



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

SEP 19 2014

Dr. Carl F. Watson, PhD Buckman Laboratories, Inc. 1256 North McLean Blvd. Memphis, TN 38108-1241

Subject:

**Amended Reregistration Label** 

**BUSAN 77** 

EPA Registration Number 1448-42 EPA Decision Number: 455638

Dr. Watson:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the reregistration of the above referenced product in connection with the Poly (oxy-1,2-ethanediyl(dimethylimino)1,2-ethanediyl(dimethylimino)-1,2-ethanediyl dichloride (RED) and has concluded that your submission is acceptable.

NOTE: This product is not being reregistered under sections (c) 5 and 4(g) of FIFRA at this time.

Please note that the record for this product currently contains the Confidential Statement of Formulation (CSFs) listed below. Any previously dated CSFs are superseded.

Basic Formulation, dated October 12, 1998

A copy of your label stamped "Accepted" is enclosed along with copies of the acute toxicity and product chemistry reviews completed for the subject product. Products shipped after 12 months from the date of this amendment or the next printing of the label whichever occurs first, must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of the conditions. If these conditions are not compiled with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e).

If you have any question about this letter, please contact Lorena Rivas at <a href="rivas.lorena@epa.gov">rivas.lorena@epa.gov</a>. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Sincerely,

/Jacquelifie Hardy Product Manager 34

Regulatory Management Branch II Antimicrobials Division (7510P)

Enclosure: Label stamped "Accepted," dated

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#### **ACTIVE INGREDIENT(S):**

Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride OTHER INGREDIENTS:

60% 40%

TOTAL

100%

# KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
If Swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water, if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If on Skin, Clothes	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15–20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If in Eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15–20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. You may also contact 901-767-2722 for emergency medical treatment information. C C E P T E I

9/19/2014

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Under the Federal Insecticide, Fungicide and Rodenlicide Act as amended, for the pesticide registered under EPA Reg. No. 4440, 40

1448-42

#### For Residential Use:

**CAUTION:** Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. 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:** This pesticide is toxic to fish, aquatic organisms and clams. 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.

#### For Occupation Use:

**CAUTION:** Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wear long-sleeved shirt, long pants, shoes, socks, and chemical resistant gloves made of any waterproof material (such as any waterproof material, such as Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Natural Rubber, Polyethylene, Polyvinyl Chloride (PVC) or Viton).

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**USER SAFETY RECOMMENDATIONS:** ser should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User 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.

**USER SAFETY REQUIREMENTS:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched (except as required by directions for use) or heavily contaminated with this product's concentrate. Do not reuse them.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Wear protective eyewear (goggles or face shield). Wear long sleeved shirt and long pants, socks, shoes, chemical-resistant apron and chemical resistant gloves (such as any waterproof material, such as Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Natural Rubber, Polyethylene, Polyvinyl Chloride (PVC) or Viton).

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish, aquatic organisms and clams. 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.

### **DIRECTIONS FOR USE**

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

This product is used to control the growth of algae in swimming pools, heated swimming pools, exterior spas, whirlpools, hot tubs and decorative fountains that do not contain fish. It is also used to control algae, bacteria, fungi and mollusks in industrial cooling water and industrial process water systems; control bacteria in industrial water cooling systems; and to inhibit the growth of bacteria that cause degradation of cutting fluids.

INDUSTRIAL FRESH WATER SYSTEMS: This product is used to control the growth of algae, bacteria and fungi in holding and processing tanks of industrial fresh water systems supplying water to pulp and paper mills, and other manufacturing plants. In such systems, it is employed as a replacement for or supplement to the conventional treatment with chlorine or chlorine compounds. In pulp and paper mills, treatment of the fresh water with This product makes an important contribution to slime control. The use of This product, as described, reduces the development of slime in fresh water pipes, fresh water spraying nozzles, and on the pulp and paper mill machine parts contacted by fresh water. However, do not use This product as the primary microbiocide for pulp and paper mill slime control since absorbents such as wood pulp rapidly absorb the product and grealy reduce its concentration in the circulating water. NOTE: Do not use in paper and paperboard that will contact food. For the control of algae, bacteria, and fungi in industrial fresh water systems, This product is added at the rate of 1 to 11 fluid ounces of BUSAN 77 per 10,000 gallons of water to provide a concentration of 1 to 10 ppm This product. Treatment is made continuously and is based on the amount of water entering the intermediate processing operations. In some cases, regular treatment periods of several hours each day will provide adequate control of the microorganisms.

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WATER COOLING SYSTEMS: Prior to the use of This product in water cooling towers, clean the systems to remove algal growth, microbiological slime, and other deposits. Then make an initial slug addition of 0.9 to 2.2 fluid ounces of This product per 1000 gallons of water to provide 8 to 20 ppm This product, based on the total weight of water in the system. Repeat initial dosage until control is evident. Make subsequent slug additions of 0.2 to 2.2 fluid ounces of This product per 1000 gallons of water (2 to 20 ppm This product) every 2 to 5 days or as needed. The frequency of addition depends upon the relative amount of bleedoff and the severity of the microbiological problem. Make slug additions in the sump of water cooling towers.

MOLLUSK CONTROL: To control mollusks such as Corbicula species in recirculating or once-through cooling water and industrial systems, add This product at dosage rates of 2 to 20 ppm. Make continuous or intermittent additions at the intake water. Continuous addition is required for noticeably fouled systems. Intermittent feeding is used to maintain control. This product is used to control algae and mollusks such as Corbicula and Dreissena species in potable water treatment systems. Mitigation: Add This product to the raw water at dosage rates of 2 to 5 ppm (2 to 5 mL of This product / 1000 L of water). For badly fouled systems, treat continuously for up to 21 days, followed by regular control treatments. Control: To avoid fouling of potable water systems by mollusks, treat the raw water at 2 ppm for 60 minutes, repeating this treatment daily or a continuous feed of 0.5 mg/L.

INDUSTRIAL AIR WASHING SYSTEMS: This product is used to control bacteria in industrial air washing systems that maintain effective mist eliminating components. Prior to its use, clean the systems to remove bacterial slime and other deposits. The typical initial slug dose is 3.33 to 5.55 fluid ounces of This product per 1000 gallons of water. Repeat initial dosage until control is evident. Make subsequent slug additions of 2.25 to 5.55 fluid ounces of This product per 1000 gallons of water each 1 to 5 days, or as needed. The frequency of addition depends upon the relative amount of bleedoff and severity of the bacterial problem. Make slug additions into the sump or into the water collection trays of the airwash system.

**SWIMMING POOLS, EXTERIOR SPAS, WHIRLPOOLS AND HOT TUBS:** For maximum effectiveness of BUSAN 77 in swimming pools, heated swimming pools, exterior spas, whirlpools and hot tubs, clean those systems with heavy growth of algae prior to using This product.

For pools having just visible algae growth, add an initial dose of 11 to 17 fluid ounces of This product per 10,000 gallons of water and remove settled algae debris by cleaning. For treatment of a freshly cleaned and filled pool, add initially 6 to 11 fluid ounces of This product per 10,000 gallons of water. To maintain pools free of visible algae growth, make subsequent additions of 2 to 4 fluid ounces of This product per 10,000 gallons of water every 5 to 7 days after the initial treatment. Uniform distribution of This product throughout the water in the pool is necessary for maximum effectiveness.

Spas, whirlpools and hot tubs having just visible algae growth require an initial dose of 1 to 2 fluid ounces of BUSAN 77 per 1000 gallons of water. For treatment of a freshly cleaned spa, whirlpool or hot tub, add 0.6 to 1.1 fluid ounces of This product per 1,000 gallons of water. Make subsequent additions of 0.2 to 0.4 fluid ounces of This product every 5 to 7 days after initial treatment for maintenance.

This product prevents growth of most algae during the off-season winter months when pools are not in use. For pools, which have been properly treated during the swimming season and are free of visible algae, add 6 to 10 fluid ounces of algaecide per 10,000 gallons of water. If, at the end of the swimming season, pools have some visible algae growth, add 12 to 17 fluid ounces per 10,000 gallons. It is necessary that a uniform distribution of algaecide throughout the water and the pool be made for maximum effectiveness. If pool is not covered, it may be necessary to repeat the treatment one or more times during the season.

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This product is compatible with those chemicals normally used to treat pools and is effective at both acid and alkaline pH. Use This product in pools treated with chlorine chemicals which will reduce the amount of those chemicals normally required. However, do not mix This product with concentrated dry or liquid chlorine products.

**DECORATIVE FOUNTAINS:** This product is used to control the growth of algae in decorative fountains that do not contain fish. Manually clean heavy growths of algae prior to treatment. Fountains with just visible algae growth require an initial dose of 1.0 to 2.0 fluid ounces of This product per 1000 gallons of water. To treat a freshly cleaned and filled fountain, add 0.5 to 1.5 fluid ounces of This product per 1000 gallons of water. For maintenance dosages, add 0.2 to 0.5 fluid ounces of This product per 1000 gallons of water every 5 to 7 days as needed. Make sure BUSAN 77 is added at a point where it can be uniformly distributed. This product is used in fountains treated with chlorine chemicals, but do not mix This product with concentrated dry or liquid chlorine products. This product is used to inhibit the growth of bacteria that cause degradation of cutting fluids.

CUTTING FLUIDS OR OILS: This product is employed for the inhibition of bacterial degradation of aqueous solutions or emulsions of the cutting fluids or oils employed as lubricants or coolants in the machining and processing of metals. It is used for the preservation of water-based synthetic metalworking fluids based on amines, borates, phosphates, nitrates, etc, and also for the protection of those fluids based on soluble or emulsifying oils modified with nonionic surfactants. It is not to be used, however, for use in insoluble or straight oils or in fluids containing anionic surfactants. For preservation of cutting fluids, add 0.01 to 0.10% of This product, based on the total weight of the diluted cutting fluid. In some cases, This product can be added to the concentrated fluids. In these cases, add BUSAN 77 at such an amount to where the final concentrations of 0.01 to 0.1% are obtained when the concentrated fluid is diluted with water for use in metalworking operations. For continued protection against bacterial degradation, repeat the treatment of the diluted cutting fluid every four weeks. If excessive contamination of a particular cutting fluid system occurs, more frequent treatments can be used. The latter condition may be indicated by the development of abnormal odors or an unusual appearance of the cutting fluid solution or emulsion and can be determined by bacteriological testing procedures.

### STORAGE AND DISPOSAL

{Nonrefillable Containers, capacity of 5 gallons or less}

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

**STORAGE:** Keep container closed when not in use. In case of spills, use sawdust or sand to absorb the spilled pesticide and disposed of in a sanitary landfill.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for the later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer for recycling if available or reconditioning, if appropriate, or by other procedures if approved by state and local authorities.

## Buckman

{Nonrefillable Containers, capacity of greater than 5 gallons}

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

**STORAGE:** Do not stack more than four drums high. Leaking or damaged drums should be placed in overpack drums for disposal. In case of spills, use sawdust or sand to absorb the spilled pesticide and disposed of in a sanitary landfill. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** Pesticide wastes may be 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:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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 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.

Then offer for recycling if available or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or, by other procedures if approved by state and local authorities.

{Refillable Plastic Containers, capacity of greater than 55 gallons}

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

**STORAGE:** Do not stack more than four drums high. Leaking or damaged drums should be placed in overpack drums for disposal. In case of spills, use sawdust or sand to absorb the spilled pesticide and disposed of in a sanitary landfill. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** Pesticide wastes may be 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:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container prior to refilling or disposal, use a pressure wash as follows: Empty the remaining contents into application equipment or a mix tank. Use a pressure wash system that rinses all interior sides with water and that is rated at >40 psi and >120°F. Pressure wash the container for a length of time that ensures that a minimum 25% of the container volume of water is used. During the pressure wash, ensure that the container valve is left open for continuous draining. Collect the rinsate and empty into application equipment or a mix tank or store rinsate for later use or disposal. Allow container to drain for 10 minutes after pressure wash is completed.

{Refillable Plastic Containers, capacity of 55 gallons or less}

Do not contaminate water, food, or feed by storage or disposal. Do not ship with Food, Feed, Drugs, or Clothing.

**STORAGE:** Keep container closed when not in use. In case of spills, use sawdust or sand to absorb the spilled pesticide and disposed of in a sanitary landfill.

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**PESTICIDE DISPOSAL:** Pesticide wastes may be 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:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container prior to refilling or disposal, use a triple rinse wash as follows: Empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously. Pour or pump rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this rinsing procedure two more times.

#### {Residential/Homeowner}

**STORAGE AND DISPOSAL:** Keep container closed when not in use and away from children and persons unfamiliar with its use. Store away from food. Leaking or damaged containers must be placed in a plastic bag and discarded in the trash. Mop up spills with clean water. Nonrefillable container: Do not reuse or refill empty container. Wrap container and place in trash.

#### {Commercial}

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

**STORAGE:** Keep container closed when not in use and away from children and persons unfamiliar with its use. Store away from food. Leaking or damaged containers must be placed in a plastic bag and discarded in the trash. Mop up spills with clean water.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill empty container. Triple rinse or equivalent. Offer for recycling or puncture and discard in sanitary landfill or by other procedures if approved by state and local authorities.

### Manufactured by:

## **Buckman Laboratories, Inc.**

1256 N. McLean Blvd., Memphis, Tennessee 38108, U.S.A. (901) 278-0330 or 1-800-282-5626

EPA Est. No. 1448-TN-1

EPA Reg. No. 1448-42

**Product Weight** 

9.6 lbs/gal 1.15 kg/l

**NET CONTENTS MARKED ON CONTAINER** 

HMIS/NPCA RATING
Health 1 Flammability 1 Reactivity 0

Revised: 08/20/14