

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 24, 2018

Alexis L. Chapman Product Stewardship Senior Regulatory Specialist Dow Microbial Control Dow Chemical Company 200 Larkin Center Midland, MI 48674

Subject: Label Amendment – Addition of non-public health biofilm language to Industrial

or Commercial Cooling Water Systems and Air Washer Systems, raising lower

limit of use rates

Product Name: DBNPA 100 Powder EPA Registration Number: 464-389 Application Date: August 25, 2017

Decision Number: 533089

#### Dear Ms. Chapman:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false

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or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Tom Luminello by phone at (703) 308-8075, or via email at luminello.tom@epa.gov.

Sincerely,

Jacque Hardy

Jacqueline Hardy, Product Manager (34)

Regulatory Management Branch II Antimicrobials Division (7510P)

Enclosure: Stamped Label

# [Brackets indicate phrases that will not appear on printed label]

# [MASTER LABEL]

## **DBNPA 100 Powder**

#### FOR INDUSTRIAL USE

Active Ingredient(s):	
2,2-Dibromo-3-nitrilopropionamide	97.6%
Inert Ingredient(s):	2.4%
Total	100.0%

E.P.A. Registration No. 464-389 E.P.A. Est. No. XXX-XX-XX

# ACCEPTED

01/24/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 464-389

#### KEEP OUT OF REACH OF CHILDREN

#### **DANGER**

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

#### **DANGER**

CORROSIVE • Causes irreversible eye damage • May be fatal if inhaled or swallowed • Causes skin irritation • Harmful if absorbed through the skin •Do Not Get In Eyes, on Skin, or on Clothing • Do not breathe dust • When loading or handling wear protective eyewear (goggles or face shield), long-sleeved shirt and long pants, socks, shoes, chemically resistant gloves and a NIOSH approved respirator • 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, chewing gum, using tobacco or using the toilet • Remove and wash contaminated clothing separately from other laundry before reuse.

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 nitrile/neoprene rubber, PVC or Viton)

# **Engineering Controls**

# Label language for product supplied as powder in general packaging:

When handlers use closed metering systems, the handler requirements may be reduced or modified to long-sleeve shirt, long pants, shoes, socks, gloves and safety glasses with side shields.

#### Label language for product supplied in water soluble packaging:

When handlers use water soluble bags the handler requirements may be reduced or modified to long-sleeve shirt, long pants, shoes, socks, gloves and safety glasses with side shields.

# Label language for product supplied in canisters for feeder device:

When handlers use feeder devices the handler requirements may be reduced or modified to long-sleeve shirt, long pants, shoes, socks, gloves and safety glasses with side shields.

# **User Safety Instructions**

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 Procedures**

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 and change into clean clothing.

# **Application Restrictions**

Do not apply this product directly in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call poison control center or doctor for treatment advice.</li> <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> <li>Call 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 a poison control center or doctor</li> </ul>
<ul> <li>Call poison control center or doctor for treatment advice.</li> <li>IF ON SKIN         <ul> <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> </li> <li>IF         <ul> <li>Call poison control center or doctor immediately for treatment advice</li> <li>Have person sip a glass of water if able to swallow</li> </ul> </li> </ul>
<ul> <li>IF ON SKIN OR 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> <li>Call poison control center or doctor immediately for treatment advice</li> <li>Have person sip a glass of water if able to swallow</li> </ul>
OR CLOTHING  Rinse skin immediately with plenty of water for 15-20 minutes Call a poison control center or doctor for treatment advice  Call poison control center or doctor immediately for treatment advice  Have person sip a glass of water if able to swallow
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<b>SWALLOWED</b> • 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
Move person to fresh air
• If person is not breathing, call an emergency responder or an ambulance, then
<b>IF INHALED</b> give artificial respiration, preferably mouth-to-mouth.
Call a poison control center or doctor for further treatment advice

Have product container or label with you when calling a poison control center or doctor or going for treatment

#### **HOT LINE NUMBER**

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

#### NOTE TO PHYSICIAN

Maintain adequate ventilation and oxygenation of the patient. Material may cause severe pulmonary edema. For persons receiving significant exposure to this material, consider chest x-ray and keep under observation for 48 - 72 hr. for delayed onset of pulmonary edema. Humidified oxygen, intermittent positive pressure breathing, assisted respiration/CPAP and steroid therapy should be considered in treatment. Physical exertion may potentiate exposure effects during the first 24 - 72 hours. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

#### 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. 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.

#### **Pesticide Storage:**

# Label language for product supplied as powder in general packaging:

To maintain product quality, store at temperatures below 35C. Keep container tightly closed when not in use.

# Label language for product supplied in water soluble packaging:

To maintain product quality, store at temperatures below 35C. Keep container tightly closed when not in use. Do not remove from container except for immediate use. DO NOT remove the product from water soluble bag.

# Label language for product supplied in water soluble packaging with additional plastic wrapper:

To maintain product quality, store at temperatures below 35C. Keep container tightly closed when not in use. Do not remove from container except for immediate use. When ready to use REMOVE outer plastic packaging. DO NOT remove the product from water soluble bag.

# Label language for product supplied in canisters for feeder device:

To maintain product quality, store at temperatures below 35C. Keep canister (jar) closed and in original packaging until ready to use in feeder device.

#### **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:**

#### Label language for product supplied as powder in general packaging:

Non refillable container. Do not reuse or refill container. Completely empty into application equipment by shaking and tapping sides and bottom of container to loosen clinging particles. Then offer empty container for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### Label language for product supplied in water soluble packaging:

Non refillable container. Do not reuse or refill container. Completely empty into application equipment by shaking and tapping sides and bottom of container to loosen clinging particles. Then offer empty container for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Label language for product supplied in water soluble packaging with additional

#### plastic wrapper:

**Nonrefillable container**. Do not reuse or refill container or bag liners. Completely empty container and bag liners by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into mix tank. Then offer for recycling if available, or dispose of container and liners in a sanitary landfill or by other procedures approved by state and local authorities.

# Label language for product supplied in canisters for feeder device:

**Nonrefillable container**. Do not reuse or refill canisters. Completely empty canisters by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into mix tank. Rinse canister three times, then offer for recycling if available, or dispose of canisters in a sanitary landfill or by other procedures approved by state and local authorities. If feeder device is contaminated and cannot be reused, dispose of it in the manner required for canisters.

#### **DIRECTIONS FOR USE**

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

**NOTE:** PRODUCT MUST BE ADDED SEPARATELY TO THE SYSTEM. DO NOT MIX WITH OTHER ADDITIVES, IN ORDER TO AVOID DECOMPOSITION OF THE ACTIVE INGREDIENT DUE TO THE HIGH pH OF MANY ADDITIVE FORMULATIONS.

#### PAPER MILLS

Not registered for this use in the State of California – [Optional]

#### Label language for product supplied as powder in general packaging:

For the control of bacterial, fungal, and yeast growths in pulp, paper, and paperboard mills, add a solution of product at the rate of 0.03-0.10 lb. product/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 must be made with a metering pump or chemical feeder device at a location that will ensure uniform distribution of product 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 must be boiled out, then treated with 0.03-0.07 lb. product/ton of paper (dry basis), as necessary for control.

MODERATELY FOULED SYSTEMS must be treated continuously with 0.07-0.10 lb. product/ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.03-0.07 lb. product/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 must be treated continuously with 0.03-0.07 lb. product/ton of paper (dry basis) until slime is controlled, then added on an intermittent basis to maintain control.

#### Label language for product supplied in water soluble packaging:

For the control of bacterial, fungal, and yeast growths in pulp, paper, and paperboard mills,

add a solution of product at the rate of 0.03-0.10 lb. product/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 must be made with a metering pump or chemical feeder device at a location that will ensure uniform distribution of product 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 must be boiled out, then treated with 0.03-0.07 lb. product/ton of paper (dry basis), as necessary for control.

MODERATELY FOULED SYSTEMS must be treated continuously with 0.07-0.10 lb. product/ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.03-0.07 lb. product/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 must be treated continuously with 0.03-0.07 lb. product/ton of paper (dry basis) until slime is controlled, then added on an intermittent basis to maintain control.

Label language for product supplied in canisters for feeder device: Not applicable.

## **INDUSTRIAL OR COMMERICAL COOLING WATER SYSTEMS**

Not registered for this use in the State of California – [Optional] Not intended for use in once-through cooling systems.

#### Label language for product supplied as powder in general packaging:

For control of microbial growth in industrial or commercial cooling water systems use either continuous or slug dosing.

Note: A solution of product may be made on site for dosing the system.

DO NOT MIX the product solution with other additives, in order to avoid decomposition of the active ingredient due to the high ph of many additive formulations.

#### **CONTINUOUS FEED**

Add product to metering device for continuous feed. Add 1-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment.

#### **SLUG DOSING**

Add product to basin of cooling system or at any other point of uniform mixing. Add 5-24 ppm product to the water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not exceed more than 24 ppm product in system water per day. Badly fouled systems must be cleaned before treatment.

#### Label language for product supplied in water soluble packaging:

For control of microbial growth in industrial or commercial cooling water systems the product may be used for intermittent or slug dosing.

INTERMITTENT or SLUG DOSING

Add one bag for every 5,000-24,000 gallons of water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not

exceed more than one bag per 5,000 gallons of water per day. Badly fouled systems must be cleaned before treatment.

## Label language for product supplied in canisters for feeder device:

For control of microbial growth in industrial or commercial cooling water systems the product may be used with the appropriate feeder to provide up to four weeks of control. Place canister(s) in side stream feeder device. Canisters may be stacked in feeder device to achieve desired dosing level. Use product in canisters to continuously dose system. Add 1-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment is begun.

# NON\_PUBLIC HEALTH BIOFILM CONTROL FOR INDUSTRIAL OR COMMERICAL COOLING WATER SYSTEMS

Not registered for this use in the State of California – [Optional] Not intended for use in once-through cooling systems.

## Label language for product supplied as powder in general packaging:

For control of non-public health biofilms in order to reduce system fouling in industrial or commercial cooling water systems use either continuous or slug dosing.

Note: A solution of product may be made on site for dosing the system. DO NOT MIX the product solution with other additives, in order to avoid decomposition of the active ingredient due to the high ph of many additive formulations.

#### **CONTINUOUS FEED**

Add product to metering device for continuous feed. Add 5-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment.

#### **SLUG DOSING**

Add product to basin of cooling system or at any other point of uniform mixing. Add 5-24 ppm product to the water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not exceed more than

24 ppm product in system water per day. Badly fouled systems must be cleaned before treatment.

#### Label language for product supplied in water soluble packaging:

For control of non-public health biofilms in industrial or commercial cooling water systems the product may be used for intermittent or slug dosing. INTERMITTENT or SLUG DOSING

Add one bag for every 5,000-24,000 gallons of water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not exceed more than one bag per 5,000 gallons of water per day. Badly fouled systems must be cleaned before treatment.

# Label language for product supplied in canisters for feeder device:

For control of non-public health biofilms in industrial or commercial cooling water systems the product may be used with the appropriate feeder to provide up to four weeks of control.

Place canister(s) in side stream feeder device. Canisters may be stacked in feeder device to achieve desired dosing level. Use product in canisters to continuously dose system. Add 1-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment is begun.

## **AIR-WASHER SYSTEMS**

Not registered for this use in the State of California – [Optional]

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

## Label language for product supplied as powder in general packaging:

For control of microbial growth in air washer systems use either continuous or slug dosing.

Note: A solution of product may be made on site for dosing the system. DO NOT MIX the product solution with other additives, in order to avoid decomposition of the active ingredient due to the high pH of many additive formulations.

#### **CONTINUOUS FEED**

Add product using metering device for continuous feed. Add 4-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment.

#### **SLUG DOSING**

Add product to basin of system or at any other point of uniform mixing. Add 1-24 ppm product to the water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not exceed more than 24 ppm product in system water per day. Badly fouled systems must be cleaned before treatment.

# Label language for product supplied in water soluble packaging:

For control of microbial growth in air washer systems the product may be used for intermittent and slug dosing.

INTERMITTENT or SLUG DOSING

Add one bag for every 5,000 - 120,000 gallons of water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not exceed more than one bag per 5,000 gallons of water per day. Badly fouled systems must be cleaned before treatment.

Label language for product supplied in canisters for feeder device:

For control of microbial growth in air washer systems the product may be used with the appropriate feeder to provide up to four weeks of control.

Place canister(s) in side stream feeder device. Canisters may be stacked in feeder device to achieve desired dosing level. Use product in canisters to continuously dose system. Add 4-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment is begun.

# NON-PUBLIC HEALTH BIOFILM CONTROL FOR FOULED AIR WASHER SYSTEMS

Not registered for this use in the State of California – [Optional]

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

#### Label language for product supplied as powder in general packaging

For control of non-public health biofilms in order to reduce system fouling in air washer systems use either continuous or slug dosing.

Note: A solution of product may be made on site for dosing the system. DO NOT MIX the product solution with other additives, in order to avoid decomposition of the active ingredient due to the high pH of many additive formulations.

#### **CONTINUOUS FEED**

Add product using metering device for continuous feed. Add 5-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment.

#### **SLUG DOSING**

Add product to basin of system or at any other point of uniform mixing. Add 5-24 ppm product to the water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not exceed more than 24 ppm product in system water per day. Badly fouled systems must be cleaned before treatment.

### Label language for product supplied in water soluble packaging:

For control of non-public health biofilms in air washer systems the product may be used for intermittent and slug dosing.

INTERMITTENT or SLUG DOSING

Add one bag for every 5,000 – 120,000 gallons of water in the system depending upon severity of contamination. Repeat treatment every four days or as needed to maintain control. Do not exceed more than one bag per 5,000 gallons of water per day. Badly fouled systems must be cleaned before treatment.

# Label language for product supplied in canisters for feeder device:

For control of non-public health biofilms in air washer systems the product may be used with the appropriate feeder to provide up to four weeks of control.

Place canister(s) in side stream feeder device. Canisters may be stacked in feeder device to achieve desired dosing level. Use product in canisters to continuously dose system. Add 4-24 ppm per day of product to the water in the system depending on the severity of contamination. Badly fouled systems must be cleaned before treatment is begun.

#### MEMBRANE SYSTEMS FOR INDUSTRIAL WATER

Not registered for this use in the State of California – [Optional]

Label language for product supplied as powder in general packaging: Alternate label language for product supplied in water soluble packaging:

Product may be used for control of microbial growth and to reduce biofouling in various membrane system types (reverse osmosis, ultrafiltration, nanofiltration, and microfiltration) used for industrial water processing.

Product should not be added 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 product in order to avoid neutralization and deactivation of the active ingredient.

#### Online cleaning

The product may be added to the RO feed water at a rate of 0.2 to 20 ppm based on the feed water flow rate. 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 20 ppm dosage should be applied each day for several hours until the system performance has recovered.

#### Offline cleaning

Product may be added to the feed tank used for an **off-line** chemical cleaning procedure. Addition should be at a rate of 1 to 40 ppm based on the total amount of solution in the feed tank. Following the complete transfer of feed solution, re - circulate or soak for 1 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: Reverse Osmosis (RO) concentrate streams must not be discharged to lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System 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.

**Label language for product supplied in canisters for feeder device:** Not applicable

#### **PUBLICLY-OWNED TREATMENT WORKS**

Not registered for this use in the State of California – [Optional]

Label language for product supplied as powder in general packaging: Label language for product supplied in water soluble packaging: TO CONTROL COLIFORM AND OTHER BACTERIA

Add product at a concentration of 0.2 to 2 ppm by weight of water being treated, depending on the severity of contamination in the system. Addition should be CONTINUOUS and must be made at a point in the system where mixing will be rapid and thorough. Add product 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 0.08-0.3 ppm product by weight of water treated. Chlorination must result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Addition must be CONTINUOUS and made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. Product must be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

**Label language for product supplied in canisters for feeder device:** Not applicable

# **INDUSTRIAL WASTEWATER SYSTEMS**

Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks Not registered for this use in the State of California – [Optional]

# Label language for product supplied as powder in general packaging: Label language for product supplied in water soluble packaging:

The product may be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 25-400 ppm by weight.

**Label language for product supplied in canisters for feeder device:** Not applicable

#### CONSUMER, HOUSEHOLD & INSTITUTIONAL PROCESSES & PRODUCTS

Not registered for this use in the State of California – [Optional]

The product is not intended for use in personal care products.

## PROCESS WATER CLEAN UP

# Label language for product supplied as powder in general packaging:

To reduce microbial contamination in process water used to make consumer, household or institutional products, add product directly to the water at a concentration of 25 -200 ppm by weight.

#### Label language for product supplied in water soluble packaging:

To reduce microbial contamination in process water used to make consumer, household or institutional products, add one bag per 600-4793 gal of process water.

Label language for product supplied in canisters for feeder device:

For control of microbial growth in process water used to make consumer, household or institutional products. Place product in feeder device to continuously dose system at a rate of 25-200 ppm per day of product to the water in the system depending on the severity of contamination.

#### RAW MATERIAL CLEAN UP

#### Label language for product supplied as powder in general packaging:

To reduce microbial contamination in raw materials used to make consumer, household or institutional products, add the product directly to the raw material at a concentration of 25 -200 ppm by weight.

#### Label language for product supplied in water soluble packaging:

To reduce microbial contamination in raw materials used to make consumer, household or institutional products, add one bag of product directly to the raw material per 5,000-40,000 lbs of raw material.

# Label language for product supplied in canisters for feeder device:

Not applicable.

#### DIRECT PRODUCT ADDITION

# Label language for product supplied as powder in general packaging:

To reduce microbial contamination in formulated products such as hard surface cleaners, laundry detergent, fabric softeners and other water based formulations, add 25 -50 ppm by product weight directly to the final product prior to packaging. Thorough mixing is recommended.

#### Label language for product supplied in water soluble packaging:

To reduce microbial contamination in formulated products such as hard surface cleaners, laundry detergent, fabric softeners and other water based formulations, add one bag of product per 20,000-40,000 lbs of formulated product directly to the final product prior to packaging. Thorough mixing is recommended after addition and prior to packaging.

# Label language for product supplied in canisters for feeder device: Not applicable.

# CONSUMER, HOUSEHOLD & INSTITUTIONAL RECYCLE WATER, RECYCLE PRODUCT CLEAN UP & RECYCLE WASTEWATER

Not registered for this use in the State of California – [Optional]

#### Label language for product supplied as powder in general packaging:

The product may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Add at a convenient point of uniform mixing. Add 25 to 200 ppm by weight.

# Label language for product supplied in water soluble packaging:

The product may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Add at a convenient point of uniform mixing. Add one bag per 600-4793 gal of water or 5,000- 40,000 lbs recycled product.

#### Label language for product supplied in canisters for feeder device:

The product may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Place product in feeder device to continuously dose system at a rate of 25-200 ppm per day of product depending on the severity of contamination. Place feeder device at a convenient point of uniform mixing.

## INDUSTRIAL PROCESSES & PRODUCTS

Not registered for this use in the State of California – [Optional]

This includes raw materials and/or products such as aqueous paints and coatings, polymers, slurries, adhesives, latex and resin emulsions and surfactants.

#### PROCESS WATER CLEAN UP

## Label language for product supplied as powder in general packaging:

To reduce microbial contamination in process water used to make industrial products, add product directly to the water at a concentration of 25-400 ppm by weight.

#### Label language for product supplied in water soluble packaging:

To reduce microbial contamination in raw materials used to make industrial products, add product directly to the raw material at a concentration of one bag per 2,500-40,000 lbs process water.

#### Label language for product supplied in canisters for feeder device:

For control of microbial growth in process water used to make industrial products. Place product in feeder device to continuously dose system at a rate of 25-400 ppm per day of product to the water in the system depending on the severity of contamination.

#### RAW MATERIAL CLEAN UP

## Label language for product supplied as powder in general packaging:

To reduce microbial contamination in raw materials used to make industrial products, add the product directly to the raw material at a concentration of 25 -400 ppm by weight.

#### Label language for product supplied in water soluble packaging:

To reduce microbial contamination in raw materials used to make industrial products, add one bag of product directly to the raw material per 5,000- 40,000 lbs of raw material.

# Label language for product supplied in canisters for feeder device:

Not applicable.

#### **DIRECT PRODUCT ADDITION**

# Label language for product supplied as powder in general packaging:

To clean up microbial contamination in a final formulated industrial product, add 25 -100 ppm by weight product directly to the final industrial product prior to packaging.

#### Label language for product supplied in water soluble packaging:

To clean up microbial contamination in a final formulated industrial product, add one bag of product per 10,000-40,000 lbs of final formulated product. Addition should be directly to the final formulated industrial product prior to packaging.

# Label language for product supplied in canisters for feeder device: Not applicable.

# INDUSTRIAL RECYCLE WATER, RECYCLE PRODUCT CLEAN UP & RECYCLE WASTEWATER

Not registered for this use in the State of California – [Optional]

#### Label language for product supplied as powder in general packaging:

Product may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Add at a convenient point of uniform mixing. Add 25 to 400 ppm by weight.

#### Label language for product supplied in water soluble packaging:

Product may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Add at a convenient point of uniform mixing. Add one bag per 300-4793 gal of water or 2,500-40,000 lbs recycled product.

# Label language for product supplied in canisters for feeder device:

Product may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Place product in feeder device to continuously dose system at a rate of 25-400 ppm product per day to the water in the system depending upon the severity of contamination.

#### TANKSIDE ADDITION TO ELECTRODEPOSITION SYSTEMS

Not registered for this use in the State of California – [Optional]

#### Label language for product supplied as powder in general packaging:

Product may be added as a tankside additive in recirculating electrodeposition systems and associated rinse systems to control microbial contamination. The product should be added into the recirculating rinse system, ultra filter permeate, or final distilled rinse system at a point to ensure uniform mixing. Add 25 - 400 ppm by weight.

### Label language for product supplied in water soluble packaging:

Product may be added as a tankside additive in recirculating electrodeposition systems and associated rinse systems to control microbial contamination. The product should be added into the recirculating rinse system, ultra filter permeate, or final distilled rinse system at a point to ensure uniform mixing. Add one bag per 300-4793 gal of electrodeposition fluid.

Label language for product supplied in canisters for feeder device: Not applicable.

#### **EQUIPMENT CLEANING**

Not registered for this use in the State of California – [Optional]

# Label language for product supplied as powder in general packaging: Label language for product supplied in water soluble packaging:

Product can be used to control 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 10 to 50 ppm by weight product in an aqueous solution, to process piping or equipment. Heavily fouled solutions or equipment may be treated with up to 400 ppm of product. After treating process equipment with the product, allow product solution to be in contact with surfaces for up to four hours. If sodium hypochlorite is being used for cleaning purposes at 50 to 250 ppm available chlorine, the product can be used as part of a dual treatment program at 10 to 20 ppm by weight, in combination with sodium hypochlorite. Treat process equipment with sodium hypochlorite first by following label directions. Follow this treatment with the product. Do not combine concentrated sodium hypochlorite solution with the product.

# Label language for product supplied in canisters for feeder device: Not applicable.

#### **OIL FIELD APPLICATIONS**

# Label language for product supplied as powder in general packaging:

For reduction of bacterial contamination and degradation in oil recovery operations, add product to the system at a rate of 6 to 54 ppm depending on the severity of contamination.

Label language for product supplied in water soluble packaging:

For reduction of bacterial contamination and degradation in oil recovery operations, add one bag of product per 2,231-20,000 gal of water in the system depending on the severity of contamination.

## Label language for product supplied in canisters for feeder device:

For reduction of bacterial contamination and degradation in oil recovery operations, place product in feeder device to dose system at a rate of 6-54 ppm per day of product to the water in the system depending on the severity of contamination.

#### **HYDROTESTING**

Not registered for this use in the State of California – [Optional]

# Label language for product supplied as powder in general packaging:

For control of bacteria, water used to hydrotest pipelines or vessels should contain 20 to 200 ppm of product depending on water quality and length of time the equipment will remain idle.

#### Label language for product supplied in water soluble packaging:

For control of bacteria, water used to hydrotest pipelines or vessels should contain between 20 and 200 ppm product. Add 1 bag per 600 – 6000 gallons depending on water quality and length of time the equipment will remain idle.

# Label language for product supplied in canisters for feeder device:

Not applicable.

#### FRACTURING FLUIDS

Not registered for this use in the State of California – [Optional]

#### Label language for product supplied as powder in general packaging:

The product reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. The product must be added to the water storage tanks before gelling and circulated to ensure mixing. The product can be pre-dissolved in warm water and added at the well head for "on-the-fly" fracturing jobs. Use all pre-dissolved liquid within 24 hours. Frequency and Dose: The product must be added at a rate of 18 to 54 ppm active (0.15-0.45 lbs. product/1,000 gallons water) depending on water quality. Retreat after 48 hours if the frac job is delayed.

#### Label language for product supplied in water soluble packaging:

The product reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. The product must be added to the water storage tanks before gelling and circulated to ensure mixing. The product can be pre -dissolved in warm water and added at the well head for "on-the -fly" fracturing jobs. Use all pre -dissolved liquid within 24 hours.

Frequency and Dose: Add one bag of product for every 2,231-6,500 gal of water depending on water quality. Retreat after 48 hours if the frac job is delayed.

# Label language for product supplied in canisters for feeder device: Not applicable.

#### ENHANCED OIL RECOVERY (EOR) FLUIDS

Not registered for this use in the State of California – [Optional]

#### Label language for product supplied as powder in general packaging:

The product reduces bacterial contamination and degradation of EOR polymers and gels. The product must be added to injection water before polymer addition. Frequency and Dose: The product must be added at a rate of 6 to 54 ppm. Dry product must be added at a point to ensure proper dissolution and mixing.

#### Label language for product supplied in water soluble packaging:

The product reduces bacterial contamination and degradation of EOR polymers and gels. The product should be added to injection water before polymer addition. Frequency and Dose: Add one bag of product per 2,231-20,000 gal of water. Product should be added at a point to ensure proper dissolution and mixing.

#### Label language for product supplied in canisters for feeder device:

The product may be dosed using a feeder device to reduce bacterial contamination and degradation of EOR polymers and gels. The product must be added to injection water before polymer addition.

Place canister(s) in side stream feeder device. Canisters may be stacked in feeder device to achieve desired dosing level. Use product in canisters to continuously dose system at a rate of 6 to 54 ppm depending on the severity of contamination. Badly fouled systems must be cleaned before treatment is begun. The feeding device should dose at a point to ensure proper dissolution and mixing.

#### WATER FLOOD

Not registered for this use in the State of California – [Optional]

#### Label language for product supplied as powder in general packaging:

The product can be used to control slime and corrosion causing bacteria in waters used for secondary oil and gas recovery. The product can be added as a dry product or predissolved in warm water. Use all pre-dissolved liquid within 24 hours. If the system is heavily fouled, slug treat at the higher rate to remove biofilm. For maintenance, batch treat two to three times per week. Frequency and Dose: The product must be added at a rate of 6 to 54 ppm. Dry product must be added at a point to ensure proper dissolution and mixing.

# Label language for product supplied in water soluble packaging:

The product can be used to control slime and corrosion causing bacteria in waters used for secondary oil and gas recovery. The product can be added as a dry product or predissolved in warm water. Use all pre-dissolved liquid within 24 hours. If the system is heavily fouled, slug treat at the higher rate to remove biofilm. For maintenance, batch treat two to three times per week.

Frequency and Dose: Add one bag of product per 2,231-20,000 gal of water. The product should be added at a point to ensure proper dissolution and mixing.

Label language for product supplied in canisters for feeder device: Not applicable.

**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.

**NET WT:** 

[Option for product supplied in water soluble packaging:] Net Contents: Lot:

[Option for product supplied in canisters for feeder device:] Net Contents: Lot:

Produced For – When produced by a contract manufacturer

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