

AQUCAR™ 720 Water Treatment Microbiocide

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

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 manufacturers' 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.

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.

STORAGE AND HANDLING

AQUCAR 720 Water Treatment Microbiocide is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. AQUCAR 720 Water Treatment Microbiocide can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about 16°F (-9°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 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 your Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Option to use for labels on nonrefillable rigid containers of all sizes.

Nonrefillable Container. Do not reuse or refill this container. Triple 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.

Option to use for labels on refillable rigid tote containers.

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning of 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 container before final disposal, empty contents into application equipment and triple rinse. Pour or pump rinsate into application equipment or rinsate collection system. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed 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.

Active Ingredient: Glutaraldehyde 20%

Inert Ingredients: 80%

Total: 100%

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FIRST AID

IF SWALLOWED:	<ul style="list-style-type: none">• 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.• Do not induce vomiting. Do not attempt mouth rinse if the person has respiratory distress, altered mental status, or nausea and vomiting.• Call a physician and/or transport to emergency facility immediately. See Note to Physician.
IF IN EYES:	<ul style="list-style-type: none">• 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:	<ul style="list-style-type: none">• 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:	<ul style="list-style-type: none">• 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.

HOT LINE NUMBER

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

NOTE TO PHYSICIAN: Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.



LICENSED

PERIOD **2011-2013** LIC. NO. PERIOD **2014-2016** LIC. NO.

9197.309



LICENSED

E.P.A. Registration No. 464-689

E.P.A. Est. 10352-WV-002



The Dow Chemical Company

Midland, Michigan 48674

(989)636-4400

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NET CONTENTS: 55 gallons

NET WT: 470 lb / 213.2 kg

LOT:

DIRECTIONS FOR USE

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

WATER FLOODS

Not registered for this use in the State of California.

AQUCAR 720 Water Treatment Microbiocide should be added to a water flood system at a point of uniform mixing.

Initial treatment: When the system is noticeably contaminated, add 250 to 12,500 ppm AQUCAR 720 Water Treatment Microbiocide to the system (0.23 to 11.9 gallons AQUCAR 720 Water Treatment Microbiocide per 1,000 gallons flood water). Repeat until control is achieved.

Subsequent dose: When microbial control is evident, add 50 to 12,500 ppm AQUCAR 720 Water Treatment Microbiocide (0.05 to 11.9 gallons AQUCAR 720 Water Treatment Microbiocide 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.

AQUCAR 720 Water Treatment Microbiocide reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. Add AQUCAR 720 Water Treatment Microbiocide to the frac water storage tanks or directly into the well head injection pipeline as the water is being pumped down-hole.

Dose Range: AQUCAR 720 Water Treatment Microbiocide should be added at a rate of 250 to 12,500 ppm (2.3 - 119 gals per 10,000 gallons) depending on the degree of bacterial fouling in the source water.

DRILLING, COMPLETION, AND WORKOVER FLUIDS

Not registered for this use in the State of California.

AQUCAR 720 Water Treatment Microbiocide should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank.

Initial treatment: Add 125 to 2,500 ppm AQUCAR 720 Water Treatment Microbiocide (0.5 to 10 gallons AQUCAR 720 Water Treatment Microbiocide per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination.

Maintenance dosage: Maintain a concentration of 125 to 2,500 ppm AQUCAR 720 Water Treatment Microbiocide by adding 0.5 to 10 gallons of AQUCAR 720 Water Treatment Microbiocide per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

PACKER FLUIDS

Not registered for this use in the State of California.

AQUCAR 720 Water Treatment Microbiocide should be added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 125 to 1500 ppm AQUCAR 720 Water Treatment Microbiocide (0.5 to 6 gallons AQUCAR 720 Water Treatment Microbiocide 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 AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

Not registered for this use in the State of California.

AQUCAR 720 Water Treatment Microbiocide should be added to an oil/gas production or transmission pipeline via direct injection. The application should be conducted to ensure maximum distribution of the AQUCAR 720 Water Treatment Microbiocide 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 AQUCAR 720 Water Treatment Microbiocide with an appropriate solvent immediately before use. The product should be dosed into the system at 1000 to 12,500 ppm based on the water volume in the pipeline. Injections to the system should be weekly, or as needed to maintain control.

GAS STORAGE WELLS AND SYSTEMS

Not registered for this use in the State of California.

Individual injection wells should be treated with a sufficient quantity of AQUCAR 720 Water Treatment Microbiocide to produce a concentration of 1,250 to 12,500 ppm AQUCAR 720 Water Treatment Microbiocide when diluted by the water present in the formation. Injection should take place before gas is injected (during the summer). Injections should be repeated

HYDROTESTING

Not registered for this use in the State of California.

Water used to hydrotest pipelines or vessels should contain 250 to 10,000 ppm AQUCAR 720 Water Treatment Microbiocide (0.23 to 9.5 gallons AQUCAR 720 Water Treatment Microbiocide per 1,000 gallons water), depending on water quality and length of time the equipment will remain idle.

PIPELINE PIGGING AND SCRAPING OPERATIONS

Not registered for this use in the State of California.

Add AQUCAR 720 Water Treatment Microbiocide 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 AQUCAR 720 Water Treatment Microbiocide should be added to produce a concentration of 0.25 to 2.5% (0.24 to 2.4 gallon AQUCAR 720 Water Treatment Microbiocide per 100 gallons water), depending on the length of the pipeline and the severity of biofouling.

INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS

Not Registered For This Use In The State Of California.

Add AQUCAR 720 Water Treatment Microbiocide to the basin (or any other point of uniform mixing). Additions should be made with a metering pump; it may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the retention time of the system. Optimum performance with this product is attained by continuous or intermittent treatment. If "shock" treatment is used, the blowdown should be discontinued for 24-48 hours.

FOR CONTROL OF BACTERIA

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

Add 34 to 84 fluid oz/1000 gallon or 263 mL to 658 mL/m³ of product in water in the system, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, Add 34 to 84 fluid

oz/1000 gallon or 263 mL to 658 mL/m³ of product to the water in the system. Repeat until control is achieved.

Subsequent Dose: Once the microbial control is evident add 24 to 34 fluid

oz/1000 gallon or 184 mL to 263 mL/m³ of product in the system every 4 days, or as needed to maintain control.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, Add 34 to 84 fluid

oz/1000 gallon or 263 mL to 658 mL/m³ of product to the water in the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 7 to

34 fluid oz/1000 gallon or 53 mL to 263 mL/m³ of product to the water in the system per day.

FOR CONTROL OF FUNGI AND ALGAE

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

Add 50 to 340 fluid oz/1000 gallon or 400 mL to 2.65 L/m³ of product to the water in the system depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, add 50 to 340 fluid

oz/1000 gallon or 400 mL to 2.65 L/m³ of product to the water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 50 to 340 fluid

oz/1000 gallon or 400 mL to 2.65 L/m³ of product to the water in the system daily, or as needed to maintain control.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, add 50 to 340 fluid

oz/1000 gallon or 400 mL to 2.65 L/m³ of product to the water in the system.

Subsequent Dose: Maintain this treatment level by pumping a continuous

feed of 50 to 340 fluid oz/1000 gallon or 400 mL to 2.65 L/m³ of product to the water in the system per day.