



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505C)
401 M Street, S.W.
Washington, D.C. 20460

EPA Reg. Number: 1812-384

Date of Issuance: MAR 15 1990

Term of Issuance: Conditional

Name of Pesticide Product: GX-446

NOTICE OF PESTICIDE:
[X] Registration; [] Reregistration
(under FIFRA, as amended)

Name and Address of Registrant (Include Zip Code)

Griffin Corporation
P.O. Box 1847
Valdosta, GA 31603-1847

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 sec. 4.
2. Revise the EPA Registration Number to read, "EPA Reg. No. 1812-384".
3. Replace the proposed language after starting with "Drink one or two --- throat with fingers" in IF SWALLOWED STATEMENT under STATEMENT OF PRACTICAL TREATMENT with the following: Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. This language is preferred for Category I eye irritation and Category II or II acute oral toxicity.
4. Add the following after "Avoid breathing dust" under the PRECAUTIONARY STATEMENTS: Wear goggles or face shield and protective clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. These statements are required for Category I Eye Irritation.

Continued...

297

Continued from Page 1.

5. Delete the following two sentences under DIRECTIONS FOR USE: "Do not apply this product -- responsible for pesticide regulation". These are field use directions and are inappropriate for the proposed use pattern.
6. Delete the following under STORAGE AND DISPOSAL: "When products is to be used as a trace mineral -- feed ingredients". This language is inappropriate for a pesticide product.
7. Delete the second paragraph, where the product is added to drainage pipe resin under PLASTIC FILM AND CONTAINERS. The use of GX-446 in drainage pipe could result in increased levels of copper in water, which may have adverse effects on the environment.
8. Change the heading, "Styrofoam Containers" to Styrofoam Plant Containers or some other appropriate heading to indicate that GX-446 incorporated containers are intended only for production of plants.
9. Submit one (1) copy of your final printed labeling before you release the product for shipment.

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

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.

Signature of Approving Official:

Theresa O. Stone

Date:

03/15/96

3 of 7

September 27, 1995

**ACCEPTED
with COMMENTS
In EPA Letter Dated
MAR 15 1996**

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
1812-384**

**GX-446
ROOT CONTROL PRODUCT
MANUFACTURING FACILITY USE ONLY**

ACTIVE INGREDIENTS:

Basic Copper Carbonate.....	96.0%
INERT INGREDIENTS	4.0%
TOTAL	100.0%

(Metallic copper equivalent 55%)

**KEEP OUT OF REACH OF CHILDREN
DANGER - PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

- IF IN EYES:** Flush eyes with a gentle stream of water for 15 minutes. Get medical attention.
- IF SWALLOWED:** Call a physician or poison control center. Drink one or two glasses of water and induce vomiting by touching the back of throat with fingers.
- IF INHALED:** Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.
- IF ON SKIN:** Wash with plenty of soap and water.
- NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate gastric lavage.

See side/back for additional "Precautionary Statements."

**GRIFFIN CORPORATION
VALDOSTA, GA 31601**

EPA REG. NO. 1312-
EPA EST. NO. 45450-AZ-1

NET CONTENTS: _____ Lbs.

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)
DANGER**

Corrosive. Causes irreversible eye damage. Harmful if swallowed, absorbed through skin, or inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing dust. Repeated or prolonged skin contact may cause allergic reactions in some individuals.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. 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.

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.

STORAGE AND DISPOSAL

STORAGE: Store product in a secure dry place and keep product dry. When opening, closing or handling open packages, or pouring product, wear goggles to keep dust out of eyes. Spilled product should be swept up, used if clean, or disposed of on site. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Store product only in original container. During storage, store pesticides separately to prevent cross-contamination of other pesticides, fertilizers, food or feed. When product is to be used as a trace mineral in mixing animal feeds, it may be stored with other trace minerals or feed ingredients.

DISPOSAL: Do not contaminate water, food, or feed by storage or disposal of this product. Do not reuse container. Completely empty bag; then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities by burning. If burned, stay out of smoke.

APPLICATION DIRECTIONS

NOTE: This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces.

NOTE: It must be determined in the selection process if proper application and molding equipment are available and if the waste associated with their use can be properly handled. Materials used in the construction of application and molding equipment are also important factors as this product may be reactive with soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc. Therefore it is necessary when working with equipment containing these materials that they are thoroughly flushed with clean water after each day's use.

NOTE: The actual rate used is dependent on the length of activity desired. Use the higher rate when greater length of effect is required.

FIBER CONTAINERS

The addition of GX-446 to fiber pot pulp prior to molding will extend container life and control spiral root growth of container-grown plants. Add GX-446 to paper pulp mix at the rate of 1-2% of dry fiber weight. GX-446 should be mixed evenly throughout the pulp before molding. Drop a two pound beater bag of GX-446 into the mixing vat while actively blending the paper for each 100 - 200 pounds of dry paper (beater bags are available in 10 pound bags for larger vats).

PLASTIC FILM AND CONTAINERS

The addition of GX-446 to plastic resin prior to molding or sheeting will control spiral root growth of container-grown plants. Add GX-446 to plastic resin mix at the rate of 2-5% of dry resin weight (example: 2-5 lbs. of GX-446 mixed with 100 lbs. of dry resin). GX-446 should be mixed evenly throughout the plastic resin before molding or sheeting.

The addition of GX-446 to plastic resin prior to molding or sheeting will also prevent the intrusion of plant roots into plastic drainage pipe. Add GX-446 to plastic resin mix at the rate of 5-10% of dry resin weight (example: 5-10 lbs. of GX-446 mixed with 100 lbs. of dry resin). Again, GX-446 should be mixed evenly throughout the plastic resin before molding or sheeting.

STYROFOAM CONTAINERS

The addition of GX-446 to styrofoam beads prior to molding will extend container life by controlling root penetration. Add GX-446 to styrofoam beads at the rate of 0.5-2% of dry styrofoam bead weight (example: 0.5-2 lbs. of GX-446 mixed with 100 lbs. of styrofoam beads). When the styrofoam beads are thoroughly coated with GX-446, the mixture can be molded into containers.

POT AND TRAY INSERTS FOR NURSERY PLANT PRODUCTION

GX-446 can be mixed with latex carriers (40-60%) cleared for use on growing crops under 40 CFR §180.1001 to produce various pot and tray inserts. These mixtures should produce suspensions of 26% (by weight) GX-446. Inserts made of paper, cardboard, plastic, foil, woven and non-woven fabric or other suitable material, that has been evenly sprayed or coated with GX-446 suspensions, on one or both sides, can be placed in a container to cover the inner surface. Insert material may be coated with GX-446 suspensions by any appropriate industrial coating machinery, such as roll coating, printing press, doctors blade, or other equipment that will provide an even coating on the material. Inserts must cover the inner surface without tears holes or gaps in coverage and should be trimmed around the top of the pot with scissors, if needed. Dispose of trimmings in a sanitary landfill, or by burning, or if allowed by state and local authorities, wrap trimmings in newspaper and place in trash collection. If burned, stay out of smoke.

Coated rigid plastics can also be molded into various container shapes and sizes by vacuum-forming.

LANDSCAPE, INDUSTRIAL USE FABRICS

GX-446 can be mixed with latex carriers (40-60%) cleared for use on growing crops under 40 CFR §180.1001 to coat woven and non-woven fabrics. These mixtures should produce suspensions of 26% (by weight) GX-446. The coatings, when applied at the manufacturers facility, allow the fabric to be used for covering greenhouse benches/floors, tray/pot bottoms, nursery, landscape, industrial, and garden matting (under mulches and pavements) to extend fabric life and prevent root penetration of the barrier from both below and above the fabric. The fabric can also be used as an underground pipe wrap to prevent root from penetrating the pipe. GX-446 suspensions can be applied to fabric by dipping, spraying or coating with any appropriate industrial coating machinery, such as roll coating, printing press, doctors blade, or other equipment that will provide an even coating on the material. Fabric must be evenly coated with GX-446 suspensions on one or both sides.

PLANT RESPONSE

GX-446 has been extensively researched; however, testing has not been conducted on all species or cultivars, or under all growing conditions. In some instances, performance characteristics may vary. For a complete listing of tested plant species contact the Griffin Corporation Technical Services Group at (800) 237-1854.

WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.