

# U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Antimicrobials Division (7510P) 1200 Pennsylvania Avenue NW Washington, D.C. 20460

## NOTICE OF PESTICIDE:

x Registration Reregistration

EPA Reg. Number:

Date of Issuance:

74655-31

JUL 1 2 2010

Term of Issuance:

#### Conditional

Name of Pesticide Product:

Biosperse 254

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Kate Ingram

Hercules Inc.

1313 North Market Street

Wilmington, DE 19894

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior, to use of the label in commerce. In any correspondence on this product always leter to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec 3(c)(7)(a) provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for re-registration of your product under FIFRA section 4.
- 2. Make the labeling changes listed below before you release the product for shipment:
  - a. Revise the "EPA Registration Number to read, "EPA Reg. No. 74655-31".

Signature of Approving Offifial:

Date:

Marshall Swindell

Product Manager Team-33

Regulatory Management Branch I

Antimicrobials Division (7510P)

JUL 12 2010

EPA Form 8570-6

Page 2 EPA Reg. No. 74655-31

**b.** The Agency encourages registrants to include a company telephone number or toll-free hotline number for emergency information in the first aid section. If registrant does not have its own number, the registrant may use the National Pesticides Information Center (NPIC) 800 number, 1-800-858-7378.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records. Submit one (1) copy of your final printed labeling prior to release of this product for shipment. If you have any questions concerning this letter, please contact Demson Fuller at (703) 308-8062.

Sincerely,

Marshall Swindell

Product Manager Team-33

Regulatory Management Branch I Antimicrobials Division (7510P)

JUL 1 2 2010

Enclosure: (Stamped Label)

## Biosperse 254 Microbiocide

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC AMINALS

### **DANGER**

to a pro- to

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if inhaled. May be fatal if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Causes asthmatic signs and symptoms in hyper-reactive individuals.

Do not get in eyes, on skin, on clothing. Avoid breathing vapor. Do not swallow. Wear goggles, protective clothing and butyl or nitrile gloves. Remove contaminated clothing and wash before reuse.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. 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 HANDLING

Biosperse 254 is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin and zinc. Biosperse 254 can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about -6°F (-21°C). Therefore, unless the storage tank is inside or underground, heating and insulation may be required. If heating is needed, exposure to high temperature should be avoided. For short storage times (up to about 1 month), temperatures of up to 100°F (37.8°C) can be tolerated but the preferred maximum storage temperature is about 80°F (26.7°C).

A stainless steel centrifugal pump is suggested for transfer service. Spiral-wound stainless steel with TEFLON® Polymer is suitable for gaskets and packing.

Handle in a well-ventilated area. If vapors are irritating to the nose or eyes, special ventilation or respiratory protection (MSHA/NIOSH approved air purifying respirator equipped with an organic vapor cartridge) may be required.

#### STORAGE AND DISPOSAL

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. 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 your Environmental Control Agency, or the Hazardous Wastes representative at the nearest EPA Regional Office for guidance. CONTAINER DISPOSAL: Nonrefillable Container. Do not reuse or refill this container. Triple or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by state and local authorities.

ACCEPTED with COMMENTS EPA Letter Dated:

JUI 1 2 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 74655-3/



Escal Page 1 of 5 BioSperse 254 Escal Page 74655Active Ingredient:

Glutaraldehyde

50%

Inert Ingredients

50%

Total

100%

# KEEP OUT OF REACH OF CHILDREN DANGER

#### FIRST AID

If Swallowed: Call a poison control center or a doctor immediately for treatment advice. DO NOT INDUCE VOMITING. Do not give anything to drink.

If In Eyes: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Call a poison control center or a doctor immediately 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 a doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or a doctor for further treatment advice.

NOTE TO PHYSICIAN: Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

Have the MSDS and, if available, the product container or label with you when calling a poison control center or a doctor, or going for treatment.

Produced for Hercules Inc., A wholly owned subsidiary of Ashland Inc.

Made in USA

EPA Reg. No. 74655-

EPA Est. No. 10352-WV-2 (A); 464-WV-1 (B)

- (A) 5 gallon pails in pallets; all drums, bulk
- (B) Sample, 5 gallon pails less than full pallet

**DIRECTIONS FOR USE** 

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling tered under EPA Reg. No. 74655-3 J

# AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS / RECIRCULATING COOLING AND PROCESS WATER SYSTEMS

This product may be used only in industrial air washers and air washer systems which have mist-eliminating components.

BIOSPERSE 254 should be added at the application rates described below to a water treatment system at a convenient point of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSE) or continuously. Badly fouled systems can be shock treated with BIOSPERSE 254. Under these conditions, blowdown so all the discontinued for up to 24 hours.

BIOSPERSE 254 can be used in industrial process water systems that contain ultra filtration write and non-medical reverse osmosis membranes (where approved for compatibility by the membrane manufacturer) and associated distribution systems.

ACCEPTED with COMMENTS

EPA Letter Dated:

Under the Federal Insecticide,

Fungicide, and Rodenticide Act as amended, for the pesticide,

JUL 1 2 2010

#### INTERMITTENT (SLUG DOSE) METHOD

Initial Dose: When the system is noticeably fouled, apply 11.3 to 22.7 fl.oz (100 to 200 ppm product) of BIOSPERSE 254 per 1000 gallons of water in the system, or 89 to 177 mL of BIOSPERSE 254 per 1000 liters of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 4.5 to 11.3 fl.oz. (40 to 100 ppm) of BIOSPERSE 254 per 1000 gallons of water in the system weekly, or 35 to 89 mL of BIOSPERSE 254 per 1000 gallons of water in the system weekly 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, apply 11.3 to 22.7 fl.oz (100 to 200 ppm product) of BIOSPERSE 254 per 1000 gallons of water in the system, or 89 to 177 mL of BIOSPERSE 254 per 1000 liters of water in the system. Subsequent Dose: Maintain this treatment level by starting a continuous feed of 2.3 to 11.3 fl.oz. (20 to 100 ppm product) of BIOSPERSE 254 per 1000 gallons of water in the system per day or 17.7 to 88.6 mL of BIOSPERSE 254 per 1000 liters of water in the system per day.

Badly fouled systems must be cleaned before treatment is begun.

#### SERVICE WATER AND AUXILIARY SUSTEMS

BIOSPERSE 254 should be used at the same application rates, and in the same manner as described above. It should be added to the system at a point that will allow for uniform mixing throughout the system.

#### **HEAT TRANSFER SYSTEMS**

(Evaporative Condensers, Dairy Sweetwater Systems, Hydrostatic Sterilizers and Retorts, and Pasteurizers and Warmers)

BIOSPERSE 254 should be used at the same application rates and in the same manner as described above. It should be added to the system at a point of uniform mixing such as a basin area, sump area or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

#### INDUSTRIAL WASTE WATER SYSTEMS

(Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks)

BIOSPERSE 254 should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 0.4 to 2.0 gallons (450 to 2250 ppm product) of BIOSPERSE 254 per 1000 gallons of wastewater of sludge or 399 mL to 1994 mL of BIOSPERSE 254 per 1000 liters of wastewater of sludge.

#### BEET SUGAR MILLS AND BEET SUGAR MILL PROCESS WATER SYSTEMS

BIOSPERSE 254 should be added to the system at a point of uniform mixing such as the diffuser, transport water pump, weir box, or diffuser feed water pump. Additions may be made intermittently (SLUG DOSE) or continuously.

INTERMITTENT (SLUG DOSE) METHOD

Initial Dose: When the system is noticeably contaminated, add 5.4 to 13.6 fl.oz. (200 to 500 ppm product) of BIOSPERSE 254 per ton or 177 to 422 mL of BIOSPERSE 254 per metric ton of sliced beets as a slug dose. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.8 to 8.2 fl.oz. (30 to 300 ppm) of BIOSPERSE 254 per ton or 27 to 270 mL of BIOSPERSE 254 per metric ton of sliced beets in the system as a slug dose as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably contaminated, add 5.4 to 13.6 fl.oz/min (200 to 500 ppm product) of BIOSPERSE 254 per ton or 177 to 422 mL/min of BIOSPERSE 254 per metric ton of beets sliced per minute in the system via automatic pump of suitable construction.

Subsequent Dose: When microbial control is evident, add 0.8 to 8.2 fl.oz/min (30 to 300 ppm product) of BIOSPERSE 254 per ton or 27 to 270 mL/min of BIOSPERSE 254 per metric ton of beets sliced per minute, or as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

#### PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS

BIOSPERSE 254 should be added to the paper making system at a point of uniform mixing such as the beaters, broke chest pump, save-all tank, or white-water tank.

Initial Dose: When the system is noticeably contaminated **ACCEPTED** lbs of BIOSPERSE 254 per ton of pulp or paper (dry basis) as a slug dose. Repeat until control is achieved. **TON Letter Dated:** 

treatment.

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Subsequent Dose: When microbial control is evident, add 0.3 to 2.0 lbs of BIOSPERSE 254 per control pulp or paper (dry basis) as a slug dose as necessary to maintain control.

JUL 1 2 2010

Under the Federal Insecticide,
Fingicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 7 4655-3

Page 3 of 5 BOSPERSE 254 See 74655-

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#### PIGMNETS AND FILLER SULRRIES FOR PAPER AD PAPERBOARD

(For use in food and non-food contact pigments and filler slurries)

Use from 0.1 to 0.6 lbs. BIOSPERSE 254 per 1000 lbs of dry powder to produce a concentration from 100 to 600 ppm as product (based on slurry solids) in the mixed slurry.

#### WATER BASED COATINGS FOR PAPER AND PAPERBOARD

NOTE: for use in non-food contact coatings only.

Use from 0.1 to 0.6 lbs. BIOSPERSE 254 per 1000 lbs of dry powder to produce a concentration from 100 to 600 ppm as product (based on slurry solids) in the mixed slurry.

#### AQUEOUS METALWORKING FLUIDS

BIOSPERSE 254 should be added to a metalworking fluid system at a point of uniform mixing such as the fluid collection tank. Additions may be made intermittently (SLUG DOSE) at intervals of one week or less.

Initial Dose: When the system is noticeably fouled apply 1.8 to 5.4 gallons of BIOSPERSE 254 per 10,000 gallons of metalworking fluid to the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.7 to 3.6 gallons of BIOSPERSE 254 per 10,000 gallons of metalworking fluid to the system weekly, or as needed to maintain control. Badly fouled systems should be cleaned before treatment if begun.

#### WATER BASED CONVEYOR LUBRICANTS

(Brewery, Juice, Dairy, Beverage, and Food Processing Systems)

Avoid contamination of food in application of product.

Thoroughly clean all tracks and conveyors to remove gross soil. Rinse well. Use an automatic feed system to provide 1.1 to 6.8 fl.oz. (50 to 300 ppm active) of BIOSPERSE 254 per 100 gallons of diluted lubricant.

#### **GENERAL PRESERVATIVE USE**

BIOSPERSE 254 is recommended for use in aqueous or water containing products and systems, including industrial, institutional and consumer in-can processes and products to control the growth of bacteria and fungi. For effective preservation, add BIOSPERSE 254 to the product formulation at a rate of 0.02% to 0.20% (200 to 2000 ppm) based on the water content of the product (0.2 to 2.0 lbs BIOSPERSE 254 per 1000 lbs water content). Mix uniformly.

#### PRESERVATIVE FOR CONCENTRATES

For use in concentrates where effective preservation is needed after dilution, add

BIOSPERSE 254 to the product formulation at a rate such that the diluted end-use product will contain 0.02% to 0.20% BIOSPERSE 254.

## At no time during the preservation process should the level of BIOSPERSE 254 exceed 2.0%. REVERSE OSMOSIS MEMBRANES

For effective preservation of reverse osmosis elements (where approved for compatibility by membrane manufacturer), immerse elements in a tank containing 0.2% to 2.0% BIOSPERSE 254. BIOSPERSE 254 can also be added to in-line recirculating systems for preservation of installed out-of-service reverse osmosis equipment (where approved for compatibility by membrane manufacturer). Add 0.2% to 2.0% BIOSPERSE 254 to the tank in the circulating system. Maintain the concentration of BIOSPERSE 254 by periodic addition to counteract any system leakage.

#### **CONCRETE ADMIXTURES**

For effective preservation of concrete admixtures, add BIOSPERSE 254 to the product formulation at a rate of 2000 to 8000 ppm based on the weight of the admixture (2.0 to 8.0 lbs BIOSPERSE 254 per 1000 lbs. concrete admixture). Mix uniformly.

#### WATER FLOODS

BIOSPERSE 254 should be added to a water flood system at a point of uniform mixing. Initial Treatment: When the system is noticeably contaminated, add 100 to 5000 ppm BIOSPERSE 254 to the system (0.09 to 4.4 gallons BIOSPERSE 254 per 1000 gallons flood water). Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 20 to 5000 ppm BIOSPERSE 254 (0.02 to 4.4 gallons BIOSPERSE 254 per 1000 gallons flood water) to the system weekly, or as needed to maintain control.

#### FRAC FLUIDS

BIOSPERSE 254 reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. Add BIOSPERSE 254 to the frac water storage tanks or directly into the well head injection pipeline as the water is being pumped down-hole.

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Dose Range: BIOSPERSE 254 should be addetrate GON DOSPERSE 254 should be addetrate GON DOSPERSE 254 should be addetrated GON DOSPERSE 254 should be added to the GON DOS

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Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 74455-3/ Egge 4 of 5 BIOSPERSE 254 Eggs 74655-

#### DRILLING, COMPLETION, AND WORKOVER FLUIDS

BIOSPERSE 254 should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank. Initial Treatment: Add 50 to 1000 ppm BIOSPERSE 254 (0.2 to 3.7 gallons BIOSPERSE 254 per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination.

Maintenance Dosage: Maintain a concentration of 50 to 1000 ppm BIOSPERSE 254 by adding 0.2 to 3.7 gallons of BIOSPERSE 254 per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

#### PACKER FLUIDS

BIOSPERSE 254 should be added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 50 to 600 ppm BIOSPERSE 254 (0.2 to 2.2 gallons BIOSPERSE 254 per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination. Seal the treated packer fluid in the wall between the casing and production tube.

#### OIL AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

BIOSPERSE 254 should be added to an oil/gas production or transmission line via direct injection. The application should be conducted to ensure maximum distribution of BIOSPERSE 254 throughout the entire internal pipeline surface by adding a sufficient amount of biocide to detect/measure a residual concentration at the back end of the pipeline system. Criteria for success of the treatment will be a reduction in bacterial counts and/or reduced corrosion rates. To facilitate application it may be desirable to dilute the BIOSPERSE 254 with an appropriate solvent immediately before use. The concentration in the solvent should not fall below an active concentration range of 500 to 5000 ppm based on the volume of water in the pipeline. Injections to the system should be weekly, or as needed to maintain control.

### GAS STORAGE WELLS AND SYSTEMS

Individual injection wells should be treated with sufficient quantity of BIOSPERSE 254 to produce a concentration of 500 to 5000 ppm BIOSPERSE 254 when diluted by the water present in the formation. Injection should take place before gas is injected (during the summer). Injections should be repeated yearly, or as needed to maintain control. Individual drips should be treated with a sufficient quantity of BIOSPERSE 254 to produce a concentration of 200 to 2000 ppm BIOSPERE 254 when diluted by the water present in the drip. Injections should be repeated yearly, or as needed to maintain control.

#### **HYRDOTESTING**

Water used to hydrotest pipelines or vessels should contain 100 to 4000 ppm BIOSPERSE 254 (0.09 to 3.5 gallons BIOSPERSE 254 per 1000 gallons water), depending on water quality and length of time the equipment will remain idle.

PIPELINE PIGGING AND SCRAPING OPERATIONS

Add BIOSPERSE 254 to a slug of water immediately following the scraper (ideally this water volume can be kept to a minimum and contained between the scraper and the trailing pig). Sufficient BIOSPERSE 254 should be added to produce a concentration of 0.1 to 1% (0.09 to 0.9 gallon BIOSPERSE 254 per 100 gallons water), depending on the length of the pipeline and the severity of biofouling.

ACCEPTED
with COMMENTS
EPA Letter Dated:

JUL 1 2 2010

Under the Federal Insecticide,
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¿¿¿¿?age 5 of 5 BIOSPERSE 254 ¿¿¿°; 74655-