

5481-145

1/13/2000

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Mr. Jon C. Wood  
 Amvac Chemical Corporation  
 2110 Davie Ave.  
 Commerce, CA 90040

JAN 13 2000

Dear Mr. Wood:

Subject: Label Revision Amendment - Revised Directions For Use: Citrus Varieties/Tangelos To Include Other Citrus Hybrids  
 Alco Citrus Fix  
 EPA Registration No. 5481-145  
 Your Amendment Application Submission Dated  
 October 8, 1999

The labeling, referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a. Under the heading entitled "STATEMENT OF PRACTICAL TREATMENT," please revise the following oral, inhalation, dermal and ocular statement of practical treatment to read as the following:

"IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting."

OR

"IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available by administering syrup of ipecac. If person is unconscious, do not give anything by mouth and do not induce vomiting."

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

"IF IN EYES: Immediately flush eyes with plenty of water. See physician if irritation persists."

- b. Under the heading entitled "HAZARDS TO HUMANS AND DOMESTIC ANIMALS," revise the precautionary statements to read as the following:

CONCURRENCES

|           |              |  |  |  |  |  |  |  |
|-----------|--------------|--|--|--|--|--|--|--|
| SYMBOL *  | 7505C        |  |  |  |  |  |  |  |
| SURNAME * | MHoward      |  |  |  |  |  |  |  |
| DATE *    | Jan 13, 2000 |  |  |  |  |  |  |  |

"Causes moderate eye irritation. Harmful if swallowed, absorbed through skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling."

- c. Under the heading entitled "**ENVIRONMENTAL HAZARDS**," delete the first two sentences in the paragraph. Begin the paragraph with the following statement:

"This product is toxic to aquatic invertebrates. Vapors, spray drift or runoff may adversely affect aquatic invertebrates and nontarget plants...."

The statement, "This product may injure cotton, beans, peas, grapes, ornamentals, etc. (coarse sprays are less likely to drift)," should be reinstated under the heading entitled "**USE PRECAUTIONS**."

2. Please submit one (1) final printed copy of the referenced label, incorporating the above change, before releasing the product for shipment.

If you have any concerns or questions regarding this letter, please call Marcel Howard at (703)305-6784.

A stamped copy is enclosed for your records.

Sincerely yours,

Joanne I. Miller  
Product Manger (23)  
Herbicide Branch  
Registration Division (7505C)

Enclosure



# CITRUS FIX™

45% ISOPROPYL ESTER

3.36 lbs. 2,4-D acid equivalent per gallon

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**ACTIVE INGREDIENT:**

Isopropyl Ester of 2,4-Dichlorophenoxyacetic Acid\* ..... 45.0%

**INERT INGREDIENTS:** ..... 55.0%

Total 100.0%

\*2,4-Dichlorophenoxyacetic Acid Equivalent 38%

The State of California Department of Agriculture classifies this ester of 2,4-D as "Highly Volatile" and therefore does not permit its use as a herbicide in California.

## KEEP OUT OF REACH OF CHILDREN CAUTION

### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Do not induce vomiting. Call a physician or Poison Control Center immediately.

**IF INHALED:** Remove to fresh air. Administer artificial respiration if necessary. Contact a physician immediately.

**IF ON SKIN:** Wash affected areas with soap and water.

**IF IN EYES:** Immediately flush eyes with plenty of water. See a physician.

### PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals**

**CAUTION:** Avoid inhaling fumes or spray. Avoid contact with skin, eyes, or clothing. Harmful if swallowed.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category (G) on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:** long-sleeved shirt and long pants; chemical-resistant gloves such as Barrier Laminate or Viton; shoes plus socks and protective eyewear. Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical resistant apron in addition to the other required PPE. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

**Engineering Controls Statement:** When handlers use closed system, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) or agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### Users Safety Recommendations

**Users should:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EPA REG. NO. 5481-145

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

EPA REG. NO. 5481-CA-1

JAN 13 2000

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

5481-145

## ENVIRONMENTAL HAZARDS

Vapors, spray drift or runoff may adversely affect non-target plants. This product may injure cotton, beans, peas, grapes, ornamentals, etc. (coarse sprays are less likely to drift). 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 when disposing of equipment wash waters. Groundwater Contamination: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

### Physical or Chemical Hazards

Do not use, pour, spill or store near heat or open flame.

## 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. Do not apply this product through any type of irrigation system.

### 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 intervals. 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, chemical resistant gloves, such as Barrier Laminate or Viton, shoes plus socks and protective eyewear.

**ALCO CITRUS FIX may be used as a Plant Growth Regulator on Citrus in Florida. Refer to CITRUS FIX Florida label; EPA SLN No. FL 890040 for complete directions.**

## USE PRECAUTIONS

- **ALCO CITRUS FIX** is a plant growth regulator for use on citrus only. Do not use a herbicide!
- Do not use on citrus trees less than 6 years old.
- Do not apply during a flush of leaf growth.
- Do not apply within 7 days of harvest.
- Do not allow drift to susceptible plants, which include cotton, grapes, roses, beans, peas, alfalfa, lettuce, ornamentals and broadleaf plants.
- Do not use equipment that has been used to spray **ALCO CITRUS FIX** to spray 2,4-D sensitive plants. Always use caution in disposing of spray solutions as they can cause extreme injury or kill sensitive plants. (See Storage and Disposal section.)
- Before using spray equipment for any other purpose, thoroughly clean same with hot soap suds followed by soaking and washing with ammonia or baking soda.

## USE DIRECTIONS

The following "Use Directions" as well as the above "Use Precautions" are taken from data developed and published by the University of California Experiment Station, Riverside California. For additional Uses and Precautions of **ALCO CITRUS FIX** in California consult the UC IPM PEST MANAGEMENT GUIDELINES: Citrus-Plant Growth Regulator Section.

### Mixing Directions

Carefully measure and accurately add the required quantity of **ALCO CITRUS FIX** to the spray mixture. Add only during the agitation of the spray material.

## PRE-HARVEST FRUIT DROP CONTROL

Add the required amount of **ALCO CITRUS FIX** to give the required milliliters or fluid ounces per acre as shown in Table 1. Spray to give outside coverage. A minimum of 100 gallons per acre for mature trees is recommended.

| Citrus Variety                           | Geographic Location | Application Timing                                    | Application Rate |            | Suggested Harvest Time |
|--|---------------------|---|------------------|------------|------------------------|
|  |                     |   | ml/acre          | fl oz/acre |                        |
| Navel Oranges                            | Central/Southern CA | Sept - Nov.   | 75.0             | 2.5        | Post February          |
|  |                     | Dec. - Jan.   | 37.5             | 1.25       |                        |
|  |                     | Sept. - Nov.<br><i>Fall Whitewash (Hydrated Lime)</i> | 112.5            | 3.8        |                        |
| Valencia Oranges                         | Central/Southern CA | Fruit Size<br>1/2" dia. min.                          | 37.5             | 1.25       |                        |
| Grapefruit<br><i>(Summer Fruit Drop)</i> | Central/Southern CA | Fruit Size<br>3/4" dia. min.                          | 75.0             | 2.5        |                        |
| Grapefruit<br><i>(Winter Fruit Drop)</i> | Central/Southern CA | Oct. - Jan.   | 75.0             | 2.5        |                        |
|  |                     | <i>Fall Whitewash (Hydrated Lime)</i>                 | 112.5            | 3.8        |                        |
| Tangelos and other Citrus Hybrids        | Central/Southern CA | Sept - Nov.   | 75.0             | 2.5        |                        |
| Lemons                                   | Inland CA           | Oct. - Dec.   | 56.25            | 1.9        |                        |

### Use in Pesticide Oil Sprays to Counteract Leaf and Fruit Drop Caused by Oil Sprays

Use 2.2 ml of **ALCO CITRUS FIX** per gallon of spray oil. Use sufficient spray gallonage to insure good coverage.

### Increasing Fruit Size

Fruit sizing sprays require excellent coverage. A minimum of 500 gallons per acre for mature trees is recommended. Apply water spray as an outside coverage using the recommended milliliters or fluid ounces of **ALCO CITRUS FIX** shown in Table 2.

| Variety                  | Fruit Size at Time of Spraying (Inches in Diameter) | Milliliters Per Acre | Fluid Ounces Per Acre |
|--------------------------|---|----------------------|-----------------------|
| Navel & Valencia Oranges | 3/16 to 1/4 inch                                    | 56                   | 1.9                   |
|                          | 1/4 to 1/2 inch                                     | 75                   | 2.5                   |
|                          | 1/2 to 5/8 inch                                     | 94                   | 3.2                   |
|                          | 5/8 to 3/4 inch                                     | 112.5                | 3.8                   |
| Grapefruit               | 1/4 to 3/8 inch                                     | 56                   | 1.9                   |
|                          | 3/8 to 5/8 inch                                     | 75                   | 2.5                   |
|                          | 5/8 to 3/4 inch                                     | 94                   | 3.2                   |
|                          | 3/4 to 1 inch                                       | 112.5                | 3.8                   |

## DIRECTIONS FOR PACKING HOUSE USE

1. To keep buttons alive and healthy, and therefore prevent Alternaria rot.
2. In lemon packing houses where a water-wax emulsion is applied to the fruit prior to storage, the growth regulator should be added to this wax emulsion.
3. If a water-wax emulsion is not used, then a separate treatment must be arranged to follow the final fresh water rinse of the fruit. Such a treatment could be designed so as to flush a growth regulator solution over the fruit and re-circulate the surplus or apply a very fine spray of growth regulator to the fruit and not re-circulate the small surplus. The amount of growth regulator adhering to the fruit would be about the same in either case, so no change in concentration would be necessary.
4. A 500 ppm concentration of 2,4-D is recommended. This is obtained by adding 1-5/8 fluid ounces (48 ml) of **ALCO CITRUS FIX** to each 10 gallons of water.

## ADDITIONAL PRECAUTIONS

1. Under certain circumstances which seem to be related to the use of chromate's in the airwasher, 2,4-D is not compatible with nitrogen trichloride, "Decco", as used for control of decay. Packing houses using Decco should avoid using a growth regulator in the wax emulsion, or use it with extreme caution. Rind injury appearing as reddish or brownish discoloration has been greatly intensified by these growth regulators in some packing houses using Decco.
2. When a minimum storage period is desired it would be a disadvantage to use 2,4-D because of the delay in changing to a yellow color. Also the percentages of juice may not increase as rapidly.
3. Late summer use of 2,4-D in the packing house may necessitate more careful culling for weak fruit (blossom-end decline) because of the retention of green buttons in such fruit.

**IMPORTANT: Any equipment used in spraying any product containing 2,4-D should not be used to spray 2,4-D sensitive plants. In disposing of solutions of 2,4-D, it should be borne in mind that they can cause extreme injury or death or sensitive plants.**

## STORAGE AND DISPOSAL

**STORAGE:** This product may crystallize if stored at cold temperatures. If crystallization occurs, call AMVAC for instructions before using. Store product in original container in a secure, dry and temperate area. Keep container closed when not in use. Do not store near food, feed, fertilizers, seeds, insecticides or fungicides. Do not store 30 gallon drums over two high. Do not use or store around the home. Avoid contact with water. In case of spill or leak, soak up with sand, earth, or synthetic absorbent (do not use alkaline absorbents) and dispose of wastes in compliance with local State and Federal regulations.

**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide; spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. 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). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned stay out of smoke.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants (a) that this product conform to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

**THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.**

**BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT, SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.**

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

|  |                |
|--|----------------|
| For the following emergencies, phone 24 hours a day: |                |
| Transportation: CHEMTREC .....                       | 1-800-424-9300 |
| Other: AMVAC .....                                   | 1-323-264-3910 |



4100 East Washington Boulevard, Los Angeles, CA 90023