



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAR - 1 2000  
OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Union Carbide Corporation  
P. O. Box 670  
Bound Brook, NJ 08805

Attention: Brad Johnson

Subject: AQUICAR 515 Water Treatment Microbiocide  
EPA Registration Number 10352-23  
Your Application Dated December 2<sup>nd</sup>, 2000  
EPA Received Date December 10<sup>th</sup>, 2000

The amendment referred to above, submitted in connection with registration under FIFRA sec.3(c)(7)(A), to add Beet sugar, Paper Mills, Pigments and Filter Slurries, Water Based Coatings, Metal Working Fluid, Conveyor Lubricant claims, Preservative use, Reverse Osmosis Membrane, and Concrete Admixture claims, is acceptable, provided that you:

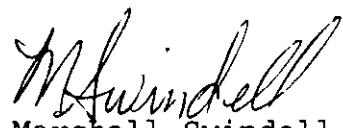
1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 3(c)(5) and sec.4 when the Agency requires all registrants of similar products to submit such data.
2. Submit two (2) copies of your final printed labeling before you release the product for shipment.

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

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

If you have any questions concerning this letter, please contact Karen M. Leavy-Munk at (703)-308-6237.

Sincerely,



Marshall Swindell  
Product Manager 33  
Regulatory Management Branch I  
Antimicrobial Division(7505C)

This label is UCC BUSINESS CONFIDENTIAL and shall not be distributed to anyone unless duly authorized by the Manager, Regulatory Affairs.



# AQUCAR® 515 WATER TREATMENT MICROBIOCIDES

A highly effective Microbiocide for use in controlling Bacteria including Slime Forming Bacteria, Sulfate-Reducing Bacteria, Fungi, Yeast 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. A Molluscicide for use in controlling Macrofouling in Service Water and Auxiliary Systems and Recirculating Cooling and Process Water Systems.

Active Ingredient: Glutaraldehyde ..... 15.0%  
 Inert Ingredients: ..... 85.0%  
 100.0%

ACCEPTED  
 with COMMENTS  
 in EPA Letter Dated:

MAR - 1 2000

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

STATEMENT OF PRACTICAL TREATMENT

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 10352-23

- IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Get immediate medical attention.
  - IF ON SKIN: Wash with plenty of soap and water. Get medical attention.
  - IF INHALED: Remove to fresh air. If breathing is difficult, administer oxygen. If symptoms persist, call a physician.
  - IF SWALLOWED: DO NOT INDUCE VOMITING. Do not give anything to drink. Seek medical advice with urgency.
- NOTE TO PHYSICIAN: Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

## UNION CARBIDE CORPORATION

39 Old Ridgebury Road • Danbury, CT 06817-0001

EPA Reg. No. 10352-23

EPA Est. No. 10352-WV-2

UCC-L90225 (F12/99)

• AQUCAR is a registered trademark

• of Union Carbide

• Net contents 5, 30, or 55 gallons

Made In USA

PE1299

90225 PRODUCT CODE	CONTAINER SIZE	CONTAINER SIZE	CONTAINER SIZE
	55 GALLONS	30 GALLONS	5 GALLONS
	470 POUNDS	280 POUNDS	43 POUNDS
	NET WEIGHT	NET WEIGHT	NET WEIGHT

EMERGENCY CONTACT (24 HOURS PER DAY): IN USA 1-800-UCC-HELP (1-800-822-4357)

OUTSIDE USA 01-304-744-3487

## DIRECTIONS FOR USE

### GENERAL CLASSIFICATION

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

### 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.

AQUCAR® 515 Water Treatment Microbiocide should be added to a water treatment system at a 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 AQUCAR® 515 Water Treatment Microbiocide. Under these conditions, blowdown should be discontinued for up to 24 hours.

AQUCAR® 516 Water Treatment Microbiocide 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 4.2 to 8.5 fluid ounces of AQUCAR® 515 Water Treatment Microbiocide per 100 gallons of water in the system. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 1.7 to 4.2 fluid ounces of AQUCAR® 515 Water Treatment Microbiocide 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 4.2 to 8.5 fluid ounces of AQUCAR® 515 Water Treatment Microbiocide per 100 gallons of water in the system.

**Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 0.8 to 4.2 fluid ounces of AQUCAR® 515 Water Treatment Microbiocide 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

AQUCAR® 515 Water Treatment Microbiocide 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 Sweetwater Systems, Hydrostatic Sterilizers and Retorts, and Pasteurizers and Warmers and Once-Through Cooling Water Systems)

AQUCAR® 515 Water Treatment Microbiocide 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)

AQUCAR® 515 Water Treatment Microbiocide should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 1.5 to 7.5 gallons (1500 to 7500 ppm AQUCAR® 515 Water Treatment Microbiocide) per 1000 gallons of wastewater or sludge.

#### MACROFOULING CONTROL

AQUCAR® 515 Water Treatment Microbiocide 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 17.0 fluid ounces of AQUCAR® 515 Water Treatment Microbiocide per 1000 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.

#### 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.

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**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. 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 rubber 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**

AQUICAR® 515 Water Treatment Microbiocide solutions are incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. These solutions can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about 20.3°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 of 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® is suitable for gaskets and packing.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness and of toxicity to laboratory animals. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. This warranty does not extend to, and the Buyer shall be solely responsible for, any and all loss or damage which results from the use of this product in any manner which is inconsistent with the label directions, warnings or cautions.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT SUCH LIABILITY IS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**BEFORE HANDLING OR USING, READ AND UNDERSTAND  
CURRENT UNION CARBIDE MATERIAL SAFETY DATA  
SHEET FOR THIS PRODUCT.**

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### BEET SUGAR MILLS AND BEET SUGAR MILL PROCESS WATER SYSTEMS

AQUCAR® 515 Water Treatment Microbiocide should be added to the system at a point of uniform mixing such as the diffuser, transport water pump, weir box, or diffuser feed water pump. Additions may be made intermittently (SLUG DOSE) or continuously.

#### INTERMITTENT (SLUG DOSE) METHOD

**Initial Dose:** When the system is noticeably contaminated, add 18.3 to 45.3 fluid ounces (225 to 560 ppm product) of AQUCAR® 515 Water Treatment Microbiocide per ton or 225 to 560 mL of AQUCAR® 515 Water Treatment Microbiocide per metric ton of sliced beets as a slug dose. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 2.7 to 27.3 fluid ounces (30 to 300 ppm) of AQUCAR® 515 Water Treatment Microbiocide per ton or 30 to 300 mL of AQUCAR® 515 Water Treatment Microbiocide per metric ton of sliced beets in the system as a slug dose as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

#### CONTINUOUS FEED METHOD

**Initial Dose:** When the system is noticeably contaminated, add 18.3 to 45.3 fluid ounces/minute (225 to 560 ppm product) of AQUCAR® 515 Water Treatment Microbiocide per ton or 225 to 560 mL/minute of AQUCAR® 515 Water Treatment Microbiocide 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 2.7 to 27.3 fluid ounces/minute (30 to 300 ppm) of AQUCAR® 515 Water Treatment Microbiocide per ton or 30 to 300 mL/minute of AQUCAR® 515 Water Treatment Microbiocide per metric ton of beets sliced per minute in the system, or as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

### PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS

AQUCAR® 515 Water Treatment Microbiocide 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 1.8 to 9.9 lbs of AQUCAR® 515 Water Treatment Microbiocide 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 0.9 to 6.6 lbs of AQUCAR® 515 Water Treatment Microbiocide 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

Add sufficient quantities of AQUCAR® 515 Water Treatment Microbiocide to produce a concentration of 100 to 600 ppm based on slurry solids.

### WATER BASED COATINGS FOR PAPER AND PAPERBOARD

NOTE: For use in non-food contact coatings only.

Add sufficient quantities of AQUCAR® 515 Water Treatment Microbiocide to produce a concentration of 100 to 600 ppm based on slurry solids.

### AQUEOUS METALWORKING FLUIDS

AQUCAR® 515 Water Treatment Microbiocide should be added to a metalworking fluid system at a point of uniform mixing such as the fluid collection tank. Additions may be made intermittently (SLUG DOSE) at intervals of one week or less.

**Initial Dose:** When the system is noticeably fouled apply 8.2 to 24.6 fluid ounces (100 to 300 ppm active) of AQUCAR® 515 Water Treatment Microbiocide per 100 gallons of metalworking fluid to the system. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 3.4 to 16.4 fluid ounces (40 to 200 ppm active) of AQUCAR® 515 Water Treatment Microbiocide per 100 gallons of metalworking fluid to the system weekly, or as needed to maintain control. Badly fouled systems should be cleaned before treatment begins.

### WATER BASED CONVEYOR LUBRICANTS

(Brewery, Juice, Dairy, Beverage, and Food Processing Systems)

Thoroughly clean all tracks and conveyors to remove gross soil. Rinse well. Use an automatic feed system as recommended by our UCC representative to provide 4.1 to 24.6 fluid ounces (50 to 300 ppm active) of AQUCAR® 515 Water Treatment Microbiocide per 100 gallons of diluted lubricant.

### GENERAL PRESERVATIVE USE

AQUCAR® 515 Water Treatment Microbiocide is recommended for use in aqueous or water containing products and systems, including industrial, institutional and consumer in-can processes and products, to control the growth of bacteria and fungi. For effective preservation, add AQUCAR® 515 Water Treatment Microbiocide to the product formulation at a rate of 0.066% to 0.66% (666.9 to 6669 ppm) based on the water content of the product (0.66 to 6.6 lbs AQUCAR® 515 Water Treatment Microbiocide /1000 lbs water content). Mix uniformly.

### PRESERVATIVE FOR CONCENTRATES

For use in concentrates where effective preservation is needed after dilution, add AQUCAR® 515 Water Treatment Microbiocide to the product formulation at a rate such that the diluted end-use product will contain 0.066% to 0.66% AQUCAR® 515 Water Treatment Microbiocide.

At no time during the preservation process should the level of AQUCAR® 515 Water Treatment Microbiocide exceed 6.6%.

### REVERSE OSMOSIS MEMBRANE

For effective preservation of reverse osmosis elements (where approved for compatibility by membrane manufacturer), immerse elements in a tank containing 0.66% to 6.6% AQUCAR® 515 Water Treatment Microbiocide.

AQUCAR® 515 Water Treatment Microbiocide can also be added to in-line recirculating systems for preservation of installed out-of-service reverse osmosis equipment (where approved for compatibility by membrane manufacturer). Add 0.66% to 6.6% AQUCAR® 515 Water Treatment Microbiocide to the tank in the circulating system. Maintain AQUCAR® 515 Water Treatment Microbiocide concentration by periodic addition to counteract any system leakage.

### CONCRETE ADMIXTURES

For effective preservation of concrete admixtures, add AQUCAR® 515 Water Treatment Microbiocide to the product formulation at a rate of 6,666 to 26,667 ppm based on the weight of the admixture (6.7 to 26.7 lbs AQUCAR® 515 Water Treatment Microbiocide/1000 lbs. concrete admixture). Mix uniformly.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

MAR - 1 2000

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

10352-23

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