous treatment, mix 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 0.5 to 1 ppm in excess of the system oxidant demand (maximum of 5 ppm measured) as total chlorine in the water being treated on a continuous basis. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems must be cleaned before initial treatment.

This product can be used to generate a mixed chloramine solution (**monochloramine and dichloramine**). This product must be used in conjunction with: 1) EPA registered sodium hypochlorite (12.5%) and 2) Biosperse CX3400 feeder/delivery system and 3) In-line acid addition to optimize the generation of the mixed chloramine solution.

The Biosperse CX3400 feeder/delivery system automatically and optimally generates a dilute mixed chloramine solution. This solution is automatically and optimally fed using the Biosperse CX3400 feeder/delivery system. The installation, calibration and operation of the feeder/delivery system must be conducted only by Solenis authorized and trained personnel.

To achieve a minimum molar ratio of 1:2, Biosperse CX3400 to sodium hypochlorite, combine 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). In-line acid addition optimizes the generation of the chloramine solution. To ensure both handling safety and effectiveness, the mixed chloramine solution must be generated and fed into the treatment water systems through a proper chemical feed skid only by a trained Solenis representative. Use of this product for any other purpose or contrary to the use directions specified below is prohibited.

PULP AND PAPER MILLS: This product is used as a microbiocide in the manufacture of paper and paperboard that contacts food. This product is applied in conjunction with sodium hypochlorite, using a closed delivery system, to form monochloramine, a slower acting less aggressive oxidizing microbiocide.

Dosage Rates: When noticeably fouled, apply sufficient product and sodium hypochlorite to achieve a total chlorine residual of at least 1 ppm in excess of the system oxidant demand. Once control is achieved, treatment rates can be reduced to sub-demand rates from 50% to 80% of system demand. The product may be added to the system continuously or intermittently as needed to any area of the system where uniform mixing can be obtained.

For intermittent treatment, mix 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 1 to 2 ppm in excess of the system oxidant demand (maximum of 10 ppm measured) as total chlorine in the water being treated for 5 to 60

minutes every 1 to 6 hours. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems must be cleaned before initial treatment.

For continuous treatment, mix 1.0 liter (0.264 gallons) of Biosperse CX3400 to 3.7 liters (0.977 gallons) of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 0.5 to 1 ppm in excess of system oxidant demand (maximum of 10 ppm measured) as total chlorine in the water being treated on a continuous basis. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems should be cleaned before initial treatment.

If chloramine is detected in the effluent, it can be neutralized by the addition of sodium metabisulfite until the chloramine is no longer detected.

INDUSTRIAL WATER SYSTEMS: Biosperse CX3400 is used for the control of algal, bacterial and fungal deposits in industrial recirculating cooling towers, recirculating cooling water systems, evaporative condensers, influent water systems*, brewery and food pasteurizers*, airwashers, reverse osmosis systems*, paint spray booth sumps, non-fish containing decorative fountains*, and ponds used for cooling purposes, sewage and wastewater systems.

***Brewery and food pasteurizers, reverse osmosis systems and non-fish containing decorative fountains and influent systems for once through industrial water systems NOT APPROVED FOR USE IN CALIFORNIA**

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When this product is used to treat recirculating cooling water systems, evaporative condensers, influent water systems (not part of once-through industrial water systems), brewery and food pasteurizers, airwashers, paint spray booth sumps, and non-fish containing decorative fountains and ponds used for cooling purposes; effluent detection of chloramine should be conducted at least once per shift. If chloramine is detected in the effluent, it can be neutralized by the addition of sodium metabisulfite until the chloramine is no longer detected.

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Note: If chloramine is detected in the effluent, it can be deactivated by the addition of sodium bisulfite until chloramine is no longer detected. Deactivate by adding 5 ppm of a 38 wt% solution of sodium bisulfite per 1 ppm of measured total chlorine (2:1 ratio of sodium bisulfite to chlorine)

Storage and Disposal

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

PESTICIDE STORAGE: Keep container tightly closed. Store in a dry place. Leaking or damaged drums should be placed in overpack drums for disposal. Spills should be absorbed in sawdust or sand and disposed of in a sanitary landfill. Keep container closed when not in use.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label directions, 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. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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 it back and forth several times. Turn the container over onto its other 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.

Manufactured by Solenis LLC
500 Hercules Road, Wilmington, DE 19808, USA
(302)594-5000