



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 29, 2018

Ms. Leesha Square
Regulatory Specialist for,
Lonza, Inc.
90 Boroline Road
Allendale, NJ 07401

Subject: Label Amendment – To add additional statement to the Directions for Use for Oilfields
Product Name: BARDAC 2250M
EPA Registration Number: 6836-339
Application Date: August 3, 2018
Decision Number: 546513

Dear Ms. Square:

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 Karen M. Leavy by phone at (703)-308-6237, or via email at Leavy.Karen@epa.gov.

Sincerely,



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

Enclosure

Bardac® 2250M

ACCEPTED

11/29/2018

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 6836-339

- Winterized
- Twin-Chain Quaternary Ammonium Compound Concentrate
- Water Treatment Microbiocide
- For Oil Field Water Flood or Salt Water Disposal Systems and Fracturing Fluids, Oil Field Injection and Waste Water, Oil and Gas Production and Transmission, Gas Storage Wells and Systems, Pipeline Pigging and Scraping Operations, Drilling, Completion and Workover Fluids Systems, Packer Fluids and Hydrotesting

Active Ingredient:
Didecyl dimethyl ammonium chloride50%
Other Ingredients50%
Total:..... 100%

This product contains the toxic ingredient, methyl alcohol at 37.5%. *Methanol may cause blindness.*

KEEP OUT OF REACH OF CHILDREN

DANGER  POISON

See [left] [right] [back] [side] panel for Precautionary Statements and First Aid

EPA Registration No. 6836-339
EPA Establishment No.
Net Weight _____ lbs.
Volume: _____ gals.

[DOT Symbols]
[Country of origin (*insert country*)]
[Manufactured in (*insert country*)]
[Barcode]

Manufactured by:
LONZA INC.
90 Boroline Road, Allendale, NJ 07401

FOR SALE, USE AND STORAGE BY MAINTENANCE PERSONNEL ONLY

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. POISON. CORROSIVE. Causes irreversible eye damage and skin burns. Methanol may cause blindness. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), chemical-resistant gloves (such as nitrile or butyl), apron and / or clothing. May be fatal if swallowed, inhaled or absorbed through the skin. Do not inhale vapor or spray mist. Wear a minimum of an NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and a combination N1, R, or P filter; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters. 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. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Follow the manufacturer's instructions for cleaning / maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes.

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 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, preferable by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

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.

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. 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 OR CHEMICAL HAZARDS

Flammable. Keep away from heat and open flame.

Bardac® 2250M is a winterized microbiocide which remains a thin pourable fluid at -40C. **Bardac® 2250M** is ideal for cold weather oil and gas applications. **Bardac® 2250M** will control algae and bacterial slimes found in oil field water flood. **Bardac® 2250M** helps clean and loosen slime debris from cooling and flooding system surfaces. When used in slug doses, no other microbiocide is required. **Bardac® 2250M** will control sulfate reducing bacteria [SRB] and slime forming bacteria in oil well drilling, oil field water floods, salt water disposal systems and oil and gas productions and transmission pipelines and systems.

Bardac® 2250M is economical to use because it is concentrated. It should be handled with care. Note that if a dilution product is used, the target active dose remains unchanged.

DIRECTIONS FOR USE

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

Oil Field Water Flood or Salt Water Disposal Systems and Fracturing Fluids: [Do not apply in Marine or Estuarine Oil Fields!]

For the control of slime forming and sulfate reducing bacteria in oil field water flood or salt water disposal systems, add 5-10 ppm [active] **Bardac® 2250M** [1- 1/2 - 3 gallons per 3000 barrels of water] continuously. Levels for effective control will vary depending on conditions at the site.

Product addition must be made with a metering pump. This product must be applied where it will dispense most rapidly and uniformly to the desired area of treatment. Product must be slug fed then fed continuously or on an intermittent basis depending on the degree of system fouling.

Heavily fouled system must be precleaned

Slug: Apply 1 1/2 - 6 gallons per 3000 barrels [5-20 ppm ai] of water for 4-8 hours per day until desired level of control is achieved. To maintain the system in an acceptable manner, utilize a continuous treatment with the microbiocide or apply intermittent doses.

Intermittent Feed: The frequency of intermittent doses will vary with individual systems. Apply 1 1/2 - 6 gallons per 3000 barrels [5-20 ppm ai] of water for 4-8 hours per day, one to four times a week as needed to maintain control.

Continuous Feed: Fouled systems must be slug treated to get initial control, followed by continuous treatment to maintain control. Apply 1 1/2 - 3 gallons per 3000 barrels of water [5-10 ppm ai] continuously.

For treatment of flow back return water [Post Hydraulic Fracturing]: Add 1 1/2 - 6 gallons per 3000 barrels of water [5-20 ppm active] for 4 to 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 make up water to the holding tank.

Continuous Injection: Add 7.5 oz per 1000 gallons of water [30 ppm active] when system is noticeably fouled. When microbial control is evident, add 3.75 oz per 1000 gallons of water [15 ppm active] to maintain control.

Batch Treatment: Add 46.3 fluid ounces per 1000 gallons of water [180 ppm active] 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 23 oz per 1000 gallons of water [90 ppm active] over a period of 4—6 hours one or more time per week.

OR – For use in oil field and/or petrochemical water subsurface injection systems of secondary and/or tertiary oil recovery systems to reduce the number of anaerobic bacteria, aerobic bacteria, sulfate-reducing bacteria.

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 and other mixing device locations.

Dosing Conditions: This product should be applied when the system is in jeopardy of being affected. Heavily contaminated systems must be precleaned before treatment is begun.

Equipment Used: Use the injection pump to apply the product.

Slug: When the system is noticeably fouled, add 15.3 oz [60 ppm active ingredient] of this product per 1000 gallons of water in the system. Apply for 3 to 8 hours daily until control is achieved.

Subsequent Dose: When microbial control is evident, add 7.5 oz [30 ppm active ingredient] **Bardac® 2250M** per 1000 gallons of water in the system daily or as needed to maintain control.

Intermittent Feed: The frequency of intermittent doses will vary with individual systems.

Initial Dose: When the system is noticeably fouled, add 15.3 oz [60 ppm active ingredient] **Bardac® 2250M** per 1000 gallons of water in the system. Add for 3 to 8 hours daily until control is achieved.

Maintenance Dose: When control of microbial growth is evident, add 7.5 gallons [30 ppm active ingredient] per 1000 gallons of water in the system daily or as needed to maintain control.

Continuous Feed

Initial Dose: When the system is noticeably fouled, add 3.8 oz [15ppm active] **Bardac® 2250M** per 1000 gallons of water in the system.

Subsequent Dose: Maintain this treatment by starting a continuous feed of 3.8 oz [15 ppm active] **Bardac® 2250M** per 1000 gallons of water daily or as needed to maintain control.

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.

Gas Storage Wells and Systems

Treat individual injection wells **Bardac® 2250M** to produce effective concentration of 65- 1000 ppm [active] of this product. Update treatment rate as needed. This product must be diluted by the water present in the formation. Injection 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 pig]. Add an effective concentration to produce 75 - 500 ppm depending on the length of the pipeline and the severity of the biofouling.

Drilling, Completion and Workover Fluids Systems

Add **Bardac® 2250M** to the fluid system at a point of uniform mixing such as circulating mud tank.

Initial Dose: Add 65- 1000 ppm [active] **Bardac® 2250M** to a freshly prepared fluid.

Maintenance Dose: Add 65— 1000 ppm **Bardac® 2250M** to maintain control.

Packer Fluids

Add to a packer fluid at a point of uniform mixing such as a circulating holding tank at a rate of 65 — 1000 ppm [active per 100 barrels of fluid] to a freshly prepared fluid depending on the severity of contamination. Seal the fresh packer fluid in the wall between the casing and the production tube.

Hydrotesting

Treat water used to hydrotest pipelines or vessels at 65 — 1000 ppm active depending on the water quality and length of time the equipment will remain idle.

This product weighs 7.31 lbs. / gallon [at 20°C].

This product may be diluted 1:4 with water and/or methanol before application. If diluted, use 4 times the dose rates listed above to achieve the ppm active concentrations listed.

STORAGE AND DISPOSAL

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

Pesticide Storage:

Store in original container in areas inaccessible to children.

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:

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying.

Triple rinse as follows: Fill container $\frac{1}{4}$ 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. Empty the rinsate into the application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. If rinsate cannot be used, follow pesticide disposal instructions. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state, and federal regulations. DO NOT cut or weld metal containers.

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