

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER
KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes irreversible eye damage. May be fatal if swallowed. Harmful if absorbed through the skin or inhaled.

Avoid contact with skin, clothing and spray mist. Do not get in eyes. Wear goggles or face shield when handling. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco or using the toilet. Remove contaminated clothing 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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.
Do not mix with oxidizers, anionic soaps and detergents.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

NON-REFILLABLE CONTAINERS

PESTICIDE STORAGE: Open dumping is prohibited. Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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 HANDLING DISPOSAL: Nonrefillable container Do not reuse this container to hold materials other than pesticides or rinsate. Offer for recycling if available or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. If rinsate cannot be used, follow pesticide disposal instructions. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state and federal regulations.

RESIDUE REMOVAL INSTRUCTIONS: Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store for later use or disposal. Repeat this procedure two more times.

REFILLABLE CONTAINERS

PESTICIDE STORAGE: Open dumping is prohibited. Store only in original container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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 HANDLING DISPOSAL: Triple rinse (or equivalent). Refillable container. Refill this container with this product only. Do not reuse this container for any other purpose.

RESIDUE REMOVAL INSTRUCTIONS: Cleaning 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 the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

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.

Aquacar™ 712 Water Treatment Microbiocide

A microbiocide for use in controlling sulfate-reducing bacteria and slime forming bacteria in oil well drilling, oil field processing applications, oil field water systems, oil and gas productions 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.

A highly effective microbiocide for use in controlling bacteria including slime forming bacteria and sulfate-reducing bacteria (SRB) 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.

Active Ingredients:	
Glutaraldehyde	12.5%
Didecyl dimethyl ammonium chloride	3.0%
Inert Ingredients:	84.5%
Total:	100.0%

KEEP OUT OF REACH OF CHILDREN
DANGER

FIRST AID	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
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 SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor • Do not give anything by mouth to an unconscious person
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or a doctor immediately 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.
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	
IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect (989)636-4400.	

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

E.P.A. Registration No. 10324-208-464
E.P.A. Est. 10324-TN-1



LICENSED

PERIOD **2015-2017** LIC. NO.

9197.350
Disc.

The Dow Chemical Company
Midland, Michigan 48674 U.S.A.
(989)636-4400
® TM Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow
Made in U.S.A.

NET CONTENTS: 275 gallons
NT WT: 2350 lb / 1066 kg
LOT NO:

AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS/RECIRCULATING COOLING AND PROCESS WATER SYSTEMS
This product is used in industrial air washers and air washer systems which have mist-eliminating components.
Aquacar 712 Water Treatment Microbiocide is 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 is made intermittently/Slug Dose or continuously. Badly fouled systems can be shock treated with Aquacar 712 Water Treatment Microbiocide. Under these conditions, blowdown is discontinued for up to 24 hours.
Aquacar 712 Water Treatment Microbiocide is 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 42.67 to 85.33 fluid ounces of Aquacar 712 Water Treatment Microbiocide per 1,000 gallons of water in the system. Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 17.07 to 42.67 fluid ounces of Aquacar 712 Water Treatment Microbiocide 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 42.67 to 85.33 fluid ounces of Aquacar 712 Water Treatment Microbiocide per 1,000 gallons of water in the system.
Subsequent Dose: Maintain this treatment level by starting a continuous feed of 8.53 to 42.67 fluid ounces of Aquacar 712 Water Treatment Microbiocide 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
Aquacar 712 Water Treatment Microbiocidd is used at the same application rates, and in the same manner as described above. It is 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
Aquacar 712 Water Treatment Microbiocide is used at the same application rates, and in the same manner as described above. It is 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
Aquacar 712 Water Treatment Microbiocide is added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 1.67 to 8.33 gallons (250 to 1250 ppm on an active basis) of Aquacar 712 Water Treatment Microbiocide per 1,000 gallons of wastewater or sludge.

PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS
Aquacar 712 Water Treatment Microbiocide is added to the 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. Do not use to treat paper or paperboard which will contact food.
Initial Dose: When the system is noticeably contaminated, add 1.67 to 10.0 lbs of Aquacar 712 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 1.0 to 6.67 lbs of Aquacar 712 Water Treatment Microbiocide per ton of pulp or paper dry basis as a slug dose as necessary to maintain control.

WATER BASED COATING, PIGMENTS AND FILLER SLURRIES FOR PAPER AND PAPERBOARD
NOTE: For use in non-food contact coating only.
Use from 0.33 to 2.0 lbs. of Aquacar 712 Water Treatment Microbiocide per 1,000 lbs. dry powder to produce a concentration of 333.3 to 2000 ppm as product based on slurry solids in the mixed slurry.

WATER FLOODS
Aquacar 712 Water Treatment Microbiocide is added to a water flood system at a point of uniform mixing.
Initial Treatment: When the system is noticeably contaminated, add 50 to 2500 ppm of Aquacar 712 Water Treatment Microbiocide to the system (0.33 to 16.67 gallons of Aquacar 712 Water Treatment Microbiocide per 1,000 gallons flood water). Repeat until control is achieved.
Subsequent Dose: When microbial control is evident, add 10 to 2500 ppm of Aquacar 712 Water Treatment Microbiocide (0.7 to 16.67 gallons of Aquacar 712 Water Treatment Microbiocide per 1,000 gallons flood water) to the system weekly, or as needed to maintain control.

DIRECTIONS FOR USE

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

FRAC FLUIDS
Aquacar 712 Water Treatment Microbiocide reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. Add Aquacar 712 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: Aquacar 712 Water Treatment Microbiocide is added at a rate of 50 to 2950 ppm on an actives basis (3.23 to 196.67 gallons per 10,000 gallons) depending on the degree of bacterial fouling in the source water.

DRILLING, COMPLETION, AND WORKOVER FLUIDS
Aquacar 712 Water Treatment Microbiocide is added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank.
Initial treatment: Add 25 to 500 ppm of Aquacar 712 Water Treatment Microbiocide (0.7 to 14.0 gallons of Aquacar 712 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 25 to 500 ppm of Aquacar 712 Water Treatment Microbiocide by adding 0.7 to 14 gallons of Aquacar 712 Water Treatment Microbiocide per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

PACKER FLUIDS
Aquacar 712 Water Treatment Microbiocide is added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 25 to 300 ppm of Aquacar 712 Water Treatment Microbiocide (0.7 to 8.4 gallons of Aquacar 712 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
Aquacar 712 Water Treatment Microbiocide is added to an oil production or transmission line via direct injection. The application is conducted to ensure maximum distribution of Aquacar 712 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 Aquacar 712 Water Treatment Microbiocide with an appropriate solvent immediately before use. The concentration in the solvent must not fall below an active concentration range of 500 to 5,000 ppm based on the volume of water in the pipeline. Injections are made weekly, or as needed to maintain control.

GAS STORAGE WELLS AND SYSTEMS
Individual injection wells are treated with a sufficient quantity of Aquacar 712 Water Treatment Microbiocide to produce a concentration of 1,666.7 to 16,666.7 ppm of Aquacar 712 Water Treatment Microbiocide when diluted by the water present in the formation. Injection takes 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 Aquacar 712 Water Treatment Microbiocide to produce a concentration of 666.7 to 6,666.7 ppm of Aquacar 712 Water Treatment Microbiocide 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 50 to 2,000 ppm of Aquacar 712 Water Treatment Microbiocide (0.33 to 13.33 gallons of Aquacar 712 Water Treatment Microbiocide per 1,000 gallons water), depending on water quality and length of time the equipment remains idle.

PIPELINE PIGGING AND SCRAPING OPERATIONS
Add Aquacar 712 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 Aquacar 712 Water Treatment Microbiocide is added to produce a concentration of 0.33 to 3.33% (0.33 to 3.33 gallons of Aquacar 712 Water Treatment Microbiocide per 100 gallons water), depending on the length of the pipeline and the severity of biofouling.



LICENSED

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