

DOWICIL* QK-20 Antimicrobial

To Control Coliform and Other Bacteria in Publicly-Owned Treatment Works; reduces microbiological contamination in equipment cleaning operations and industrial preservation applications, including both raw materials and products.

FOR INDUSTRIAL USE ONLY

Active Ingredient(s):

2,2-Dibromo-3-nitropropionamide20%

Inert ingredient(s):80%

Total 100%

E.P.A. Registration No. 464-628

E.P.A. Est. 464-MI-1

KEEP OUT OF REACH OF CHILDREN

DANGER

Precautionary Statement

Hazards to Humans & Domestic Animals

Danger

Corrosive: Causes irreversible eye damage. May be fatal if swallowed. Harmful if inhaled, or absorbed through skin. Causes skin burns. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco, or using the Toilet. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment

Applicators and other handlers must wear: coveralls, over long-sleeved shirt and long pants -socks and chemical resistance footwear -goggles or face shields -chemical-resistant gloves (such as barrier, laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, viton) -For mixing/loading: Wear a chemical resistant apron. 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, using tobacco, 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 this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly.

General Precautions and Restrictions

Do not apply this product directly in a way that will contact workers or other persons.

FIRST AID:	
IF IN EYES	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 30 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor 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 doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> Call 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 the poison control center or doctor.
HOT LINE NUMBER	
IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect 989-636-4400. Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Apply this product only as specified on this label. Do not contaminate water by cleaning of equipment, or disposal of wastes. **NOTE:** 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 DISPOSAL

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

Storage: To maintain product quality, store at temperatures below 60°C. Keep container tightly closed when not in 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 Disposal: Do not reuse empty container. Triple rinse (or equivalent). 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.

Reusable Portable Containers (Totes): Do NOT rinse containers. Do not put any other material(s) in containers. Seal all openings with proper fittings and clean outside of container. Then return container to The Dow Chemical Company.



NOTICE

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

DIRECTIONS FOR USE

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

NOTE: ADD DOWICIL QK-20 ANTIMICROBIAL SEPARATELY TO THE SYSTEM. DO NOT MIX IT WITH OTHER ADDITIVES IN ORDER TO AVOID DECOMPOSITION OF DOWICIL QK-20 ANTIMICROBIAL DUE TO THE HIGH pH OF MANY ADDITIVE FORMULATIONS.

INDUSTRIAL PRESERVATION

DOWICIL QK-20 Antimicrobial may be used to reduce microbiological contamination in raw materials and/or products such as; aqueous paints and coatings, polymers, slurries, adhesives, latex and resin emulsions, sizing, caulk, process water, and electrochemical deposition along with specialty industrial products including; inks, polishes, waxes, detergents, & cleansers. **TO REDUCE MICROBIOLOGICAL CONTAMINATION** Adding DOWICIL QK-20 Antimicrobial to the material or product at concentrations ranging from 125 to 2000 ppm by weight will typically provide effective reduction. This concentration is equivalent to 14 to 224 fluid ounces DOWICIL QK-20 Antimicrobial per 1000 gallons or 107 to 1712 milliliters DOWICIL QK-20 Antimicrobial per 1000 liters. In some instances lower levels of DOWICIL QK-20 Antimicrobial may be effective. The required concentration will depend on the material being treated and the level of contamination present. Matrix effects that can impact the efficacious level of DOWICIL QK-20 are pH, organic load, exposure time and type of contamination. To determine the exact dosage for a given application you will need to test it within your own system.

ACCEPTED

JAN 23 2003

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 464-628

EQUIPMENT CLEANING

DOWICIL QK-20 Antimicrobial can be used to kill microorganisms present in solution or growing on the surfaces of process equipment such as; reaction vessels, storage tanks and containers, piping and hoses. For standard cleaning of equipment, add 50 to 250 ppm by weight DOWICIL QK-20 Antimicrobial, in an aqueous solution, to process piping or equipment. Heavily fouled solutions or equipment may be treated with up to 2000 ppm of DOWICIL QK-20 Antimicrobial. After treating process equipment with the DOWICIL QK-20, allow the DOWICIL QK-20 solution to be in contact with surfaces for up to four hours.

If bleach is being used for cleaning purposes at 50 to 250 available chlorine, DOWICIL QK-20 Antimicrobial can be used as part of a dual treatment program at 50 to 100 ppm by weight, in combination with sodium hypochlorite. Treat process equipment with chlorine first. Follow this treatment with DOWICIL QK-20 Antimicrobial. Do not combine concentrated sodium hypochlorite solution with DOWICIL QK-20 Antimicrobial.

PUBLICLY-OWNED TREATMENT WORKS

TO CONTROL COLIFORM AND OTHER BACTERIA, add DOWICIL QK-20 Antimicrobial at a concentration of 1.0 to 10.0 ppm by weight of water being treated, depending on the severity of contamination in the system. Addition should be CONTINUOUS and should be made with a metering pump at a point in the system where mixing will be rapid and thorough. Add DOWICIL QK-20 Antimicrobial to the system in a location where contact time will be 30 minutes or greater before reaching the outfall.

TO USE AS A CO-TREATMENT WITH CHLORINE, add 0.4-1.5 ppm DOWICIL QK-20 Antimicrobial by weight of water treated. Chlorination should result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Addition should be CONTINUOUS and made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. DOWICIL QK-20 Antimicrobial should be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

Notice: 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 (except uses for which USEPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration) 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.**

†

Not registered for this use in the State of California



THE DOW CHEMICAL COMPANY

Midland, Michigan 48674 U.S.A.

(989)636-4400

* Trademark of THE DOW CHEMICAL COMPANY

464-628

1-23-2003

1/1