

464-702

7/8/2004

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUL - 8 2004

The Dow Chemical Company  
1803 Building  
Midland, MI 48674

Attention: Maureen Miksztal  
Senior Regulatory Specialist

Subject: UCARCIDE 42 Antimicrobial  
EPA Registration No. 464-702  
Amendment Dated March 16, 2004

The amendment, submitted in connection with registration under the FIFRA sec. 3(c)(7)(A), to change the primary product name to "UCARCIDE 42 Antimicrobial", to include two additional brand names "UCARSAN 442 Sanitizer" and "AQUCAR 542 Water Treatment Microbiocide", additional organisms and sanitizer claims and paper claims on the label is acceptable, provided that you:

Delete the proposed label claims in regards to the product as a virucide against Human coronavirus on hard, non-porous surfaces in the presence of 5% organic soil for a contact time of 5 minutes at both 500 ppm and 1000 ppm active ingredient in 100 ppm hard water.

Refer to the enclosed copy of the Efficacy Review for any additional comments and deficiencies listed under the "CONCLUSION" and "RECOMMENDATIONS"

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

SYMBOL							
SURNAME							
DATE							

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General Comments

The two (2) requested alternate brand names "UCARCIDE 42 Antimicrobial" and AQUCAR 542 Water Treatment Microbiocide" are acceptable.

Your request to change the primary product name of your registration from "AQUCAR 542 Water Treatment Microbiocide" to UCARCIDE 42 Antimicrobial" is acceptable.

On the proposed label, change "Corona virus" to "Coronavirus". Refer to the enclosed Product Chemistry Review for additional labeling deficiencies.

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

# UCARCIDE 42

## Antimicrobial

USE DIRECTIONS

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. UCARCIDE™ 42 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™ 42 Antimicrobial. Under these conditions, blowdown should be discontinued for up to 24 hours.

UCARCIDE™ 42 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 12.7 to 25.5 fluid ounces of UCARCIDE™ 42 Antimicrobial per 1,000 gallons of water in the system. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 5.1 to 12.7 fluid ounces of UCARCIDE™ 42 Antimicrobial per 1,000 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 12.7 to 25.5 fluid ounces of UCARCIDE™ 42 Antimicrobial per 1,000 gallons of water in the system.

**Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 2.8 to 12.7 fluid ounces of UCARCIDE™ 42 ANTIMICROBIAL per 1,000 gallons of water in the system per day.

Badly fouled systems must be cleaned before treatment is begun.

#### SERVICE WATER AND AUXILIARY SYSTEMS

UCARCIDE™ 42 Antimicrobial should be added 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)

UCARCIDE™ 42 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™ 42 Antimicrobial should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 0.45 to 2.3 gallons (500 to 2,500 ppm) UCARCIDE™ 42 Antimicrobial per 100 gallons of wastewater or sludge.

#### PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS

UCARCIDE™ 42 Antimicrobial should be added to a paper making system at a point of uniform mixing such as the thin or thick stock chest, save-all tank, process tank or white-water tank.

**Initial Dose:** When the system is noticeably contaminated, add 0.5 to 3.0 lbs. of UCARCIDE™ 42 Antimicrobial per ton or 0.15 to 1.5 Kg of UCARCIDE™ 42 Antimicrobial per metric ton of pulp or paper (dry basis) as a continuous or slug dose. Repeat until control is achieved. Heavily fouled systems should be shocked out prior to initial treatment.

**Subsequent Dose:** When microbial control is evident, add 0.3 to 2.0 lb of UCARCIDE™ 42 Antimicrobial per ton or 0.15 to 1.0 kg of UCARCIDE™ 42 Antimicrobial per metric ton of pulp or paper (dry basis) as a continuous or slug dose. Repeat until control is achieved.

#### WATER BASED COATINGS, PIGMENTS AND FILLER SLURRIES FOR PAPER AND PAPERBOARD

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

Use from 0.1 to 0.6 lbs. of UCARCIDE™ 42 Antimicrobial per 1,000 lbs. dry powder to produce a concentration of 100 to 600 ppm as product (based on slurry solids) in the mixed slurry.

#### WATER FLOODS

UCARCIDE™ 42 Antimicrobial should be added to a water flood system at a point of uniform mixing.

**Initial Treatment:** When the system is noticeably contaminated, add 100 to 5,000 ppm UCARCIDE™ 42 Antimicrobial to the system (0.09 to 4.5 gallons UCARCIDE™ 42 Antimicrobial per 1,000 gallons flood water). Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 20 to 5,000 ppm UCARCIDE™ 42 Antimicrobial (0.02 to 4.5 gallons UCARCIDE™ 42 Antimicrobial per 1,000 gallons flood water) to the system weekly, or as needed to maintain control.

#### DRILLING, COMPLETION, AND WORKOVER FLUIDS

UCARCIDE™ 42 Antimicrobial should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank.

**Initial Treatment:** Add 50 to 1,000 ppm UCARCIDE™ 42 Antimicrobial (0.2 to 3.8 gallons UCARCIDE™ 42 Antimicrobial per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination.

**Maintenance Dosage:** Maintain a concentration of 50 to 1,000 ppm UCARCIDE™ 42 Antimicrobial by adding 0.2 to 3.8 gallons of UCARCIDE™ 42 Antimicrobial per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

#### PACKER FLUIDS

UCARCIDE™ 42 Antimicrobial should be added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 50 to 600 ppm UCARCIDE™ 42 Antimicrobial (0.2 to 2.3 gallons UCARCIDE™ 42 Antimicrobial per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination. Seal the treated packer fluid in the well between the casing and production tube.

#### GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

UCARCIDE™ 42 Antimicrobial should be added to a gas production or transmission pipeline via direct injection. The application should be conducted to ensure maximum distribution of the UCARCIDE™ 42 Antimicrobial through the entire internal surface of the pipeline. To facilitate application, it may be desirable to dilute the UCARCIDE™ 42 Antimicrobial with an appropriate solvent immediately before use. Injections to the system should be weekly, or as needed to maintain control.

A HIGHLY EFFECTIVE MICROBIOCIDICIDE FOR USE IN CONTROLLING BACTERIA INCLUDING SLIME FORMING BACTERIA, AND SULFATE-REDUCING BACTERIA, AND 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 IN SERVICE WATER AND AUXILIARY SYSTEMS AND HEAT TRANSFER SYSTEMS AND IN WASTEWATER SYSTEMS INCLUDING WASTEWATER SLUDGE AND HOLDING TANKS, AND IN PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS AND WATER BASED COATINGS FOR PAPER AND PAPERBOARD AND IN OIL WELL DRILLING, OIL FIELD PROCESSING APPLICATIONS, OIL FIELD WATER SYSTEMS, GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS, AND GAS STORAGE FEEDS 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 AND AN INDUSTRIAL SANITIZER FOR USE IN CONTROLLING MICROBIAL CONTAMINATION IN ANIMAL PRODUCTION FACILITIES AND FARM EQUIPMENT SUCH AS POULTRY & TURKEY HOUSES, SWINE HOUSING AND FARROWING AREAS, BARN AND LARGE ANIMAL BUILDINGS, HATCHERS, SETTERS, AND CHICK PROCESSING FACILITIES, CAGES AND TRANSPORT VEHICLES, AND HATCHING EGGS AND FOR SANITIZING INDUSTRIAL OR NON-FOOD CONTACT SURFACES SUCH AS EQUIPMENT FOR MIXING, PACKING OR PACKAGING PRODUCTS, PRODUCT TRANSFER LINES, STORAGE TANKS, FLOORS AND WALLS.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

JUL 0 8 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 464-782	Ingredient: Glutaraldehyde	42.5%
	Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride	7.5%
	Water	50.0%
	Total	100.0%

### 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 30 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 a rescue 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. Probable 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. 464-702  
EPA Est. No. 10352-WV-2 (A) 464-WV-1 (B)  
EPA Est. No. 10352-WV-1 (C)  
16.5 gallon pails in pallets; all drums; bulk  
Single 5 gallon pails only.  
Bulk Shipments.

THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.

1-800-258-CHEM

\*Trademark of THE DOW CHEMICAL COMPANY

L14350 (G 03/04)

Made in USA

PE0304

Net Contents: 5.55 gallons or Bulk

CONTAINER SIZE	CONTAINER SIZE	CONTAINER SIZE	SHIPPING NAME	COMPRESSIVE LIQUID TOXIC NO. 5 CONTAINS SULFARLENOLIDE
TOTE	55 GALLONS	5 GALLONS		
2,335 POUNDS	505 POUNDS	43 POUNDS	HAZARD CLASS: 8.6.1	UNCLAS
NET WEIGHT	NET WEIGHT	NET WEIGHT		PG#

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

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## DANGER

### KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes irreversible eye damage. Causes skin burns. May be fatal if swallowed or absorbed through skin. Harmful if inhaled. 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™ 42 Antimicrobial is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. UCARCIDE™ 42 Antimicrobial can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about 7°F (-14°C). Therefore, unless the storage tank is above 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 EPDM 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 burning 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.



#### NOTICE

Do Not Ship or Store with Food, Feeds, Drugs, or Clothing

UCAS STORAGE

Individual drips should be treated to produce a concentration diluted by the water present to maintain control.

#### HYDROTESTING

Water used to hydrotest pipe should be treated with UCARCIDE™ 42 Antimicrobial (0.09 lbs. water), depending on water.

#### PIPELINE PIGGING A

Add UCARCIDE™ 42 Antimicrobial (0.09 lbs. water) to the pigging fluid. Sufficient concentration is 0.1 to 1% (10 to 100 lbs. water), depending on the water.

#### SANITIZING NON-FOOD CONTACT SURFACES AND EQUIPMENT AND BUILDINGS

\* Not for use in state of California. DO NOT USE THIS PRODUCT

#### Product Dilution:

To sanitize vegetative pathogens: *Staphylococcus aureus*, and *Bordetella pertussis*, *Avian influenzae (virulent)*.

- Thoroughly saturate all surfaces with a solution of UCARCIDE™ 42 Antimicrobial (0.14 to 0.56 fluid ounce to 4.4 milliliters per liter) to produce a final concentration of 0.1 to 1.0% (10 to 100 lbs. water), depending on the water.
- Allow to stand for at least 10 minutes.
- Ventilate thoroughly before re-occupancy.
- Fresh solution should be prepared for each application.

#### Farm Equipment and Buildings

(poultry & turkey grow-out houses, large animal buildings)

#### Before applying UCARCIDE™ 42 Antimicrobial:

- Remove all poultry and other animals from the area. Clean and disinfect all equipment and empty all feed and waterers must be thoroughly cleaned.
- Remove all litter and manure and stand after treatment with fresh replacement.
- Using suitable commercially available UCARCIDE™ 42 Antimicrobial (0.56 fluid ounce to 4.4 milliliters per liter) to produce a final concentration of 0.1 to 1.0% (10 to 100 lbs. water), depending on the water.
- Ventilate enclosed spaces.
- Do not re-occupate with poultry until the solution has been absorbed or dried.

#### Hatcheries, S

- General sanitizing of environment. Clean and disinfect all equipment and empty all feed and waterers must be thoroughly cleaned.
- Treatment of air and surfaces. Clean and disinfect all equipment and empty all feed and waterers must be thoroughly cleaned.
- Treatment of equipment for use of UCARCIDE™ 42 Antimicrobial recirculating system. Repeat.

Trays, Racks, Carrels. Clean and disinfect all equipment and empty all feed and waterers must be thoroughly cleaned.

Remove all litter and heavy debris from the area. Clean and disinfect all equipment and empty all feed and waterers must be thoroughly cleaned.

Remove all litter and heavy debris from the area. Clean and disinfect all equipment and empty all feed and waterers must be thoroughly cleaned.

#### Sanitizing Non-Food Contact Surfaces and Equipment and Buildings

\* Not for use in state of California. DO NOT USE THIS PRODUCT

Before applying UCARCIDE™ 42 Antimicrobial to surfaces using a suitable cleaner. Dilute UCARCIDE™ 42 Antimicrobial (0.56 fluid ounce of UCARCIDE™ 42 Antimicrobial per liter) with water to produce a final concentration of 0.1 to 1.0% (10 to 100 lbs. water), depending on the water.

Using suitable commercially available UCARCIDE™ 42 Antimicrobial (0.56 fluid ounce to 4.4 milliliters per liter) to produce a final concentration of 0.1 to 1.0% (10 to 100 lbs. water), depending on the water.