PM 90 63950-3 1 of 6

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_x_ Registration
____ Reregistration

(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
63950-3	JUL 21 1995

Term of Issuance: Conditional

Name of Pesticide Product:
Blue Circle™ Liquid

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 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. 63950-3".

   b. Revise the first word of the boxed heading to "Agricultural" from "Agriculture".

   c. Revise the Company designation to read "Manufactured by: Stine Microbial Products, 2225 Laredo Trail, Adel IA, 50003"

   d. Revise the nematicide and fungicide labeling booklets' drip irrigation application rates to match the master booklet by including metric equivalents.

Signature of Approving Official.	Date:
JRA	7/21/95

EPA Form 8570-6

1 of 6

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

4. You must assure that the active ingredient continues to meet the criteria for the "Wisconsin biotype". The broad designation "Wisconsin biotype" can include a number of isolates of *Burkholderia (Pseudomonas) cepacia*. Each isolate comprising the active microbial ingredient must meet criteria for the biotype. The nutitional/biochemical and antibiotic susceptibility patterns must be the same as the previously registered (63950-1) isolate, M36. Flagellar antigen serotype analyses, ribotyping analyses and patterns of cepacian production/sensitivity must confirm that each isolate is distinct from clinical isolates of this organism and each batch of the product must be free of significant human pathogens. Additionally, for any change in isolates comprising the active ingredient, an onion pathogenicity test must be conducted to confirm lack of pathogenicity since some strains of *Burkholderia (Pseudomonas) cepacia* have been reported to be pathogenic to onions.

Therefore, within six months from the date of this letter, you must submit acceptable data to demonstrate that the isolates J82 and M54 meet the above criteria, established for the originally registered isolate, M36. That data must include information detailing the standard operating procedures and methods of identification. Acceptable onion pathogenicity tests, as described above, must be submitted for isolates J82 and M54 within six months of the date of this letter. Submit also within six months the culture collection source and reference numbers for deposited isolates M36, J82 and M54.

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,

Janet L. Andersen

Janet L. Andersen, Acting Director
Biopesticides and Pollution
Prevention Division (7501W)

Enclosures

BLUE CIRCLE™ LIQUID

MASTER LABEL

(Has both fungicidal and nematicidal uses)

US Patents 4,798,723 and 5,264,210

Active Ingredient:

Burkholderia (Pseudomonas) cepacia type Wisconsin containing at least 8.8×10^9 viable cells/fl. oz. ..... 0.6% (by wt)

Inert Ingredients: ..... 99.4% (by wt)

Total: ..... 100.0% (by wt)

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.

AGRICULTURE 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: CCT Corporation
2776 Loker Avenue West
Carlsbad, CA 92008

EPA Establishment Number: 7173-WI-003
EPA Registration Number: 63950-X

NET CONTENTS: X XXXXXX
NOT FOR SALE OR USE AFTER: XX/XX/XX

ACCEPTED
with COMMENTS
in EPA Letter Dated

JUL 21 1995

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 63950-3

BLUE CIRCLE™ LIQUID MASTER LABEL 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.

AGRICULTURE 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 12 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:

Coveralls Waterproof gloves Shoes plus socks

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS (& DOMESTIC ANIMALS)

CAUTION

Personal Protective Equipment (PPE): Applicators and other handlers must wear: A. Long-sleeved shirt and long pants. B. Shoes plus socks. C. Protective eyewear. Follow manufactures 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 intertidal areas below the mean high water mark Do not contaminate water by cleaning of equipment or disposal of equipment wash-waters.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: BLUE CIRCLE LIQUID should be stored in original container until used. Container should be stored in a cool place between 35-75°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 reuse 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.

APPLICATION SITE: Plant roots or seedling roots.

TARGET PESTS: Fungi that cause damping-off disease (*Rhizoctonia, Pythium* and *Fusarium*) and 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 liters) per acre
	For seedling transplant drenches:	1 pint per 100 gallons water (1tsp/gal)
	For turfgrasses:	2 to 4 pints per acre

FREQUENCY OF APPLICATION: Early root colonization by BLUE CIRCLE LIQUID is important. Initial applications at seeding or transplant followed by two to six subsequent applications at four 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.

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 nonuniform 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 in 100 gallons water (0.5 liter in 400 liters 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 at the beginning of the irrigation.

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

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