



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

November 25, 2003

Rhonda Vance-Moeser  
Sr. Regulatory Specialist  
**The Dow Chemical Company**  
1803 Building  
Midland, MI 48674

**FILE COPY**

Subject: **Dowicil\* QK-20 Antimicrobial**  
EPA Registration Number 464-628  
Letter Dated August 25, 2003

Dear Ms. Vance-Moeser:

The following amendments, submitted in connection with registration under section of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, are acceptable with comments:

**Proposed Amendments**

- Delete POTW from the label and move it to Antimicrobial 7287
- Add waste-water treatment as a use-site
- Rephrase and expand the use of Dowicil QK-20 Antimicrobial for direct product addition to non food products

**Label Comments**

1. The signal word "Danger" is required in two places on the label. It must appear near the "Keep Out of Reach of Children" statement and the Precautionary statement subheading. The Precautionary statement subheading must be written as follows:

**Precautionary Statements**  
Hazards to Humans and Domestic Animals  
**Danger**

2. The precautionary statement context must be in the same print size.

3. With respect to the precautionary statement, the statement must be revised as follows:


Corrosive. Causes irreversible eye damage or skin burns. Do not get in eyes, on skin or on clothing. May cause loss of vision. Fatal if absorbed through skin. Harmful if swallowed or inhaled. Avoid breathing vapor. Wear goggles or face shield (safety glasses). Wear protective clothing (long-sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as waterproof gloves.) Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and was before reuse.

**General Comments**

A stamped copy of the accepted labeling is enclosed. Submit three (3) copies of your final printed labeling before distributing or selling the product.

Should you have any question concerning this letter, please contact me at (703) 308-6422 or Renae Whitaker at (703) 308-7003.

Sincerely,

  
Adam Heyward  
Product Manager 34  
Regulatory Management Branch II  
Antimicrobials Division (7510C)

Enclosure

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# DOWICIL<sup>\*</sup> QK-20 Antimicrobial

Reduces microbial contamination in process water, raw materials and formulated consumer, institutional and industrial products. Reduces microbial contamination in wastewater and equipment cleaning operations.

**Active Ingredient:**

2,2-Dibromo-3-nitrilopropionamide ..... 20%

Inert Ingredients: ..... 80%  
Total 100%

E.P.A. Registration No. 464-628  
E.P.A. Est. 464-MI-1

ACCEPTED  
with COMMENTS  
EPA Letter Dated:  
NOV 25 2003

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

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

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**CORROSIVE • CAUSES IRREVERSIBLE EYE DAMAGE • MAY BE FATAL  
IF SWALLOWED \* 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 (PPE)**

Applicators and other handlers must wear:  
Coveralls, over long-sleeved shirt and long pants  
-socks and chemical resistant 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 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 using this product.  
Wash outside of gloves before removing. As soon as possible, wash thoroughly.

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**General Precautions and Restrictions**

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

<b>FIRST AID</b>	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 30 minutes</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye</li> <li>• Obtain prompt medical treatment, preferably from an ophthalmologist.</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 doctor for treatment advice.</li> </ul>
<b>If Swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
<b>HOT LINE NUMBER</b>	
<p><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.</p>	
<b>NOTE TO PHYSICIAN</b>	
<p>Probable mucosal damage may contraindicate the use of gastric lavage.</p>	

**ENVIRONMENTAL HAZARDS**

This product is toxic or highly 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.**

**Process, Product & Wastewater Clean Up**

DOWICIL QK-20 Antimicrobial may be used to reduce microbial contamination in process water and raw materials during the formulating phase, or it can be added directly to the final formulated product to reduce microbial contamination prior to packaging. DOWICIL QK-20 Antimicrobial may also be used for treatment of wastewater prior to discharge to a public owned treatment works. The required concentration will depend upon the material being treated and the contamination load. Organic load, pH, exposure load and time are matrix effects that impact efficacy of the biocide. You will need to determine the optimum level to use for your system or product within the guidelines given below. Do not use at greater than recommended levels.

**Consumer, Household & Institutional Processes & Products**

DOWICIL QK-20 Antimicrobial is not intended for use in personal care products,  
**PROCESS WATER & RAW MATERIAL CLEAN UP**

To reduce microbial contamination in process water or raw materials used to make consumer, household or institutional products, add DOWICIL QK-20 Antimicrobial directly to the water or raw material at a concentration of 125-1,000 ppm by weight.

**DIRECT PRODUCT ADDITION**

To reduce microbial contamination in formulated products such as hard surface cleaners, laundry detergent, fabric softeners and other water based formulations, add 125-250 ppm by weight DOWICIL QK-20 Antimicrobial directly to the product prior to packaging. Through mixing is recommended.

**Industrial Processes & Products**

**PROCESS WATER & RAW MATERIAL CLEAN UP**

To reduce microbial contamination in process water or raw materials used to make industrial products, add DOWICIL QK-20 Antimicrobial directly to the process water or

raw material at a concentration of 125-2,000 ppm by weight. This includes raw materials and/or products such as aqueous paints and coatings, polymers, slurries, adhesives, latex and resin emulsions and surfactants.

**DIRECT PRODUCT ADDITION**

To clean up microbial contamination in a final formulated industrial product, add 125-500 ppm by weight DOWICIL QK-20 Antimicrobial directly to the product prior to packaging.

**Industrial Wastewater Systems**

Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks

DOWICIL QK-20 Antimicrobial may be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 125-2,000 ppm by weight. This concentration is equivalent to 107-1,712 milliliters DOWICIL QK-20 Antimicrobial per 1,000 gallons of water.

**Equipment Cleaning**

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

DOWICIL QK-20 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, 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. 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.

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.

**THE DOW CHEMICAL COMPANY**  
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