

# KEEP OUT OF REACH OF CHILDREN DANGER

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

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. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, aquatic invertebrates, oysters and shrimp. 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.

### Personal Protective Equipment

Applicators and other handlers must wear: goggles or face shield, long-sleeve shirt, long pants, shoes, socks, chemical-resistant gloves (such as butyl rubber) and chemical resistant apron.

**User Safety Requirements**  
Follow manufacturer's instructions for cleaning & maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations**  
Users must wash hands before eating, drinking, chewing gum, or using the toilet. Users must remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users must remove PPE immediately after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### STORAGE AND HANDLING

UCARCIDE 14 Antimicrobial is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. UCARCIDE 14 Antimicrobial can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about 27° F (-3° 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® 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.

The product in its undiluted form must not be used in a spray, fogging or aerosol application.

### 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 Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL**  
Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Notice:** Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

# UCARCIDE™ 14 Antimicrobial

Active Ingredient:	Glutaraldehyde .....	14.0%
	Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride .....	2.5%
Inert Ingredients:	.....	83.5%
Total:	.....	100.0%

FIRST AID	
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><li>• If the person is fully alert and cooperative, have the person rinse mouth with plenty of water. Have the patient drink 4 to 10 ounces (120-300 mL) of water or milk.</li><li>• Do not induce vomiting. Do not attempt mouth rinse if the person has respiratory distress, altered mental status, or nausea and vomiting.</li><li>• Call a physician and/or transport to emergency facility immediately. See Note to Physician.</li></ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Wash immediately and continuously with flowing water for at least 30 minutes.</li><li>• Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.</li><li>• Call a poison control center or a doctor immediately for treatment advice.</li></ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"><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 a doctor for treatment advice.</li></ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible</li><li>• Call a poison control center or a doctor for further treatment advice.</li></ul>
HOT LINE NUMBER	
<b>IN CASE OF AN EMERGENCY</b> endangering life or property involving this product, call collect (989)636-4400. Have product container or label with you when calling a poison control center or doctor or going for treatment.	
<b>NOTE TO PHYSICIAN:</b> Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.	

E.P.A. Registration No. 464-700

E.P.A. Est. 5905-IA-01



**LICENSED**

PERIOD **2014-2016** LIC. NO.

**9197.233**  
**Disc.**

Produced for:



### THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.

(989)636-4400

®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow Made in U.S.A.

**NET CONTENTS: 55 gallons**

**NET WT: 470 lb / 213 kg**

**LOT NO:**

## DIRECTIONS FOR USE

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 14 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 14 Antimicrobial. Under these conditions, blowdown should be discontinued for up to 24 hours.

UCARCIDE 14 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 4.2 to 8.5 fluid ounces of UCARCIDE 14 Antimicrobial 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 UCARCIDE 14 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 4.2 to 8.5 fluid ounces of UCARCIDE 14 Antimicrobial per 100 gallons of water in the system.

**Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 0.8 to 4.2 fluid ounces of UCARCIDE 14 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 14 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 Sweetwater Systems, Hydrostatic Sterilizers And Retorts, And Pasteurizers And Warmers)

UCARCIDE 14 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 14 Antimicrobial should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 200 to 975 fluid ounces (1.6 to 7.6 gallons) (1,600 to 7,600 ppm product) of UCARCIDE 14 Antimicrobial per 1,000 gallons of wastewater or sludge.

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

UCARCIDE 14 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 1.5 to 9.0 lbs of UCARCIDE 14 Antimicrobial per ton or 0.76 to 4.5 Kg of UCARCIDE 14 Antimicrobial per metric 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 6.0 lbs of UCARCIDE 14 Antimicrobial per ton or 0.46 to 3.0 Kg of UCARCIDE 14 Antimicrobial per metric ton of pulp or paper (dry basis) as a slug dose as necessary to maintain control.

#### WATER BASED COATINGS FOR PAPER AND PAPERBOARD

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

Use from 0.3 to 1.8 lbs. of UCARCIDE 14 Antimicrobial per 1,000 lbs. of dry powder or 0.3 to 1.8 Kg of UCARCIDE 14 Antimicrobial per metric ton of dry slurry to produce a concentration from 300 to 1,800 ppm as product (based on slurry solids) in the mixed slurry.

#### WATER FLOODS

UCARCIDE 14 Antimicrobial should be added to a water flood system at a point of uniform mixing.

**Initial Treatment:** When the system is noticeably contaminated, add 300 to 15,000 ppm UCARCIDE 14 Antimicrobial to the system (0.3 to 14.5 gallons UCARCIDE 14 Antimicrobial per 1,000 gallons flood water). Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 60 to 15,000 ppm UCARCIDE 14 Antimicrobial (0.06 to 14.5 gallons UCARCIDE 14 Antimicrobial per 1,000 gallons flood water) to the system weekly, or as needed to maintain control.

#### FRAC FLUIDS

**Not registered for this use in the State of California.**

UCARCIDE 14 Antimicrobial reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. Add UCARCIDE 14 Antimicrobial to the frac water storage tanks or directly into the well head injection pipeline as the water is being pumped down-hole.

Dose Range: UCARCIDE 14 Antimicrobial should be added at a rate of 360 to 17,900 ppm (3.5 - 172.5 gallons per 10,000 gallons) depending on the degree of bacterial fouling in the source water.

#### DRILLING, COMPLETION, AND WORKOVER FLUIDS

UCARCIDE 14 Antimicrobial should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank.

**Initial Treatment:** Add 150 to 3,000 ppm UCARCIDE 14 Antimicrobial (0.6 to 12.2 gallons UCARCIDE 14 Antimicrobial per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination.

**Maintenance Dosage:** Maintain a concentration of 150 to 3,000 ppm UCARCIDE 14 Antimicrobial by adding 0.6 to 12.2 gallons of UCARCIDE 14 Antimicrobial per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

#### PACKER FLUIDS

UCARCIDE 14 Antimicrobial should be added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 150 to 1,800 ppm UCARCIDE 14 Antimicrobial (0.6 to 7.3 gallons UCARCIDE 14 Antimicrobial per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination. Seal the treated packer fluid in the wall between the casing and production tube.

#### OIL PRODUCTION AND TRANSMISSION PIPELINE SYSTEMS

**Product not registered for this use in the State of California.**

UCARCIDE 14 Antimicrobial should be added to an oil production or transmission line via direct injection. The application should be conducted to ensure maximum distribution of UCARCIDE 14 Antimicrobial throughout the entire internal pipeline surface by adding a sufficient amount of biocide to detect/measure a residual concentration at the back end of the pipeline system. Criteria for success of the treatment will be a reduction in bacterial counts and/or reduced corrosion rates. To facilitate application, it may be desirable to dilute the UCARCIDE 14 Antimicrobial with an appropriate solvent immediately before use. The concentration in the solvent should not fall below an active concentration range of 500 to 5,000 ppm based on the volume of water in the pipeline. Injections to the system should be weekly, or as needed to maintain control.

#### GAS PRODUCTION AND TRANSMISSION PIPELINE SYSTEMS

UCARCIDE 14 Antimicrobial should be added to a gas production or transmission line via direct injection. The application should be conducted to ensure maximum distribution of UCARCIDE 14 Antimicrobial throughout the entire internal pipeline surface by adding a sufficient amount of biocide to detect/measure a residual concentration at the back end of the pipeline system. Criteria for success of the treatment will be a reduction in bacterial counts and/or reduced corrosion rates. To facilitate application, it may be desirable to dilute the UCARCIDE 14 Antimicrobial with an appropriate solvent immediately before use. The concentration in the solvent should not fall below an active concentration range of 500 to 5,000 ppm based on the volume of water in the pipeline. Injections to the system should be weekly, or as needed to maintain control.

#### GAS STORAGE WELLS AND SYSTEMS

Individual injection wells should be treated with sufficient quantity of UCARCIDE 14 Antimicrobial to produce a concentration of 1,500 to 15,000 ppm UCARCIDE 14 Antimicrobial when diluted by the water present in the formation. Injection should take place before gas is injected (during the summer). Injections should be repeated yearly, or as needed to maintain control. Individual drips should be treated with a sufficient quantity of UCARCIDE 14 Antimicrobial to produce a concentration of 600 to 6,000 ppm UCARCIDE 14 Antimicrobial when diluted by the water present in the drip. Injections should be repeated yearly, or as needed to maintain control.

#### HYDROTESTING

Water used to hydrotest pipelines or vessels should contain 300 to 12,000 ppm UCARCIDE 14 Antimicrobial (0.3 to 11.8 gallons UCARCIDE 14 Antimicrobial per 1,000 gallons water), depending on water quality and length of time the equipment will remain idle.

#### PIPELINE PIGGING AND SCRAPING OPERATIONS

Add UCARCIDE 14 Antimicrobial to a slug of water immediately following the scraper (ideally this water volume can be kept to a minimum and contained between the scraper and a trailing pig). Sufficient UCARCIDE 14 Antimicrobial should be added to produce a concentration of 0.3 to 3% (0.29 to 2.9 gallon UCARCIDE 14 Antimicrobial per 100 gallons water), depending on the length of the pipeline and the severity of biofouling.