PM31	3876-151	~ ~~ ~	
			19
	U.S. ENVIRONMENTAL PROTECTION AGENCY	EPA Reg. Number:	Date of Issuance:
UNITED STATED	Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460	3876-151	May 31, 1996
A PROTECTION		Term of Issuance:	Conditional
	NOTICE OF PESTICIDE:		
	Reregistration	Name of Pesticide Pro	duct:
(under FIFRA, as amended)		Betz DE-5556	
Name and Address of Registrant (include ZIP Code):			
4636 Som P.O. Box	oratories, Inc. erton Road 3002 PA 19053-6783		
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 refer 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/ reregistration 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 reregistration of your product under FIFRA section 4.			
2. Make the following label changes:			
a. Revise the EPA Registration Number to read, "EPA Reg. No. "3676-151. "			
b. Revise your ingredient statement to read as follows:			
2-Bromo-2-nitroporpane-1,3,-diol			
c.	Include the following statement Statement" section: "Harmful if through skin."		
Signature of Approving		Date:	1000
Marion J.	Johnson, Product Manager 31	MAY 3 1	. 1996
EPA Form 8570-6			
	1		

page 2 EPA Reg. No. 3876-151

> d. Add the following additional instructions to the Directions For Use section:

Use of the product in either public/municipal or single or multiple family private/residential potable/drinking water systems is strictly prohibited. Use of the product in any cooling water system that discharges effluent within 1/4 mile of either a public/municipal or single or multiple family private/residential potable/drinking water intake is strictly prohibited.

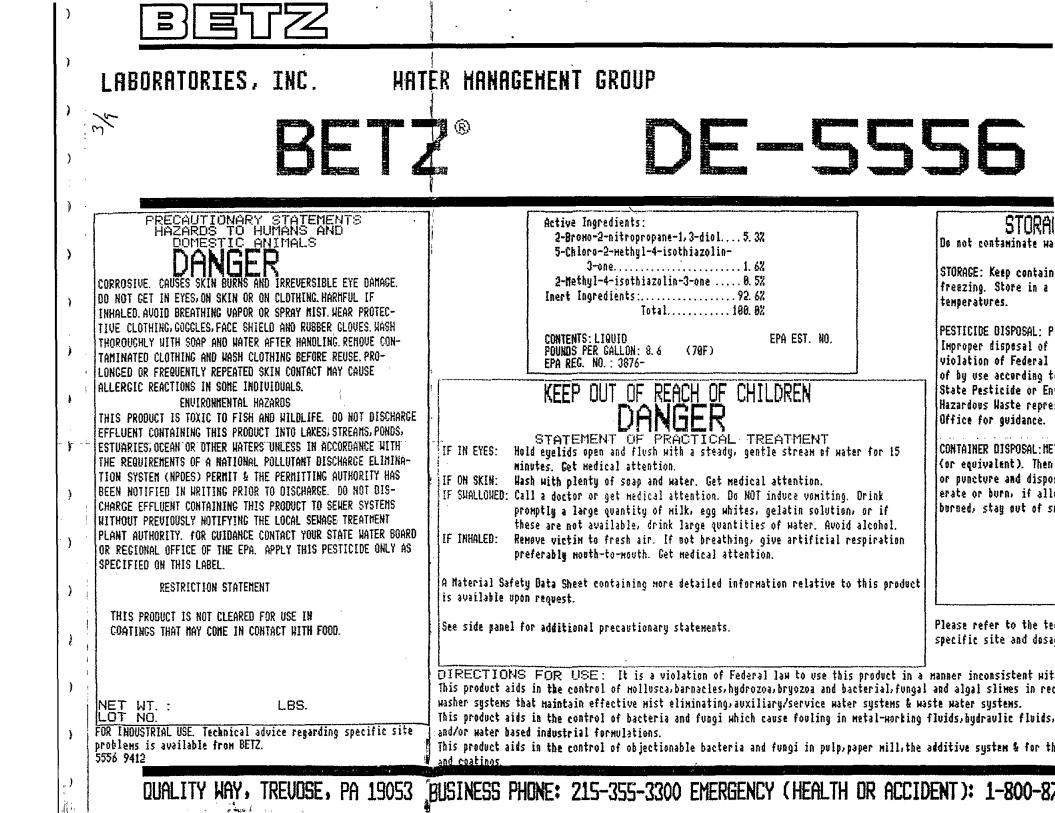
3. Submit two copies of the revised final printed label for the record.

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.

Sincerely yours,

Marion Johnson Product Manager 31 Antimicrobial Programs Branch Registration Division (7505C)



BETZ DE-5556 APPLICATION BULLETIN

4/9

This product is effective for the control of mollusca, barnacles, hydrozoa, bryzoa and bacterial, fungal and algal slimes in recirculating water systems, air washer systems that maintain effective mist eliminating, auxiliary/service water systems and waste water systems.

This product is effective for the control of bacterial and fungi which causes fouling in metal working fluids, hydraulic fluids, hydrocarbon based fuel oils, and oil and/or water based industrial formulations.

This product is effective for the control of objectionable bacteria and fungi in pulp, paper mill, the additive system and for the preservation of paper mill additives and coatings.

Recirculating Water Systems

This product is effective for the control of mollusca, barnacles, hydrozoa, bryozoa, bacterial, fungal, and algal slimes in evaporative condensers, heat exchange water systems, commercial and industrial cooling towers, influent systems such as flow through filters and lagoons, industrial water scrubbing systems, brewery pasteurizers, hydrostatic cookers and retort waters.

This product may be added to the system either continuously or intermittently as needed. The frequency of feeding and duration of the treatment will depend upon the severity of contamination. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

INTERMITTENT OR SLUG METHOD

4

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 0.4 to 4.2 lbs per 1000 gallons/0.5 to 5 kg/m³ (50 to 500 ppm) of water in the system. Repeat until control. is achieved.

SUBSEQUENT DOSE: When control is evident, add this product at the rate of 0.3 to 3.3 lbs per 1000 gallons/0.4 to 4 kg/m³ (40 to 400 ppm) of water in the system every 3 days or as needed to maintain control.

CONTINUOUS FEED METHOD

13

HNUTIAL DOSE: When the system is noticeably fouled, add this product at the rate of 0.4 to 1929bs per 1000 gallons/0.5 to 5 kg/m³ (50 to 500 ppm) of water in the system. Repeat until control is achieved. SUBSEQUENT DOSE: Continuously feed this product to maintain a dosage of 0.3 to 3.3 lbs

per 1000 gallons/0.4 to 4 kg/m³ (40 to 400 ppm) of blowdown (or water loss) from the system.

Air Washers

For use only in Air Washing systems that maintain effective mist eliminating components. To control bacteria, fungi and algae which cause fouling in industrial air washing systems, add this product to the air washer sump or chill water sump to insure uniform mixing at the rate of 0.3 to 3.3 Ibs per 1000 gallons/0.4 to 4 kg/m³ or 4.2 to 45.9 fluid ounces/124 to 1357 ml (40 to 400 ppm) of water in the system depending upon the severity of the contamination. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, apply this product at the rate of 0.4 to 4.2 lbs per 1000 gallons/0.5 to 5 kg/m³ or 5.6 to 58.5 fluid ounces/166 to 1730 ml (50 to 500 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add this product at the rate of 0.3 to 3.3 lbs per 1000 gallons/0.4 to 4 kg/m³ or 4.2 to 45.9 fluid ounces/124 to 1357 ml (40 to 400 ppm) of water in the system weekly or as needed to maintain control.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, apply this product at the rate of 0.4 to 4.2 lbs per 1000 gallons/0.5 to 5 kg/m^3 or 5.6 to 58.5 fluid ounces/166 to 1730 ml (50 to 500 ppm) of water in the system.

SUBSEQUENT DOSE: Maintain this treatment level by adding a continuous feed of this product at the rate of 0.3 to 3.3 lbs per 1000 gallons/0.4 to 4 kg/m³ or 4.2 to 45.9 fluid ounces/124 to 1730 ml (40 to 400 ppm) of blowdown (or water loss) from the system.

Auxiliary Water/Service Water and Waste Water Systems

This product is effective for the control of mollusca, barnacles, hydrozoa, bryozoa, odor-forming bacteria, slime-forming bacteria, fungi, and algae in auxiliary water systems such as fire protection systems and pump or screen bays, waste water and waste material disposal, holding or recovery systems such as storage tanks, storage piles, associated piping, settling ponds or lagoons, transport spillways or canals and disposal wells.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 0.4 to 4.2 lbs per 1000 gallons/0.5 to 5 kg/m³ (50 to 500 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When control is evident, add this product at the rate of 0.3 to 3.3 lbs per 1000 gallons/0.4 to 4 kg/m³ (40 to 400 ppm) of water in the system every 3 days or as needed to maintain control.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 0.4 to 4.2 lbs per 1000 gallons/0.5 to 5 kg/m³ (50 to 500 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: Continuously feed this product to maintain a dosage of 0.3 to 3.3 lbs per 1000 gallons/0.4 to 4 kg/m³ (40 to 400 ppm) of blowdown (or water loss) from the system.

This product may be added to the system water or by spraying on to a waste pile as needed. The frequency of feed or spray and the duration of treatment will depend upon the severity of the contamination. Additives to water systems should be made during the pumping operation and as close to the pump as possible to ensure adequate mixing.

INTERMITTENT OR SLUG METHOD

T. Martin

When treatment is required, add BETZ BIO-TROL 91W at the rate of 0.4 to 4.2 lbs per 1000 gallons/0.5 to 5 kg/m³ (50 to 500 ppm) of water already in the system, or being added to the system for 4 to 8 hours, 1 to 4 times per week or as needed to achieve the desired level of control. When control is obtained, add this product at the rate of 0.3 to 3.3 lbs per 1000 gallons/0.4 to 4 kg/m³ (40 to 400 ppm) of water in the system.

Metal working fluids, Hydraulic fluids, Hydrocarbon based fuel oils and Oil and/or water based industrial formulations

For control of bacteria, fungi and algae which cause fouling in metal working fluids hydraulic fluids, hydrocarbon based fuel oils and oil and/or water based industrial formulations, add this product to the fluid insuring uniform mixing at the rate of 2 to 10 lbs per 1000 gallons/2.4 to 12 kg/m³ or 27.8 for 100 gallons/2.4 to 12 kg/m³ or 27.8 to 12 kg/m

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, apply this product at the rate of 4 to 10 lbs/4.8 to 12 kg/m³ or 55.6 to 139 fluid ounces/1644 to 4110 ml (480 to 1200 ppm) of fluid in the system. Repeat every 4 weeks or until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add this product at the rate of 2 to 5. lbs per 1000 gallons/2.4 to 6 kg/m³ or 27.8 to 69.5 fluid ounces/822 to 2055 ml (240 to 600 ppm) of fluid in the system every 4 weeks or as needed to maintain control.

Pulp and Paper Mill

In Pulp and Paper Mill and the additive systems and for the preservation of pulp, pigment slurries, alum, emulsions, adhesives, non-coating defoamers, polymers and paper products this product aids to control objectionable bacteria and fungi. Additions can be made on a continuous or intermittent basis, depending upon the severity of the contamination.

BADLY FOULED SYSTEMS must be cleaned before treatment is begun. This product should be added directly to the pulp and paper mill systems. Apply at a point in the system where the product will be uniformly mixed.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 0.75 to 7.5 lbs per ton of pulp/paper produced. Addition of this product to the additive system should be made directly at the rate of 0.42 to 5.4 lbs/0.5 to 6.5 kg/m³ (50 to 650 ppm) per 1000 gallons. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add this product at the rate of 0.6 to 5.75 lbs per ton of pulp or paper produced. Treat the system as needed to maintain control. Addition of this product to the additive system may be reduced to 0.28 to 4.6 lbs/0.34 to 5.5 kg/m³ (34 to 550 ppm) per 1000 gallons.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 0.75 to 2.0 lbs per ton of pulp/paper produced. Additions of this product to the additive system should be made directly at the rate of 0.42 to 5.4 lbs//0.5 to 6.5 kg/m³ (50 to 650 ppm) per 1000 gallons. Continue until control is achieved.

SUBSEQUENT DOSE: Maintain the following level by continuous feed of this product at the rate of 0.6 to 1.75 lbs per ton of pulp and paper produced. Addition of this product to the additive system should be made at the rate of 0.28 to 4.6 lbs/0.34 to 550 ppm) per 1000 gallons. Continue until control is achieved.

For Preservation

This product should be added directly to the material to be preserved prior to menufacturing into the finished product, i.e., pulp, broke, polymers, defoamers, alum, emulsions, addes wes, paper mill coatings, pigment slurries and paper products. The dosage rate will depend or the material to be preserved and the storage time. The usual additions should be 75 to 1300 ppm for polymer latex emulsions, 75 to 650 ppm for polymers, starch, defoamers, alum, adhesives, paper mill coatings and pigment slurries and 150 to 650 ppm for pulp and broke. The above recommendations are based on a maximum storage time of 7 to 14 days. Repeat dosing every 7 to 14 days for storage times longer than two weeks.

THE COMPOSITION AND USE OF THIS PRODUCT IS COVERED BY U.S. PATENT 4,732,905.

USE OF THIS PRODUCT WITH CERTAIN OXIDIZING BIOCIDES IS COVERED BY U.S. PATENT 4,855,296 AND PENDING PATENTS. JSC4/95 REV-5

BETZ DE-5556 APPLICATION BULLETIN FOR CALIFORNIA

This product is effective for the control of mollusca, barnacles, hydrozoa, bryzoa and bacterial, fungal and algal slimes in recirculating water systems, industrial air washer systems that maintain effective mist eliminating, auxiliary/service water systems and waste water systems.

This product is effective for the control of bacterial and fungi which causes fouling in metal working fluids, hydraulic fluids, hydrocarbon based fuel oils, and oil and/or water based industrial formulations.

This product is effective for the control of objectionable bacteria and fungi in pulp, paper mill, the additive system and for the preservation of paper mill additives and coatings.

Recirculating Water Systems

This product is effective for the control of mollusca, barnacles, hydrozoa, bryozoa, bacterial, fungal, and algal slimes in evaporative condensers, heat exchange water systems, commercial and industrial cooling towers, influent systems such as flow through filters and lagoons, industrial water scrubbing systems, brewery pasteurizers, hydrostatic cookers and retort waters.

This product may be added to the system either continuously or intermittently as needed. The frequency of feeding and duration of the treatment will depend upon the severity of contamination. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 1.6 to 5 lbs per 1000 gallons/2 to 6 kg/m³ (200 to 600 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When control is evident, add this product at the rate of 0.8 to 4.0 lbs per 1000 gallons/1 to 4.8 kg/m³ (100 to 480 ppm) of water in the system every 3 days or as needed to maintain control.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 1.6 to 5 lbs per 1000 gallons/2 to 6 kg/m³ (200 to 600 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: Continuously feed this product to maintain a cosage of 0.8 to 4 lbs per 1000 gallons/1 to 4.8 kg/m³ (100 to 480 ppm) of blowdown (or water loss) from the system.

Air Washers

For use only in Air Washing systems that maintain effective mist eliminating components. To control bacteria, fungi and algae which cause fouling in industrial air washing systems, add this product to the air washer sump or chill water sump to insure uniform mixing at the rate of 0.8 to 5 lbs per 1000 gallons/1 to 6 kg/m³ or 11.2 to 69.5 fluid ounces/331 to 2055 ml (100 to 600 ppm) of water in the system depending upon the severity of the contamination. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, apply this product at the rate of 1.6 to 5 lbs per 1000 gallons/2 to 6 kg/m³ or 22.4 to 69.5 fluid ounces/659 to 2055 ml (200 to 600 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add this product at the rate of 0.8 to 4.0 lbs per 1000 gallons/1 to 4.8 kg/m³ or 11.2 to 55.6 fluid ounces/331 to 1644 ml (100 to 480 ppm) of water in the system weekly or as needed to maintain control.

CONTINUOUS FEED MEI HOD

INITIAL DOSE: When the system is noticeably fouled, apply this product at the rate of 1.6 to 5 lbs per 1000 gallons/2 to 6 kg/m³ or 22.4 to 69.5 fluid ounces/659 to 2055 ml (200 to 600 ppm) of water in the system.

SUBSEQUENT DOSE: Maintain this treatment level by adding a continuous feed of this product at the rate of 0.8 to 4.0 lbs per 1000 gallons/1 to 4.8 kg/m³ or 11.2 to 55.6 fluid ounces/331 to 1644 ml (100 to 480 ppm) of blowdown (or water loss) from the system.

For Auxiliary Water/Service Water and Waste Water Systems

This product aids in the control of mollusca, barnacles, hydrozoa, bryozoa, odor-forming bacteria, slime-forming bacteria, fungi, and algae in auxiliary water systems such as fire protection systems and pump or screen bays, waste water and waste material disposal, holding or recovery systems such as storage tanks, storage piles, associated piping, settling ponds or lagoons, transport spillways or canals and disposal wells.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 1.6 to 5 lbs per 1000 gallons/2 to 6 kg/m³ (200 to 600 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When control is evident, add this product at the rate of 0.8 to 4 lbs per 1000 gallons/1 to 4.8 kg/m³ (100 to 480 ppm) of water in the system every 3 days or as needed to maintain control.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add this product at the rate of 1.6 to 5 lbs per 1000 gallons/2 to 6 kg/m³ (200 to 600 ppm) of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: Continuously feed this product to maintain a dosage of 0.8 to 4 lbs per 1000 gallons/1 to 4.8 kg/m³ (100 to 480 ppm) of blowdown (or water loss) from the system.

This product may be added to the system water or by spraying on to a waste pile as needed. The frequency of feed or spray and the duration of treatment will depend upon the severity of the contamination. Additives to water systems should be made during the pumping operation and as close to the pump as possible to ensure adequate mixing.

INTERMITTENT OR SLUG METHOD

When treatment is required, add this product at the rate of 1.6 to 5 lbs per 1000 gallons/2 to 6 kg/m³ (200 to 600 ppm) of water already in the system, or being added to the system for 4 to 8 hours, 1 to 4 times per week or as needed to achieve the desired level of control. When control is obtained, add this product at the rate of 0.8 to 4 lbs per 1000 gallons/1 to 4.8 kg/m³ (100 to 480 ppm) of water in the system.

Metal working fluids. Hydraulic fluids. Hydrocarbon based fuel oils and Oil and/or water based industrial formulations

For control of bacteria, fungi and algae which cause fouling in metal working, hydraulic fluids, hydrocarbon based fuel oils and oil and/or water based industrial formulations, add this product to the fluid insuring uniform mixing at the rate of 2 to 10 lbs per 1000 gallons/2.4 to 12 kg/m³ or 27.8 to 139 fluid ounces/822 to 4110 ml (240 to 1200 ppm) of fluid in the system depending upon the severity of the contamination. BADLY FOULED SYSTEMS must be cleaned before treatment is begun.

Ę.

INTERMITTENT OR SLUG METHOD

INITIAL DOSE: When the system is noticeably fouled, apply this product at the rate of 4 to 10 lbs per 1000 gallons/4.8 to 12 kg/m³ or 55.6 to 139 fluid ounces/1644 to 4110 ml (480 to 1200 ppm) of fluid in the system. Repeat every 4 weeks or until control is achieved.

9/9

SUBSEQUENT DOSE: When microbial control is evident, add this product at the rate of 2 to 5 lbs per 1000 gallons/2.4 to 6 kg/m³ or 27.8 to 69.5 fluid ounces/822 to 2055 ml (240 to 600 ppm) of fluid in the system every 4 weeks or as needed to maintain control.

> WICH CHANNESS STS In EPA Latter David

they be an in a second Stationals, and show allow down 64 oppignated the the menutarity

1996

o here any

THE COMPOSITION AND USE OF THIS PRODUCT IS COVERED BY U.S. PATENT 4,732,905.

USE OF THIS PRODUCT WITH CERTAIN OXIDIZING BIOCIDES IS COVERED BY U.S. PATENT 4,855,296 AND PENDING PATENTS. **JSC 4/95 REV-5**

MAY 31