

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 26 1996

Lonza Inc.
17-17 Route 208
Fair Lawn, NJ 07410

Attention: Eliot I. Harrison, Agent
Lewis & Harrison

Subject: BARDAC CW-50
EPA Registration No. 6836-220
Your Amendment Dated January 15, 1996
EPA Received Date January 25, 1996

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, to add a "Once-Through Water Cooling Systems Applications" use claim to the product labeling, has been reviewed by the Agency and found to be acceptable provided that you make the following labeling changes before you release the product for shipment bearing the amended labeling.

1. In the "DIRECTIONS FOR USE" Section include the following restriction statements:

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

"Use of this product in either public/municipal or single or multiple family private/residential potable/drinking water systems is strictly prohibited. Use of this product in any cooling water system that discharges effluent within 1/4 mile of either a public/municipal or single or multiple family private/residential potable/drinking water intake is strictly prohibited."

2. Change the heading "ONCE-THROUGH COOLING APPLICATIONS" to read "ONCE-THROUGH WATER COOLING SYSTEMS APPLICATIONS".

3. Revise the first sentence under the "ONCE-THROUGH" applications to read "Bardac CW-50...is an algicide and bacterial slimicide in industrial once-through freshwater and saltwater cooling system applications."

CONCURRENCES

SYMBOL	7505C	7505C					
SURNAME	D. Avicco	Avicco					
DATE	9/19/96	9/26/96					

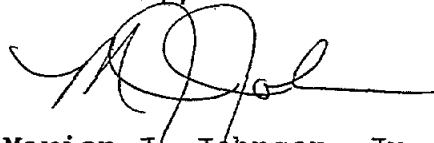
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4. In the "Intermittent/Slug Dosing" use directions, change the word "controls" to read "control".

A stamped copy of the BARDAC CW-50 product labeling is enclosed for your records. Submit one (1) copy of the revised final printed labeling before you release the product for shipment.

If you have any questions concerning this letter, please contact Doreen Aviado of my staff at (703) 305-6554.

Sincerely,



Marion J. Johnson, Jr.
Product Manager (31)
Antimicrobial Program Branch
Registration Division (7505C)

Enclosure

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Bardac CW-50 will control algae and bacterial slimes found in recirculating water cooling systems (evaporative condensers, heat exchange water systems, commercial and industrial cooling towers, influent systems such as flow-through filters and lagoons, industrial water scrubbing systems and brewery pasteurizers) and pulp and paper mills. Bardac CW-50 helps clean and loosen slime debris from cooling and flooding system surfaces. When used in slug doses, no other microbiocide is required. Bardac CW-50 is designed to produce low foam. It should be handled with care.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Corrosive. Causes severe eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed. Avoid contamination of food. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and birds. Do not use in facilities discharging directly or indirectly to the estuarine or marine environment. 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 CHEMICALS HAZARDS

Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Do not store on side. Avoid creasing or impacting of side walls.

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

Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Metal Container: Triple rinse (or equivalent), then offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

(If container is 1 gallon or less, use this container disposal statement.) Do not reuse empty container (bottle, can, bucket). Wrap container and put in trash.

BARDAC CW-50

A Low Foam Twin-Chain Quaternary Ammonium Compound Concentrate Water Treatment Microbiocide for Control of Algae and Slime in Industrial Water Cooling Systems and Pulp/Paper Manufacturing

Active Ingredient

Decyl isononyl dimethyl ammonium chloride 50.0%

Inert Ingredients

50.0%
100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

STATEMENT OF PRACTICAL TREATMENT

If In Eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

If on Skin: Wash with plenty of soap and water. Get medical attention.

If Swallowed: Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

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

SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Registration No.

6836-220

EPA Establishment No.

6836-IL-1

Net Contents

Manufactured by:

LONZA Inc.
17-17 Route 208
Fair Lawn, NJ 07410

DIRECTIONS FOR USE

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

Bardac CW-50 may be metered, pumped, gravity-fed or poured from a suitable container into the treatment system. Centrifugal, injection, piston or diaphragm pumps are satisfactory. Algicide feed pumps, meters and feed lines may be stainless steel, neoprene, glass, plastic or unpigmented fiberglass.

RECIRCULATING WATER COOLING SYSTEMS

INITIAL TREATMENTS: For initial treatment apply Bardac CW-50 to a visually clean system or when algae or slime is first visible. Add 1.5 to 16 fluid ounces of Bardac CW-50 for each 1,000 gallons of water (5 to 60 ppm active) in the system to the sump water near pump suction. Repeat initial dose until algae and slime control are evident. Badly fouled systems should be cleaned before initiating treatment.

MAINTENANCE TREATMENTS: The frequency at which additional dosages must be added to control slime and algal growth can only be determined by experience, since each system will vary in water composition and in amounts and types of microorganisms present. After initial control is achieved, maintenance doses of 0.5 to 15 fluid ounces for each 1,000 gallons of water (1.5-50 ppm active) should be provided daily, weekly or bimonthly as required. The dosage frequency for algae control is typically less than that required for control of bacterial slimes. Biweekly treatment is frequently sufficient to control green algae.

FEEDING: Bardac CW-50 may be fed directly from the drum or diluted with water and fed by a suitable feed system. Dose directly into the sump or any other convenient location providing good distribution of treatment.

PULP AND PAPER MILLS

Paper Manufacturing (for control of bacteria, fungi and algae)
NOT FOR USE IN THE MANUFACTURE OF FOOD-CONTACT PAPER OR PAPERBOARD. Bardac CW-50 can be used as a slimeicide in the manufacture of paper and paperboard that does not contact food. Apply 0.05-10 gallons of Bardac CW-50 per ton of paper produced. Alternatively, apply 0.1-20 gallons of Bardac CW-50 per 100,000 gallons of white water to be treated, which corresponds to a concentration of 0.5-100 ppm active ingredient. Additions of Bardac CW-50 should be made at a point in the system where mixing action is good.

**ACCEPTED
with COMMENTS
in EPA Letter Dated:**

SEP 26 1996

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

6836-220

17-108

ONCE-THROUGH COOLING APPLICATIONS

Bardac CW-50 controls macrofouling by mollusks, clams, and barnacles and is an excellent algicide and bactericide in once-through fresh and salt water cooling applications.

Application Method

Applications must be in accordance with all relevant environmental regulations. Bardac CW-50 may be fed directly from its container, or diluted with water and fed by a suitable feed system into the cooling system. Feed pumps, meters and feed lines may be stainless steel, neoprene, glass, plastic or unpigmented fiberglass. Dose directly into the sump, near the inlet to the recirculating pump if possible, or any other convenient location providing good distribution. If deactivation is required, bentonite clay may be used. A 10 ppm clay to 1 ppm active quaternary ration is typical.

Application Dosages

Initial Treatment: Add 1.4 to 27 fluid ounces of Bardac CW-50 for each 10,000 gallons of system cooling water (0.5 to 10 ppm active quaternary). Repeat initial dose until biological control is evident.

Maintenance Treatment:

Intermittent/Slug Dosing: The frequency of maintenance doses can only be determined by experience, since each cooling system will vary in water composition and in amounts and types of organisms present. After initial controls has been achieved, maintenance doses of 1.4 to 13.5 fluid ounces of Bardac CW-50 for each 10,000 gallons of system cooling water (0.5 to 5 ppm active quaternary) should be added daily, weekly or monthly as required.

Continuous Feed: After initial control has been achieved, apply 0.5 to 13.5 fluid ounces of Bardac CW-50 for each 10,000 gallons of system cooling water (0.2 to 5 ppm active quaternary) to maintain biological control.

12-29-95

ACCEPTED
with COMMENTS
in EPA Letter Dated:

SEP 26 1996

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

0836-220