464-426

3-25-2008

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

March 25, 2008

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

Subject: **Antimicrobial 7287**
EPA Registration Number: 464-426
Application Dated: January 1, 2008
Receipt Date: January 16, 2008

Dear Ms. Vance-Moeser:

Based on the additional information provided with your re-submission, the Agency has concluded that the following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

Proposed Amendment

- Label revision

Other Comments

The Agency is moving away from review of paper submitted registration applications to electronic review of applications. Therefore, we need your help to make this an efficient and convenient process for both you and the Antimicrobials Division. Accordingly, we are asking you to submit future labeling amendments for this product via the electronic labeling process. Refer to the following website for guidance on electronic submissions, including label: http://www.epa.gov/oppfead1/eds/esr_guidance.htm#overallsub. If you have any questions concerning electronic label submissions, a list of contacts is available at the following website: http://www.epa.gov/oppfead1/eds/edsgoals.htm#contacts.

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General Comment

A stamped copy of the accepted labeling is enclosed for your records.

Should you have any questions concerning this letter, you may contact me by telephone at (703) 308-6422 or by e-mail at heyward.adam@epa.gov or Lisa McKelvin by telephone at (703) 308-7496 or by email at mckelvin.lisa@epa.gov during the hours of 8:00 am to 4:00 pm EST. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Sincerely,

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

Enclosure: [Stamped labeling]

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ANTIMICROBIAL 7287

To Control Coliform and Other Bacteria in Publicly-Owned Treatment Works; controls bacteria, fungi, and yeasts in paper mills, metalworking fluids containing water, and enhanced oil recovery systems; controls bacteria, fungi, and algae in industrial recirculating water cooling towers, once-through fresh and sea water industrial cooling water systems, and reverse osmosis systems; controls slime-forming bacteria and fungi in air-washer systems.

FOR INDUSTRIAL USE ONLY

Active Ingredient:	
2,2-Dibromo-3-nitrilopropionamide	20%
Inert Ingredient(s):	80%
Total	100%

E.P.A. Registration No. 464-426
E.P.A. Est. XXX – XX - XXX

KEEP OUT OF REACH OF CHILDREN

DANGER

Precautionary Statements
Hazards To Humans and Domestic Animals
Danger

Corrosive. Causes irreversible eye damage • Causes skin Burns • Harmful if swallowed or absorbed through skin • Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals • Harmful if inhaled • Avoid breathing vapor or mist • Wear goggles, face shield or safety glasses • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet • Remove and wash contaminated clothing before reuse.

ACCEPTED
MAR 25 2008
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 464-426

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,

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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, 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	• 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 rinising eye. • Call poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	• 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	• 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
IF INHALED	• Move person to fresh air • If person is not breathing, call 911 or an ambulance, then give artificial Respiration, preferably mouth-to-mouth if possible • Call a poison control center or 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. 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	

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ENVIRONMENTAL HAZARDS

This pesticide 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.

PESTICIDE 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.

Following statement to appear on label when reusable portable containers are used:
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 or their designate.

NOTICE

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

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DIRECTIONS FOR USE

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

NOTE: ADD ANTIMICROBIAL 7287 SEPARATELY TO THE SYSTEM. DO NOT MIX IT WITH OTHER ADDITIVES, IN ORDER TO AVOID DECOMPOSITION OF ANTIMICROBIAL 7287 DUE TO THE HIGH pH OF MANY ADDITIVE FORMULATIONS.

PAPER MILLS

For the control of bacterial, fungal, and yeast growths in pulp, paper and paperboard mills, add ANTIMICROBIAL 7287 at the rate of 0.15-0.50 lb/ton of pulp or paper (dry basis). Addition may be continuous or intermittent, depending upon the type of system and the severity of contamination. It should be made with a metering pump at a location that will insure uniform distribution of ANTIMICROBIAL 7287 in the mass of fiber and water, such as the beaters, jordan inlet or discharge, broke chests, furnish chests, save-alls, and white-water tanks.

HEAVILY FOULED SYSTEMS should be boiled out, then treated with 0.15-0.35 lb ANTIMICROBIAL 7287/ton of paper (dry basis), as necessary for control.

MODERATELY FOULED SYSTEMS should be treated continuously with 0.35-0.50 ANTIMICROBIAL 7287/ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.15-0.35 lb ANTIMICROBIAL 7287/ton of paper on a continuous or intermittent basis, as needed for control. Dislodged slime may cause breaks in the paper and a clean-up of the paper machine may be advisable.

SLIGHTLY FOULED SYSTEMS should be treated continuously with 0.15-0.35 lb ANTIMICROBIAL 7287/ton of paper (dry basis) until the slime is controlled, then added on an intermittent basis to maintain control.

METALWORKING FLUIDS CONTAINING WATER

This product is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:100-1:4.

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For controlling (or inhibiting) the growth of bacteria, fungi, and yeasts that may deteriorate metalworking fluids containing water, add ANTIMICROBIAL 7287 to the fluid in the collection tank. Additions should be made with a metering pump.

INITIAL OR SLUG DOSE: When the system is just noticeably fouled, add 0.25 gal ANTIMICROBIAL 7287/1,000 gal of metalworking fluid to the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.1-0.2 gal ANTIMICROBIAL 7287/1,000 gal of metalworking fluid per day, or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.

ENHANCED OIL RECOVERY SYSTEMS

For controlling slime-forming bacteria, sulfide-producing bacteria, yeasts, and fungi in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems, add 1-80 ppm ANTIMICROBIAL 7287 (0.1-6.4 gal ANTIMICROBIAL 7287 per 2400 barrels of water) depending on the severity of contamination. Additions should be made with a metering pump either continuously or intermittently.

CONTINUOUS FEED METHOD

When the system is noticeably fouled, add 10-80 ppm ANTIMICROBIAL 7287 (0.8-6.4 gal ANTIMICROBIAL 7287 per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1-15 ppm ANTIMICROBIAL 7287 (0.1-1.2 gal ANTIMICROBIAL 7287 per 2400 barrels of water) continuously or as needed to maintain control.

INTERMITTENT OR SLUG METHOD

When the system is noticeably fouled, or to maintain control of the system, add 10-80 ppm ANTIMICROBIAL 7287 (0.8-6.4 gal ANTIMICROBIAL 7287 per 2400 barrels of water) intermittently for 4-8 hours per day, and from 1-4 times per week, or as needed depending on the severity of contamination.

Addition of ANTIMICROBIAL 7287 may be made at the free water knockouts, before or after the injection pumps and injection well headers.

NOTE: FOR CONTROL OF BACTERIA, YEAST, AND FUNGI IN AQUEOUS SOLUTIONS OF BIOPOLYMER USED IN FLOODING OPERATIONS, add 15-80 ppm ANTIMICROBIAL 7287 (1.2-6.4 gal ANTIMICROBIAL 7287 per 2400 barrels of water). Additions of ANTIMICROBIAL 7287 should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

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Antimicrobial 7287
FINAL MASTER LABEL
January, 2008

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS
Add ANTIMICROBIAL 7287 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
Add 0.00095-0.0095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD
INITIAL DOSE: When the system is noticeably fouled, add 0.0048-0.0095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident add 0.0024-0.0095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system every 4 days, 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, add 0.0048-0.0095 gal ANTIMICROBIAL 7287/1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.00095-0.0048 gal ANTIMICROBIAL 7287/1,000 gal of water in the system per day.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE
Add 0.029-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD
INITIAL DOSE: When the system is noticeably fouled, add 0.048-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system. Repeat until control is achieved.

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SUBSEQUENT DOSE: When microbial control is evident, add 0.029-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system daily, 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 add 0.048-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this treatment level by pumping a continuous feed of 0.029-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system per day.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

ONCE-THROUGH INDUSTRIAL COOLING WATER SYSTEMS
Product not registered for this use in the State of California

For controlling microbiological growth in once-through and closed-cycle fresh and sea water cooling systems, cooling ponds, canals, and lagoons, add ANTIMICROBIAL 7287 to the system inlet water or before any other contaminated area in the system. Intermittent addition should be made with a metering pump at a level dependent on the severity of the contamination in the system.

INITIAL DOSE: When the system is noticeably fouled, add 6-12 ppm ANTIMICROBIAL 7287 based on the flow-rate through the system. Additions should be for durations of at least 15 minutes, but with additions not being made for more than a total of 4 hours per day.

SUBSEQUENT DOSE: When microbial control is evident, add 3-12 ppm ANTIMICROBIAL 7287 intermittently to maintain control. Addition intervals may vary but total time of additions should not exceed 4 hours per day.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

MEMBRANE SYSTEMS FOR INDUSTRIAL WATER

Antimicrobial 7287 may be used to control bacteria and reduce biofouling in various membrane system types (reverse osmosis, ultrafiltration, nanofiltration, and microfiltration) used for industrial water processing. Acceptable applications include

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reverse osmosis for the production of boiler make-up water, electronic component rinsing, and industrial wastewater treatment.

Note: Reverse Osmosis (RO) concentrate streams should not be discharged to lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Permit (NPDES). Discharge of RO concentrate steams to sewer systems may require approval of the local sewer treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Antimicrobial 7287 may be added to the RO feed water at a rate of 1 to 100 ppm based on the feed water flow rate (0.1 to 10 fl. oz./min per 1000 gallons/min. feed water, or 0.8 to 80 mis/min per cubic meter/min of feed water). Apply product to the service cycle feed water on a regular basis using an addition cycle of at least 30 minutes. The frequency of addition may be daily or as necessary in order to maintain RO productivity performance. For highly fouled systems, a 100 ppm dosage should be applied each day for several hours until the system performance has recovered.

NOTE: Do not add Antimicrobial 7287 in the presence of sodium bisulfite or other reducing agents which are being added to the feed water of the membrane system. In some situations the addition of any reducing agents must be suspended at least 15 minutes prior to the addition of Antimicrobial 7287 in order to avoid neutralization and deactivation of the active ingredient.

Antimicrobial 7287 may be added to the feed tank used for an off-line chemical cleaning procedure. Addition should be at a rate of 20 to 200 ppm based on the total amount of solution in the feed tank (2 to 20 fl. oz. per 1000 gallons, or 16 to 160 mls. per cubic meter). Following the complete transfer of feed solution, re-circulate or soak for 1

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to 3 hours to ensure sufficient contact for all RO membrane modules with the DBNPA solution. Frequency of addition should be every 5 days or as needed.

Note: Add Antimicrobial 7287 separately to the feed tank system. Do not mix with other chemical additives as this may result in rapid decomposition of Antimicrobial 7287 due to the high pH of many additive formulas. It is important to thoroughly rinse the feed tank system so it is free of any high pH chemicals prior to introducing the Antimicrobial 7287 product.

AIR-WASHER SYSTEMS

Add 0.0015-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system, depending upon the severity of contamination to control slime-forming bacteria and fungi in industrial air-washer systems.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled add 0.003-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.0015-0.047 gal ANTIMICROBIAL 7287/1,000 gal of water in the system every 2 days 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, add 0.003-0.095 gal ANTIMICROBIAL 7287/1,000 gal of water in the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.0015-0.047 gal ANTIMICROBIAL 7287/1,000 gal of water in the system per day.

Badly fouled systems must be cleaned before treatment is begun.

NOTE: For use only in industrial air-washer systems that maintain effective mist eliminating components.

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HYDROTESTING
Product not registered for this use in California
FOR CONTROL OF BACTERIA
Water used to hydrotest pipelines or vessels should contain 100 to 1,000 ppm of Antimicrobial 7287 per 1,000 gallons water) depending on water quality and length of time the equipment will remain idle.

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 ad 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 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, subject to the inherent risks set forth below. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

NET WT:

Produced For (used when manufactured by contract manufacturer)

Dow Diamond TM
THE DOW CHEMICAL COMPANY
Midland, Michigan 48674
989-636-4400

Antimicrobial 7287
FINAL MASTER LABEL
January, 2008

NSF Non Foods Compound Listing
This product is acceptable for treating boilers, steam lines, and/or cooling systems (G7) where neither the treated water nor the steam produced may contact edible products in and around food processing areas.