

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

MAY 24 2012

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Ms. Kate Ingram
Biocide Regulatory Manager for,
Ashland Inc.
7910 Baymeadows Way, Suite 100
Jacksonville, FL 32256

Subject: Biosperse<sup>TM</sup> 250M microbiocide

EPA Registration Number 74655-20 Your Amendment Dated May 22, 2012 EPA Received Date May 22, 2012

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act(FIFRA), as amended, to change the product name and to add additional use sites to the product labeling, is acceptable.

The registration file has been updated to reflect the product name change to read as follows:

Old Product Name: Biosperse<sup>TM</sup> 250 microbiocide

New Product Name: Biosperse<sup>TM</sup> 250M microbiocide

A stamped copy of labeling is enclosed.

If you have any questions concerning this letter, please contact Karen M. Leavy-Munk at (703)-308-6237.

Sincerely,

Marshall Swindell Product Manager 33

Regulatory Management Branch I Antimicrobial Division(7510P)

## BIOSPERSE™ 250M microbiocide

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### **DANGER**

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL IF INHALED. HARMFUL IF SWALLOWED OR ABSORBED THROUGH THE SKIN.

Do not get in eyes, on skin on clothing. Mixers, loaders and others exposed to this product must wear long-sleeved shirt and long pants; chemical resistant gloves such as nitrile or butyl rubber; shoes plus socks; goggles and face shield; and chemical resistant apron. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly. This product may cause skin sensitization reactions in some people.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to aquatic plants, fish and aquatic invertebrates. 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. Do not contaminate water by cleaning of equipment or disposal of waste. Apply pesticide only as specified on this label.

#### **ACTIVE INGREDIENTS:**

| 5-Chloro-2-methyl-4-isothiazolin-3-one | 1.15%   |
|--|---------|
| 2-Methyl-4-isothiazolin-3-one          | 0.41%   |
| INERT INGREDIENTS:                     | 98.44%  |
| TOTAL                                  | 100.00% |

The product contains the active ingredients at 0.1326 pounds per gallon Contents could be of US or Great Britain

EPA Reg. No. 74655-20 EPA Est. No. 74655-TX-1

74655-1X-1 74655-GA-001 ACCEPTED with COMMENTS in EAST Land Dotted:

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BS 250\_74655-20 Page 1 of 7

# DANGER

**FIRST AID** 

#### IF IN EYES:

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. Call a poison control center or doctor for treatment advice.

#### IF SWALLOWED:

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 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.

#### 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.

NOTE TO PHYSICIAN: Probably mucosal damage may contraindicate the use of gastric lavage.

#### IN CASE OF EMERGENCY CALL 1-800-ASHLAND

#### STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: This product is corrosive to mild steel. Do not store or transport in unlined metal containers.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING:** 

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Offer for reconditioning, if appropriate. Triple rinse as follows: Empty the 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 rinsate for later use or disposal. Repeat this procedure two more times. GENERAL: CONSULT FEDERAL, STATE OR LOCAL DISPOSAL AUTHORITIES FOR APPPROVED ALTERNATIVE PROCEDURES.

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BS 250\_74655-20 Page 2 of 7

#### **DIRECTIONS FOR USE**

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

BIOSPERSE<sup>™</sup>-250 microbiocide controls bacteria, fungi and algae in industrial recirculating cooling water systems such as cooling towers, pasteurizers, air washers and evaporative condensers and for use as a preservative in aqueous metal working fluids.

BIOSPERSE<sup>™</sup>-250 microbiocide controls slime forming bacteria, sulfate reducing bacteria, yeast and fungi in oil field water and other oil field water systems.

BIOSPERSE<sup>™</sup> 250M microbiocide is not recommended for use in potable water systems or where contamination of potable water can occur.

For control of bacteria, fungi and algae in industrial recirculating cooling water systems such as cooling towers, pasteurizers, air washers and evaporative condensers:

#### INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS

For control of microorganisms add 25-100ppm (0.21-0.84 pounds or 3.1-12.6 fluid ounces per 1000 gallons of water) of BIOSPERSE<sup>™</sup> 250M microbiocide to the system. The amount of antimicrobial required will depend on the nature and extent of contamination, quality of the makeup water and the degree of control required.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, apply 50-100ppm (0.42-0.84 pounds or 6.3-12.6 fluid ounces per 1000 gallons of water) of BIOSPERSE<sup>™</sup> 250M microbiocide to the system. Repeat periodically until control is achieved. Badly fouled systems must be cleaned before treatment is begun. Subsequent Dose: When microbial control is evident, add 25-50ppm (0.21-0.42 pounds or 3.1-6.3 fluid ounces per 1000 gallons of water) of BIOSPERSE<sup>™</sup> 250M microbiocide to the system weekly or as needed to maintain control.

#### **PASTEURIZERS**

Dosages for industrial recirculating cooling water systems associated with pasteurizers will vary depending upon the condition of the pasteurizer when treatment if begun and the retention time in the system.

In general, BIOSPERSE<sup>™</sup> 250M microbiocide should be slug fed at dosages of 0.21 to 0.84 pounds (3.1 to 12.6 fluid ounces) per each 1000 gallons of water in the system.

For pasteurizers, BIOSPERSE<sup>™</sup> 250M microbiocide should be added into the pre-cool reservoir or any other convenient point in the system which will allow for good distribution.

#### **ENHANCED OIL RECOVERY**

For controlling slime forming bacteria, sulfate reducing bacteria, yeast and fungi in oil field water and other oil field water systems. Initial Dose: Apply 50-100ppm (17.45-34.90 pounds or 2.03-4.06 gallons per each 1000 barrels of water) of BIOSPERSE<sup>™</sup> 250M microbiocide one to four times per week or as needed to achieve control.

Maintenance Dose: When microbial control is evident, add 10-80ppm (3.44-27.95 pounds or 0.40-3.20 gallons per each 1000 barrels of water) of BIOSPERSE<sup>™</sup> 250M microbiocide one to four times per week or as needed to maintain control.

Additions of BIOSPERSE<sup>™</sup> 250M microbiocide may be made at the free water knockouts, before or after the injection pumps and injection well headers or at any point from which uniform mixing throughout the system can be achieved.

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BS 250\_74655-20 Page **3** of **7** 

#### **METAL WORKING FLUIDS**

For use as a preservative in aqueous metal working fluids. To maintain an uncontaminated system, a minimum dosage level of approximately 225ppm (1.93 pounds or 29 fluid ounces per 1000 gallons of water) of BIOSPERSE<sup>™</sup> 250M microbiocide every four weeks would be appropriate. Every eight to twelve weeks, 250-1200ppm (2.07-9.94 pounds or 31-148 fluid ounces per 1000 gallons of water) of BIOSPERSE<sup>™</sup> 250M microbiocide would be appropriate. For a noticeably fouled system, an initial treatment at a dosage range of 500-1160ppm (4.14-9.63 pounds or 62-143 fluid ounces per 1000 gallons of water in the system) would be suitable followed by maintenance dosages. Higher dosages and more frequent treatments may be needed depending on the rate of dilution of the preservative in the makeup fluid, the nature and severity of contamination, the level of control required, the effectiveness of filtration and the system design.

#### **ELECTRODEPOSITION**

METHOD OF ADDITION: Biosperse <sup>™</sup> 250M microbiocide is recommended as a tankside additive for the control of bacteria, fungi, and algae in recirculating electrodeposition systems and associated rinse systems. Alternatively, Biosperse <sup>™</sup> 250M microbiocide may be added through the components of the electrodeposition paint prior to their addition to the electrodeposition system.

#### TANKSIDE ADDITION TO ELECTRODEPOSITION SYSTEMS

BIOSPERSE<sup>™</sup> 250M microbiocide should be dispensed into the recirculating rinse system, ultrafilter permeate, or final distilled rinse system at a point to ensure uniform mixing.

**INITIAL DOSE:** When the systems is noticeably fouled, add 667-2333 ppm BIOSPERSE<sup>™</sup> 250M microbiocide (6.7-23.3 gallon per 10,000 gallon of fluid in the system). This will provide 10-35 ppm of active ingredient. Repeat until control is achieved.

**SUBSEQUENT DOSE**: When microbial control is evident, add 333-1000 ppm of BIOSPERSE<sup>™</sup> 250M microbiocide (3.3-10 gallon per 10,000 gallon of fluid in the system). This will provide 5 -15 ppm of active ingredient. A change of frequency of treatment may be required depending upon the rate of dilution of the preservative with the makeup fluid, the nature and severity of contamination, level of control required, filtration effectiveness, systems design, etc.

## TREATMENT OF ELECTRODEPOSITION PAINT COMPONENTS INITIAL DOSE OF PAINT COMPONENTS

BIOSPERSE<sup>™</sup> 250M microbiocide should be added to the resin, pigment, or other component of the electrodeposition paint at a level to ensure that the final use-dilution fluid will contain 333- 2333 ppm product (5-35 ppm active ingredient).

#### SUPPLEMENTAL TANKSIDE DOSING OF ELECTRODEPOSITION SYSTEM

If additional microbial control is necessary, BIOSPERSE<sup>™</sup> 250M microbiocide may be added to the electrodeposition system tankside to supplement microbicide incorporated through paint components. If the system becomes noticeably fouled, add 667-2333 ppm BIOSPERSE<sup>™</sup> 250M microbiocide (6.7-23.3 gallon per 10,000 gallon of fluid in the system). This will provide 10-35 ppm of active ingredient. Repeat until control is achieved. When microbial control is evident, the system can be maintained by addition of 333-1000 ppm BIOSPERSE.<sup>™</sup> 250M microbiocide (3.3-10 gallon per 10,000 gallon of fluid in the system) weekly or as needed. This will provide 5-15 ppm active ingredient.

**NOTE:** Regardless of the manner of incorporation, the total active ingredient level in the system should at no time exceed 35 ppm (equivalent to 2333 ppm BIOSPERSE<sup>™</sup> 250M microbiocide or 23.3 gallon per 10,000 gallon system fluid).

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BS 250\_74655-20 Page 4 of 7

#### **CONVEYOR LUBRICANT MICROBIAL CONTROL**

BIOSPERSE<sup>™</sup> 250M microbiocide is recommended for the control of bacteria and fungi in the manufacture and use of water-based conveyor lubricants.

METHOD OF APPLICATION: BIOSPERSE<sup>™</sup> 250M microbiocide should be dispensed into the conveyor lubricant concentrate and uniformly dispersed throughout the fluid or dispensed into the conveyor lubricant use-dilution feed line using a metering pump and uniformly sprayed onto the conveyor.

FLUID CONCENTRATE: BIOSPERSE<sup>™</sup> 250M microbiocide should be added to the conveyor lubricant concentrate at a level to ensure that the final use-dilution will contain 200-1000 ppm of BIOSPERSE<sup>™</sup> 250M microbiocide (3-15 ppm of active ingredient).

USE-DILUTION FLUID: Grossly contaminated systems must be cleaned before treatment is begun. INITIAL DOSE: For a noticeably fouled system, meter in 8.3 pound (126 fluid ounce) of BIOSPERSE<sup>™</sup> 250M microbiocide per 1000 gallon of use-dilution conveyor lubricant. If necessary, continue metering 3.3-8.3 pound (50-126 fluid ounce) of BIOSPERSE<sup>™</sup> 250M microbiocide per 1000 gallon of conveyor lubricant until control is achieved and only to maintain the level of BIOSPERSE<sup>™</sup> 250M microbiocide in the final use-dilution fluid at 400-1000 ppm (6-15 ppm active ingredient).

SUBSEQUENT DOSE: After establishing microbial control or to prevent fouling of a clean system, maintain the system at 3-15 ppm active ingredient by metering 1.7-8.3 pound (26-126 fluid ounce) of BIOSPERSE<sup>™</sup> 250M microbiocide per 1000 gallon of conveyor lubricant.

For the control of microbial biofilms, bacteria, algae, and fungi in industrial process water systems, industrial recirculating water cooling towers, industrial recirculating closed loop water cooling systems, brewery pasteurizers, can warmers, retort water systems, industrial scrubbing systems, evaporative condenser water systems, hydrostatic sterilizer water systems, air conditioner/refrigeration condensate water systems, coal slurry systems, immersion ultrasonic tank water, laboratory equipment water baths and influent water filtration systems:

**INITIAL DOSE:** When the system is noticeably fouled, apply 148 - 883 ppm Biosperse™ 250M microbiocide (1.26 - 7.46 pound or 19 - 113 fluid ounce of Biosperse™ 250M microbiocide per 1000 gallon of water in the system.) Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

SUBSEQUENT DOSE: When microbial control is evident, add 35 - 219 ppm Biosperse™ 250M microbiocide (0.3 - 1.86 pound or 4.5 - 28 fluid ounce of Biosperse™ 250M microbiocide per 1000 gallon of water in the system) weekly or as needed to maintain control.

Add Biosperse™ 250M microbiocide at some point in the system to insure uniform mixing.

#### **PAPERMILLS**

For the control of microbial biofilms, bacteria, algae and fungi, add Biosperse™ 250M microbiocide to the Beater, Hydropulper, or Fan or Broke Storage Pumps or some other point in the system to insure uniform mixing.

Apply 0.44 to 1.5 lb (7 - 23 fluid ounce) of Biosperse™ 250M microbiocide per ton (dry basis) of pulp or paper produced as a slug dose. If needed, repeat daily. Badly fouled systems should be cleaned before initial treatment.

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BS 250\_74655-20 Page **5** of **7** 

#### AIR WASHER SYSTEMS/ PAINT SPRAY BOOTHS

Add to the air washer sump, chill water sump, or paint spray booth to insure uniform mixing, 35 - 883 ppm Biosperse™ 250M microbiocide (0.3 - 7.46 pound or 4.5 - 113 fluid ounce of Biosperse™ 250M microbiocide per 1000 gallon of water in the system) depending upon the severity of contamination to control microbial biofilms, bacteria, fungi, and algae which cause fouling in industrial air washer systems and paint spray booths.

#### INTERMITTENT OR SLUG METHOD

**INITIAL DOSE:** When the system is noticeably fouled, apply 148 - 883 ppm Biosperse™ 250M microbiocide (1.26 - 7.46 pound or 19 - 113 fluid ounce of Biosperse™ 250M microbiocide per 1000 gallon of water in the system.) Repeat until control is achieved.

**SUBSEQUENT DOSE:** When microbial control is evident, add 35 - 219 ppm Biosperse<sup>™</sup> 250M microbiocide (0.3 - 1.86 pound or 4.5 - 28 fluid ounce of Biosperse<sup>™</sup> 250M microbiocide per 1000 gallon of water) in the system weekly or as needed to maintain control. Badly fouled systems should be cleaned before treatment is begun.

#### **CONTINUOUS FEED METHOD**

**INITIAL DOSE:** When the system is noticeably fouled, apply 148 - 883 ppm Biosperse™ 250M microbiocide (1.26 - 7.46 pound or 19 - 113 fluid ounce of Biosperse™ 250M microbiocide per 1000 gallon of water in the system.)

SUBSEQUENT DOSE: Maintain this treatment level by adding a continuous feed of 35 - 219 ppm Biosperse™ 250M microbiocide (0.3 - 1.86 pound or 4.5 - 28 fluid ounce of Biosperse™ 250M microbiocide per 1000 gallon of makeup water). Badly fouled systems must be cleaned before initial treatment.

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

#### **OIL FIELD INJECTION WATERS**

For the control of microbial biofilm-forming and sulfate-reducing bacteria in oil and gas field water systems, including enhanced recovery injection fluids, drilling, fracturing and completion fluids, slug treat with 67 - 332 ppm Biosperse™ 250M microbiocide depending on the severity of contamination.

INITIAL DOSE: Add 166 - 332 ppm Biosperse™ 250M microbiocide (6.9 - 13.9 gallon or 58.0 - 116.8 pound Biosperse™ 250M microbiocide per 1000 barrel of water) at a point in the system where it will be uniformly mixed. Repeat treatment after three days or as needed until control is achieved.

SUBSEQUENT DOSE: Add 67-166 ppm Biosperse™ 250M microbiocide (2.8 - 6.9 gallon or 23.5 - 58.0 pound Biosperse 250 WT per 1000 barrel of water) every seven days or as needed to maintain control

#### ULTRA FILTRATION UNITS AND NON-MEDICAL/NON-POTABLE REVERSE OSMOSIS SYSTEMS

Biosperse™ 250M microbiocide is recommended for the control of microbial biofilms, bacteria and fungi in ultra filtration units and non-medical/non-potable reverse osmosis systems. Use of Biosperse™ 250M microbiocide in potable water or dialysis is prohibited. Add 10 - 333 ppm of Biosperse™ 250M microbiocide (0.15 - 5 ppm active ingredient) into industrial ultra filtration or reverse osmosis systems by either continuous feed or periodic injection. Compatibility of Biosperse™ 250M microbiocide with reverse osmosis membranes should be confirmed with membrane manufacturers.

For the control of bacteria and fungi in carbon beds, add 10 - 333 ppm of Biosperse™ 250M microbiocide (0.15 - 5 ppm active ingredient) by either continuous or batch feed.

For periodic membrane cleaning, add 0.4 - 1.0 lb of Biosperse™ 250M microbiocide to every 120 gallon of cleaning solution (6 - 15 ppm active ingredient).

Badly fouled systems should be cleaned before treatment is begun.

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BS 250\_74655-20 Page **6** of **7** 

#### INDUSTRIAL WASTEWATER TREATMENT SYSTEMS AND SEWAGE SYSTEMS

Biosperse<sup>™</sup> 250M microbiocide is recommended for the control of microbial biofilms, bacteria, fungi, and algae in industrial wastewater treatment and sewage systems. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority.

INITIAL DOSE: When the system is noticeably fouled, apply 148 - 883 ppm Biosperse<sup>™</sup> 250M microbiocide (1.26 - 7.46 pound or 19 - 113 fluid ounce of Biosperse<sup>™</sup> 250M microbiocide per 1000 gallon of water in the system.) Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

**SUBSEQUENT DOSE:** When microbial control is evident, add 35 - 219 ppm Biosperse<sup>™</sup> 250M microbiocide (0.3 - 1.86 pound or 4.5 - 28 fluid ounce of Biosperse<sup>™</sup> 250M microbiocide per 1000 gallon of water in the system) weekly or as needed to maintain control.

IMPORTANT NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label under normal conditions of use. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED. THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN OTHER RESPECTS THAN AS EXPRESSLY SET FORTH HEREIN, ARE EXPRESSLY EXCLUDED AND DISCLAIMED.

NOTE: Buyer assumes all responsibility for safety and use not in accordance with directions.

Hercules Incorporated, A wholly owned subsidiary of Ashland Inc. 500 Hercules Road Wilmington, DE 19808 (302) 594-5000 Emergency Phone Number 1-800-ASHLAND (1-800-274-5263)

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