

464-693

6/8/2004

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUN 8 2004

The Dow Chemical Company
1500 E. Lake Cook Road
Buffalo Grove, IL 60089

Attention: Maureen Mikszal
Senior Regulatory Specialist

Subject: UCARCIDE 15 Antimicrobial
EPA Registration No. 464-693
Amendment Dated March 12, 2004 and
Letter Dated May 20, 2004

The amendment, submitted in connection with registration under the FIFRA sec. 3(c)(7)(A), to modify the first aid for the eye, to add oilfield claims, to add ventilation information to storage and handling section, to update the identifying statement, to add new MSDS statement and text revision in the directions for use to correct the dosing for density of glutaraldehyde and to add efficacy against an additional organism, to change the primary product name to "UCARCIDE 42 Antimicrobial", to include two additional brand names "AQUCAR 515 Water Treatment Microbiocide" and "UCONEX 315 Antimicrobial" to amend the basic and two alternate Confidential Statements of Formulas (CSFs), is acceptable, provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec.3(c)(5) and sec. 4 when the Agency requires all registrants of similar products to submit such data.
2. Submit two (2) copies of final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

CONCURRENCES

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General Comments

The Basic Confidential Statement of Formula dated May 20, 2004 is acceptable. The two (2) Alternate Confidential Statements of Formulas dated May 21, 2004 are also acceptable.

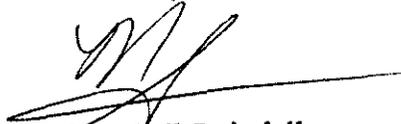
The two (2) requested alternate brand names "UCONEX 315 Antimicrobial" and AQUCAR 515 Water Treatment Microbiocide" are acceptable.

Your request to change the primary product name of your registration from "AQUCAR 515 Water Treatment Microbiocide" to UCARCIDE 15 Antimicrobial" is acceptable.

A stamped copy of the accepted labeling is enclosed for your records.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely



Marshall Swindell
Product Manager (33)
Regulatory Management Branch 1
Antimicrobials Division (7510C)

Enclosure

CONCURRENCES

SYMBOL							
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DATE							

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER
KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes irreversible eye damage. Causes skin irritation. Harmful if inhaled. Harmful if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Causes asthmatic signs and symptoms in hyper-reactive individuals.

Do not get in eyes, on skin, on clothing.
Avoid breathing vapor. Do not swallow.
Wear goggles, protective clothing, and butyl or nitrile gloves.
Wash thoroughly with soap and water after handling.
Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. 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.

STORAGE AND HANDLING

UCARCIDE™ 15 Antimicrobial is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. UCARCIDE™ 15 Antimicrobial can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about 20°F (-6.5°C). Therefore, unless the storage tank is inside or underground, heating and insulation may be required. If heating is needed, exposure to high temperatures should be avoided. For short storage times (up to about 1 month), temperatures up to 100°F (37.8°C) can be tolerated but the preferred maximum storage temperature is about 80°F (26.7°C).

A stainless steel centrifugal pump is suggested for transfer service. Spiral-wound stainless steel with TEFLON® Polymer is suitable for gaskets and packing.

Handle in a well-ventilated area. If vapors are irritating to the nose or eyes, special ventilation or respiratory protection (MSHA/NIOSH approved air purifying respirator equipped with an organic vapor cartridge) may be required.

LIMITED WARRANTY AND DISCLAIMER

Seller warrants that the product conforms to its chemical description as contained on this label and is reasonably fit for the purposes stated on this label when used in accordance with directions under normal conditions of use. THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES WITH RESPECT TO THE PRODUCT AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES.

**BEFORE HANDLING OR USING THIS PRODUCT, SEE
YOUR EMPLOYER AND READ CURRENT MATERIAL
SAFETY DATA SHEET.**

STORAGE AND DISPOSAL

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. 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 your Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
CONTAINER DISPOSAL: Metal Containers or Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by state and local authorities. Plastic Containers: May be incinerated, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Metal Containers: Must not be incinerated. Do not cut or weld on or near metal containers.

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

JUN 08 2004

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

464-693

**UCARCIDE™ 15
Antimicrobial**

A highly effective Microbiocide for use in controlling: Bacteria including Slime Forming Bacteria and Sulfate-Reducing Bacteria, Fungi (Yeast and Molds), and Algae in Air Washers and Industrial Scrubbing Systems, Recirculating Cooling and Process Water Systems Including those that contain Reverse Osmosis Membranes and Service Water and Auxiliary Systems, Heat Transfer Systems, Wastewater Systems Including Wastewater Sludge and Holding Tanks, Beet Sugar Mills and Beet Sugar Mill Process Water Systems, Paper Mills and Paper Mill Process Water Systems, Pigments and Filler Slurries for Paper and Paperboard, Water Based Coatings for Paper and Paperboard and Functional Fluids and Lubricants and Aqueous Metalworking Fluids and for use by Manufacturers as a Preservative in Industrial, Institutional and Consumer Processes and Products and for use in Preserving Aqueous-Based Solutions, Slurries and Emulsions and a Molluscicide for use in controlling Macrofouling in Service Water and Auxiliary Systems and Recirculating Cooling and Process Water Systems and Oil Well Drilling, Oil Field Processing Applications, Oil Field Water Systems, Gas Production and Transmission Pipelines and Systems, and Gas Storage Fields and Equipment; such as Steam-Injection Water Holding Tanks, Flood Water, Injection Water, Holding Pond Water, Disposal Well Water, Water Holding Tanks, Fuel Storage Tanks and related Refinery and Oil Field Closed Industrial Recirculating Water Handling Systems.

Active Ingredient: Glutaraldehyde 15%
Inert Ingredients: 85%
Total 100%

**KEEP OUT OF REACH OF CHILDREN
DANGER
FIRST AID**

If swallowed:

- Call a poison control center or a doctor immediately for treatment advice.
- DO NOT INDUCE VOMITING.
- Do not give anything to drink.

If in eyes:

- Wash immediately and continuously with flowing water for at least 15 minutes.
- Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.
- Call a poison control center or a doctor immediately 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 a doctor for treatment advice.

If inhaled:

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

NOTE TO PHYSICIAN: Aspiration may cause lung damage. Possible mucosal damage may contraindicate the use of gastric lavage.

Have the MSDS and, if available, the product container or label with you when calling a poison control center or a doctor, or going for treatment.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

EPA Reg. No. 464-693
EPA Est. No. 10352-WV-2 (A); 464-WV-1 (B)
Available on pallets in pallets; all drums; bulk
55 and 65 gallon pails only.



THE DOW CHEMICAL COMPANY
Midland, Michigan 48674 U.S.A.
1-800-258-CHEM
*Trademark of THE DOW CHEMICAL COMPANY

L90225 (K 03/04)
Made in USA
PE0304

Net Contents: 5, 30, or 55 gallons

CONTAINER SIZE	CONTAINER SIZE	CONTAINER SIZE
55 GALLONS	30 GALLONS	15 GALLONS
470 POUNDS	250 POUNDS	125 POUNDS
NET WEIGHT	NET WEIGHT	NET WEIGHT

IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect 989-636-4400.

**AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS/
RECIRCULATING COOLING AND PROCESS WATER SYSTEMS**

This product may be used only in industrial air washers and air washer systems which have mist-eliminating components.
UCARCIDE™ 15 Antimicrobial should be added at the application rates described below, to a water treatment system at a convenient point of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSE) or continuously. Badly fouled systems can be shock treated with UCARCIDE™ 15 Antimicrobial. Under these conditions, blowdown should be discontinued for up to 24 hours.

UCARCIDE™ 15 Antimicrobial can be used in industrial process water systems that contain ultra filtration units and non-medical reverse osmosis membranes (where approved for compatibility by the membrane manufacturer) and associated distribution systems.

INTERMITTENT (SLUG DOSE) METHOD

Initial Dose: When the system is noticeably fouled, apply 4.1 to 8.2 fluid ounces of UCARCIDE™ 15 Antimicrobial per 100 gallons of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 1.6 to 4.1 fluid ounces of UCARCIDE™ 15 Antimicrobial per 100 gallons of water in the system weekly, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, apply 4.1 to 8.2 fluid ounces of UCARCIDE™ 15 Antimicrobial per 100 gallons of water in the system.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 0.8 to 4.1 fluid ounces of UCARCIDE™ 15 Antimicrobial per 100 gallons of water in the system, per day. Badly fouled systems must be cleaned before treatment is begun.

SERVICE WATER AND AUXILIARY SYSTEMS

UCARCIDE™ 15 Antimicrobial should be used at the same application rates, and in the same manner as described above. It should be added to the system at a point that will allow for uniform mixing throughout the system.

HEAT TRANSFER SYSTEMS

(Evaporative Condensers, Dairy Sweetener Systems, Hydrostatic Sterilizers and Retorts, and Pasteurizers and Warmers and Once-Through Cooling Water Systems)

UCARCIDE™ 15 Antimicrobial should be used at the same application rates, and in the same manner as described above. It should be added to the system at a point of uniform mixing such as a basin area, sump area or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

INDUSTRIAL WASTEWATER SYSTEMS

(Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks)

UCARCIDE™ 15 Antimicrobial should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 1.4 to 7.2 gallons (1500 to 7500 ppm UCARCIDE™ 15 Antimicrobial) per 1,000 gallons of wastewater or sludge.

MACROFOULING CONTROL

*Not for use in the state of California

UCARCIDE™ 15 Antimicrobial should be added continuously to maintain a level of 20 ppm active ingredient in the system for a period of at least 96 hours.

Initial Dose: When macrofouling is present in the system, apply 16.3 fluid ounces of UCARCIDE™ 15 Antimicrobial per 1,000 gallons of water in the system. Continue to add as needed to maintain the 20 ppm active ingredient level for a period of at least 96 hours.

INTERMITTENT (SLUG DOSE) METHOD

Initial Dose: When the system is noticeably contaminated, add 19.6 to 49.1 fluid ounces (667 to 1,667 ppm product) of UCARCIDE™ 15 Antimicrobial per ton or 640 to 1,600 mL of UCARCIDE™ 15 Antimicrobial per metric ton of sliced beets as a slug dose. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 2.94 to 29.4 fluid ounces (66 to 960 ppm) of UCARCIDE™ 15 Antimicrobial per ton or 96 to 960 mL of UCARCIDE™ 15 Antimicrobial per metric ton of sliced beets in the system as a slug dose as necessary to maintain control. The total should not exceed 350 gallons per 1,000 tons of beets sliced per day.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably contaminated, add 19.6 to 49.1 fluid ounces/minute (667 to 1,667 ppm product) of UCARCIDE™ 15 Antimicrobial per ton or 640 to 1,600 mL/minute of UCARCIDE™ 15 Antimicrobial per metric ton of beets sliced per minute in the system via automatic pump of suitable construction.

Subsequent Dose: When microbial control is evident, add 2.94 to 29.4 fluid ounces/minute (100 to 1,000 ppm) of UCARCIDE™ 15 Antimicrobial per ton or 96 to 960 mL/minute of UCARCIDE™ 15 Antimicrobial per metric ton of beets sliced per minute in the system, or as necessary to maintain control. The total should not exceed 350 gallons per 1,000 tons of beets sliced per day.

PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS

UCARCIDE™ 15 Antimicrobial should be added to the paper making system at a point of uniform mixing such as the beaters, broke chest pump, save-all tank, or white-water tank.

Initial Dose: When the system is noticeably contaminated, add 1.7 to 9.9 lbs of UCARCIDE™ 15 Antimicrobial per ton of pulp or paper (dry basis) as a slug dose. Repeat until control is achieved. Heavily fouled systems should be boiled out prior to initial treatment.

Subsequent Dose: When microbial control is evident, add 1.0 to 6.6 lbs of UCARCIDE™ 15 Antimicrobial per ton of pulp or paper (dry basis) as a slug dose as necessary to maintain control.

PIGMENTS AND FILLER SLURRIES FOR PAPER AND PAPERBOARD

(For use in food contact and non-food contact pigments and filler slurries)

Use from 0.33 to 2.0 lbs. of UCARCIDE™ 15 Antimicrobial per 1,000 lbs. of dry powder to produce a concentration from 333 to 2,000 ppm as product (based on slurry solids) in the mixed slurry.

WATER BASED COATINGS FOR PAPER AND PAPERBOARD

NOTE: For use in non-food contact coatings only

Use from 0.33 to 2.0 lbs. of UCARCIDE™ 15 Antimicrobial per 1,000 lbs. of dry powder to produce a concentration from 333 to 2,000 ppm as product (based on slurry solids) in the mixed slurry.

UCARCIDE™ 15 Antimicrobial of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSE) or continuously. Badly fouled systems can be shock treated with UCARCIDE™ 15 Antimicrobial. Under these conditions, blowdown should be discontinued for up to 24 hours.

WATER BASED COATINGS

(Brewery, Juice, Dairy, Beverage)

Avoid contamination of food. Thoroughly clean all traces of feed system as recommended (50 to 300 ppm active) of UCARCIDE™ 15 Antimicrobial.

GENERAL PRESERVATIVE

UCARCIDE™ 15 Antimicrobial products and systems, including products, to control the growth of UCARCIDE™ 15 Antimicrobial to 6,860 ppm) based on the water.

PRESERVATIVE FOR

For use in concentrates where UCARCIDE™ 15 Antimicrobial active product will contain 0.086% at no time during the process. Antimicrobial exceed 6.86%.

REVERSE OSMOSIS

For effective preservation of membrane manufacturers, UCARCIDE™ 15 Antimicrobial products and systems, including products, to control the growth of UCARCIDE™ 15 Antimicrobial to 6,860 ppm) based on the water.

CONCRETE ADMIXTURE

For effective preservation of concrete product formulation at a rate of (6.7 to 26.7 lbs UCARCIDE™ 15 Antimicrobial) per ton of concrete.

WATER FLOODS

UCARCIDE™ 15 Antimicrobial uniform mixing. **Initial Treatment:** When the UCARCIDE™ 15 Antimicrobial Antimicrobial per 1,000 gallons. **Subsequent Dose:** When microbial control is evident, add 1.6 to 4.1 fluid ounces of UCARCIDE™ 15 Antimicrobial (0.06 to 16.0 ppm water) to the system weekly, or

DRILLING, COMPLETION

UCARCIDE™ 15 Antimicrobial uniform mixing such as the circulation. **Initial Treatment:** Add 170 to 330 gallons of UCARCIDE™ 15 Antimicrobial to the system. **Maintenance Dosage:** Maintain Antimicrobial by adding 0.7 to 1.4 barrels of additional fluid, or as

PACKER FLUIDS

UCARCIDE™ 15 Antimicrobial mixing such as a circulating hot Antimicrobial (0.7 to 8.1 gallon) freshly prepared fluid dispense fluid in the well between the casing.

GAS PRODUCTION AND

UCARCIDE™ 15 Antimicrobial pipeline via direct injection. The buffer of the UCARCIDE™ 15 line. To facilitate application, it with an appropriate schedule injections to the system should

GAS STORAGE WELL

Individual injection wells should Antimicrobial to produce a core Antimicrobial when diluted by 1 before gas is injected (during it needed to maintain control.

HYDROTESTING

Water used to hydrotest pipelines 15 Antimicrobial (0.3 to 12.8 gal depending on water quality and

PIPELINE PIGGING AND

(Ideally this water volume can be a trailing pig). Sufficient UCAR concentration of 0.3 to 3.3% (0.3 water), depending on the length