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612-8

Jacket 197

FEB 25 1993

Mr. W. F. Millar
Unocal Agriproducts
3960 Industrial Blvd. Suite 600-B
West Sacramento, CA 95691

Dear Mr. Millar:

Subject: Add Use on Potatoes
Propel Plant Growth Regulator ✓
EPA Registration No. 612-8
Your Submission Dated January 28, 1993

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/-reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.

2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

a. In the potato directions for use specify:

Use sufficient spray volume....

b. After surfactant specify:

Cleared for application to growing crops.

c. Delete the section on tank mixing in the potato directions for use. The directions are too broad. You must specify what you intend this product to be mixed with. According to PR Notice 82-1, the Tank Mix directions must include statements similar to the following:

This product can be mixed with _____ (chemical name, including percentage of active ingredient and type of formulation, or specific product name, or both) for use on _____ (Crops/sites) in accordance with the more (most) restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

3. Submit one (1) copy of your final printed labeling before you release 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 bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,

Cynthia Giles-Parker
Product Manager (22)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

1/28/93

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PROPEL

Plant Growth Regulator

ACCEPTED
with COMMENTS
In EPA Letter Dated:

FEB 25 1993

ACTIVE INGREDIENT:

2-hydroxypropanoic acid* 80%
inert ingredients 20%

TOTAL 100%

*Contains 8 lbs. of active ingredient per gallon

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

612-8

KEEP OUT OF REACH OF CHILDREN

DANGER

SEE ADDITIONAL PRECAUTIONS ON THE SIDE PANEL

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush with plenty of water. Call a physician.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED: Drink promptly a large quantity of milk, egg white, gelatin solution, or if these are not available, large quantities of water. Avoid alcohol. **NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

PELIGRO!

AL USUARIO: Si usted no lee ingles, no usa este producto hasta que la etiqueta le haya sido explicad ampliamente.

EPA Reg. No. 612-8

EPA Est. Nos. 48498-CA-01 and 1202-WA-2

Manufactured for:

Unocal
Agriproducts
Unocal Chemicals & Minerals Division
1201 W. 5th Street
Los Angeles, CA 90017

Net Contents: _____ Gallons

Patent Pending

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER

**MAY CAUSE SEVERE BURNS
HARMFUL OR FATAL IF SWALLOWED**

DANGER: Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear goggles, face shield, or safety glasses. Wear protective clothing and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

DO NOT GET IN EYES: Face shield or goggles **MUST** be worn.

DO NOT GET ON SKIN: Wear suitable protective clothing, such as synthetic rubber or plastic apron, gloves, pants, and boots. Wash thoroughly after handling. Shower at the end of the working day. Do not wear contaminated clothing.

DO NOT TASTE OR SWALLOW: Do not use the mouth to siphon from containers or blow clogged lines. Wash thoroughly after handling.

AVOID BREATHING VAPORS OR SPRAY MIST: Use with adequate ventilation. Do not work in enclosed area or clean up large spills without NIOSH-approved respiratory protection. Keep container closed.

ENVIRONMENTAL HAZARDS

Do not apply directly to water to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from areas treated. Do not apply where runoff is likely to occur. Do not contaminate water when disposing of equipment wash waters. Apply this product only as specified on the label.

RE-ENTRY STATEMENT

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until sprays have dried (or, if appropriate, dusts have settled).

Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your state Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with PROPEL. Oral warnings must be given which inform workers of areas or fields that may not be entered without specific protective clothing, as described under PRECAUTIONARY STATEMENTS, until spray has dried. Also, oral warnings must be given which inform workers of appropriate actions to take in case of accidental exposure, as described under STATEMENT OF PRACTICAL TREATMENT. When oral warnings are given, warnings shall be in a language customarily understood by workers. Oral warnings shall be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "Danger. Area treated with PROPEL on (date of application). Do not enter without appropriate protective clothing, as described under PRECAUTIONARY STATEMENTS, until spray has dried. In case of accidental exposure, follow directions under STATEMENT OF PRACTICAL TREATMENT."

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CHEMIGATION

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM

STORAGE AND DISPOSAL

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

Storage: Do not store at temperatures above 140°F. Do not store mixed material.

Pesticide Disposal: Pesticide wastes are acutely hazardous. 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 Environmental Control Agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

Container Disposal: Triple rinse (or equivalent) all containers and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

GENERAL USE INSTRUCTIONS

Before using this material, read conditions of sale.

Almonds. To increase nut set, apply two pints/acre immediately following bloom (early nut set) using sufficient spray volume for complete coverage (usually 100 to 300 gallons/acre).

Apples. To promote fruit set and increase solids, apply 2 to 4 pints/acre during full king bloom. To enhance the rate of ripening, apply 1 to 2 pints/acre 30 to 45 days prior to normal harvest date. Apply higher labeled rate where optimum growing conditions and maximum growth is taking place. If a wetting agent is used, its use rate shall not exceed four ounces per 100 gallons of spray volume on maturing fruit. Use sufficient spray volume for complete coverage of the trees (usually 200 to 300 gallons/acre).

Beans (Green and Dry). To increase pod set, apply 1 to 2 pints/acre at full bloom using sufficient spray volume for complete coverage (usually 20 to 60 gallons/acre by ground or 10 gallons/acre by air).

Broccoli, Cabbage, Cauliflower. To increase yield and hasten maturity, apply 1 to 2 pints/acre one to three weeks after thinning or transplanting. Apply higher labeled rate where optimum growing conditions and maximum growth is taking place. Use sufficient spray volume for complete coverage (usually 30 to 60 gallons/acre by ground or 10 gallons/acre by air).

Cherries. To hasten ripening, and increase fruit sugar and average fruit weight, apply 1 pint/acre at jacket split or three to four weeks prior to the anticipated harvest date using sufficient spray volume for complete coverage (usually 200 to 300 gallons/acre).

Citrus. To increase fruit set, apply 2 to 4 pints/acre at petal fall, or shortly thereafter, no less than thirty days before natural thinning, using sufficient spray volume for complete coverage (usually 300 to 400 gallons/acre by ground or 20 gallons/acre by air). Apply higher labeled rate where optimum growing conditions and maximum growth is taking place.

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Corn (Sweet and Field). To increase yield, apply 8 ounces/acre at the 2 to 4-leaf stage, using sufficient spray volume for complete coverage (usually 20 to 30 gallons/acre by ground or 10 gallons/acre by air). A high quality, agriculturally-approved, nonionic surfactant should be included at a rate of 2 pints/100 gallons of spray solution.

Cotton. To increase set (decrease square drop), apply 1 pint/acre to cotton at first bloom or 40 to 65 days after cotton emergence, using sufficient spray volume for complete coverage (usually 20 to 50 gallons/acre by ground or 5 gallons/acre by air). A high quality, agriculturally-approved, nonionic surfactant should be included at a rate of 2 pints per 100 gallons of spray solution.

Grapes. To increase berry weight, apply 2 pints/acre three to fourteen days post-shatter. To hasten maturity and increase fruit sugars, apply 1 to 2 pints/acre at the onset of ripening (veraison). Apply higher labeled rate where optimum growing conditions and maximum growth is taking place. Use sufficient spray volume for complete coverage (usually 50 to 150 gallons/acre).

Lettuce. To increase vegetative plant growth (yield), apply 1 to 2 pints/acre one to three weeks after thinning or transplanting, or 1 to 3 weeks prior to harvest, using sufficient spray volume for complete coverage (usually 20 to 60 gallons/acre by ground or 10 gallons/acre by air).

Peanuts. To increase yield, apply 8 ounces/acre to runner-type or Virginia-type peanuts when plants are in full bloom. This will generally be 40 to 50 days after peanut plants emerge (approximately 50 to 60 days after planting). Apply sufficient spray volume for complete coverage (usually 20 to 50 gallons/acre by ground or 5 gallons/acre by air). A high quality, agriculturally-approved, nonionic surfactant should be used at a rate of 2 pints per 100 gallons of spray solution.

Peppers (Green and Chile). To increase set, apply 1 to 2 pints/acre at full bloom using sufficient spray volume for complete coverage (usually 20 to 60 gallons/acre by ground or 10 gallons/acre by air).

Pineapple. To induce more rapid growth and root initiation, use in a planting material dip at a rate of 1000 to 2000 ppm solution (one gallon in 600 to 1200 gallons of water) to crowns and/or slips. Follow 30 days later by foliar application at 2 pints/acre using sufficient spray volume for complete plant coverage (usually 60 to 125 gallons/acre). To increase the level and rate of sugar formation, apply 2 pints/acre 30 to 45 days prior to scheduled harvest using sufficient spray volume for complete coverage (usually 60 to 125 gallons/acre). ✓

Potatoes. To increase yield and quality, apply one pint per acre, when the plants reach 15 to 20 inches in diameter (when the tubers are less than 3/4 inches in size). Use sufficient volume to ensure adequate coverage, which is 15-25 gallons per acre by ground equipment, and 10 gallons per acre by air application. Use a high quality non-ionic surfactant at a rate of 1-2 quarts per 100 gallons of spray solution (0.25-0.50% by volume). Propel is physically and chemically compatible with many products used on potatoes, and may be tank mixed provided that the certain precautions are observed. Avoid tank mixing with products that are not compatible with acidic materials. Always check tank mix for stability and phytotoxic potential, prior to making field applications. *check to application rows. Tank mix?*

Prunes. To hasten ripening and increase solids, apply 2 pints/acre immediately following bloom using sufficient spray volume for complete coverage of the trees (usually 200 to 300 gallons/acre by ground or 10 gallons/acre by air).

Strawberries. To increase the number of runners, apply 1 to 2 pints/acre thirty days after transplanting. Apply 2 pints/acre at mid-bloom to increase set and compress fruit maturity. Use sufficient spray volume for complete coverage (usually 30 to 60 gallons/acre by ground or 10 gallons/acre by air).

Sugarcane. To increase shoot initiation, rooting, and rate of growth, dip seed piece in 1000 to 2000 ppm solution (one gallon in 600 to 1200 gallons of water). Follow in thirty days with foliar application at 2 pints/acre using sufficient spray volume for complete coverage (usually 30 to 60 gallons/acre by ground or 10 gallons/acre by air). To maintain stalk growth (internode length) during winter, apply 2 pints/acre from mid-October through mid-November using sufficient spray volume for complete coverage. For seed cane: apply 2 pints/acre 30 to 90 days after transplanting or emergence using sufficient volume for complete coverage (usually 20 to 60 gallons/acre by ground or 10 gallons/acre by air).

Tomatoes (Cannery Varieties). To increase fruit set and/or promote earlier maturity (more red fruit) and enhance average fruit weight and soluble solids, apply 2 pints/acre at full bloom (maximum flowering). To enhance the crop maturation rate, apply 2 pints/acre fifteen days prior to the anticipated harvest date. Propel should be applied using sufficient spray volume for complete coverage (usually 30 to 60 gallons/acre by ground or 10 gallons/acre by air) at both timings.

Tomatoes (Freshmarket). To increase fruit set, apply 1 to 2 pints/acre between first and second open bloom (first and second cluster). To enhance ripening and crop maturation, apply 1 to 2 pints/acre 15 days prior to the anticipated harvest date. Propel should be applied using sufficient spray volume for complete coverage (usually 30 to 60 gallons/acre by ground or 10 gallons/acre by air) at both timings.

Tomatoes (Transplant). To improve transplant vigor, Propel may either be mixed with starter (transplant) solution or setting water at 1 pint/100 gallons, or may be sprayed on transplants at 1 pint/acre immediately after planting. Propel should be applied using sufficient volume for complete coverage (usually 30 to 60 gallons/acre by ground or 10 gallons/acre by air).

Walnuts. To increase nut set, apply 2 pints/acre immediately after bloom using sufficient spray volume for complete coverage (usually 100 to 300 gallons/acre).

CONDITIONS OF SALE

1. Unocal warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated when used in accordance with the use directions under normal conditions. Unocal neither makes, nor authorizes any agent or representative to make, any other warranty of FITNESS or of MERCHANTABILITY, guarantee or representation, express or implied, concerning this material.

2. Critical and unforeseeable factors beyond Unocal's control prevent it from eliminating all risks in connection with the use of this material. Such risks include, but are not limited to, damage to plants and crops to which the material is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the uses stated herein and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability resulting from handling, storage, and use of this material (except those assumed in (1) above). Unocal shall not be liable for incidental or consequential damages.

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