PM 50 63950-9 pg 1/6

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs

Biopesticides and Pollution Prevention Division (7501W)
401 M Street, S.W.
Washington, DC 20460

EPA Reg. Number: 63950-9

Date of Issuance: DEC 11 1996

Term of Issuance: Unconditional

NOTICE OF PESTICIDE:

__x__ Registration
_____ Reregistration
(under FIFRA, as amended)

Name of Pesticide Product:

Blue Circle Liquid
Biological Nematicide

Name and Address of Registrant (include ZIP Code): Stine Microbial Products, 2225 Laredo Trail, Adel IA 50003

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention 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 unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Add the phrase "EPA Reg. No. 63950-9" to the label prior to releasing the product for shipment.

2. Add the term "LIQUID" to the end of the product name, "BLUE CIRCLE", under the heading "TURFGRASS APPLICATIONS."

3. Submit five copies of the final printed labeling before releasing the product for shipment.

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

Unconditional registration does not eliminate the need for continual reassessment of a pesticide. If EPA determines, at any time, that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official: Janet L. Andersen

Date: DEC 11 1996

EPA Form 8570-6

BLUE CIRCLE®

LIQUID

BIOLOGICAL NEMATICIDE

Active Ingredient:

Burkholderia (Pseudomonas) cepacia type Wisconsin Isolate M36 ..... 2.0% (by weight)

Inert Ingredients: ..... 98.0% (by weight)

Total ..... 100.0% (by weight)

Contains at least 8.8×10^8 viable cells of Isolate M36/fluid oz. of product

Expiration Date:

KEEP OUT OF REACH OF CHILDREN
CAUTION

DIRECTIONS FOR USE

See additional Labeling Booklet

Do not apply this product 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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to additional labeling under "Agricultural Use Requirements" in the Directions for Use section in the Labeling Booklet for information about this standard.

Manufactured for:

Stine Microbial Products
2225 Laredo Trail
Adel, IA 50003

LOT NUMBER:

NET CONTENTS: 1 GAL. (3.785 liters)

EPA Reg. No.: 63950-

EPA Est. No.: 7173-WI-003

U.S. Patent: 5,264,210

PERISHABLE
KEEP FROM HEAT AND SUN

ACCEPTED
with COMMENTS
In EPA Letter Dated

DEC 11 1998

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 63950-9

BLUE CIRCLE® LIQUID

BIOLOGICAL NEMATICIDE

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LABELING BOOKLET

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

- Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.
- Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.
- PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

1) Coveralls 2) Waterproof gloves 3) Shoes plus socks

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals: **CAUTION**

Personal Protective Equipment (PPE) - Applicators and other handlers must wear.....1) long-sleeved shirt and long pants, 2) shoes plus socks and 3) protective eyewear.

Follow manufacturers instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean highwater mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL

Pesticide Storage: **BLUE CIRCLE LIQUID** should be stored in the original container until used. Container should be kept in a cool place at a temperature between 35°F-75°F. This product contains live rhizobacteria. AVOID heat and sun.

Pesticide Disposal: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Do not re-use empty container. Rinse thoroughly with a 10% solution of household bleach for 15 minutes. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

ACCEPTED
with COMMENTS
In EPA Letter Dated

DEC 11 1996

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.
63950-9

Application Site: Plant roots or seedling roots.

Target Pests: Disease caused by lesion *(Pratylenchus)*, spiral *(Helicotylenchus)*, lance *(Hoplolaimus)* and sting *(Belonolaimus)* nematodes.

Target Crops: Vegetables, fruits, nuts, vine crops, herbs, spices, ornamentals, greenhouse crops, turfgrasses, flowers, bulbs and field crops.

Dosage Rates:

For chemigation - 1 pint (0.5 liter) per acre
For seedling transplant drenches - 1 pint (0.5 liter) per 100 gallons (400 liters) of water
For turfgrasses - 2 to 4 pints (1 to 2 liters) per acre

Frequency of Application: Early root colonization by BLUE CIRCLE LIQUID is important. Initial applications at seeding or transplant followed by 2 to 6 subsequent applications at 4 week intervals (except for turfgrasses) will provide the best results. Due to root mass concentration in turfgrasses, apply at 2 week intervals. Irrigate immediately after turfgrass application.

Types of Application:

CHEMIGATION - Apply this product only through drip (trickle), furrow or border irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

For Chemigation Systems Connected to Public Water Systems -

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

For Flood (Basin), Furrow and Border Chemigation -

1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements —

a) The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

b) The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

c) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

d) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

e) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

f) Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

For Drip (Trickle) Chemigation -

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

2. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

If a pesticide supply tank is used, agitation in the tank is recommended. For this application, **BLUE CIRCLE LIQUID** should be diluted just prior to application at the rate of 1 pint (0.5 liter) in 100 gallons (400 liters) of water.

DRIP IRRIGATION - Inject undiluted **BLUE CIRCLE LIQUID** at the rate of 1 pint (0.5 liter) per acre or the supply tank mixture at the rate of 100 gallons (400 liters) per acre during the first half of the irrigation cycle.

BANDED INTO SEED/SEEDLING BED AT PLANTING - Mix 1 pint (0.5 liter) undiluted **BLUE CIRCLE LIQUID** in 100 gallons (400 liters) of water. Spray (maximum 7 inch band) or dribble at a rate of 50 to 100 gallons (200 to 400 liters) per acre into seed furrow.

SEEDLING TRANSPLANT DRENCH - Inject undiluted **BLUE CIRCLE LIQUID** into the drench water at the rate of 1 pint (0.5 liter) per 100 gallons (400 liters) of water, or prepare drench water by mixing 1 pint (0.5 liter) **BLUE CIRCLE LIQUID** per 100 gallons (400 liters) of water. Drench root ball thoroughly just after seeding to just prior to transplanting and/or just after transplanting.

LIQUID

TURFGRASS APPLICATIONS - Apply 2 to 4 pints (1 to 2 liters) BLUE CIRCLE per acre with a conventional sprayer, using a minimum of 50 gallons (200 liters) of water per acre. Water in immediately after application with a minimum of 1/10 inch of water. Target pests include diseases caused by lesion (*Pratylenchus*), spiral (*Helicotylenchus*), lance (*Hoplolaimus*) and sting (*Belonolaimus*) nematodes. The use of this product is intended for commercial turf applications and does not include home lawns.

WARRANTIES AND LIABILITIES: The manufacturer guaranties that the contents and total amount are as stated within lawful limits. Due to conditions beyond the control of Stine Microbial Products, such as the time, place and rate of application; weather conditions; dispensing equipment; storage facilities; etc.; the warranty shall be limited to refund of purchase price or replacement product. Such is expressly agreed to by the Buyer as the exclusive sole remedy. In no event shall Stine Microbial Products be liable for indirect or consequential damages. The manufacturer warrants that this product consists of the specified ingredients listed on the label and is reasonably fit for the purpose stated when used in accordance with the directions under normal conditions of use. No one other than an officer of Stine Microbial Products is authorized to make any other warranty or guarantee regarding this product.

Manufactured for:

Stine Microbial Products
2225 Laredo Trail
Adel, IA 50003

BLUE CIRCLE® is a registered trademark of Stine Microbial Products
EPA Registration Number: 63950-
EPA Establishment Number: 7173-WI-003
U.S. Patent 5,264,210

NET CONTENTS: 1 GAL. (3.785 liters)