

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

DEC 1 2003

Darryl E. Brock  
Amvac Chemical Corporation  
4695 MacArthur Court, Suite 1250  
Newport Beach, California 92660

Subject: K-Salt™ Fruit Fix™ 800  
EPA Registration No. 5481-413  
Your label amendment application dated August 1, 2003

Dear Mr. Brock,

The amended 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 following changes to the label:
  - a. In the third sentence in the first paragraph in the "DIRECTIONS FOR USE" section, change "...protected persons maybe in the area..." to "...protected persons may be in the area...".
  - b. The subheading that immediately follows the "CONTROLS PRE-HARVEST DROP" section heading reads "Apples and". Remove the "and" if it is present in error.
  - c. In the second sentence in the "CONTAINER DISPOSAL:" subsection of the "STORAGE AND DISPOSAL" section, change "...in a sanitary landfill, or incineration, or..." to "...in a sanitary landfill, or by incineration, or...".
2. Submit one copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration may 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.

If you have any questions about this letter, please contact John Bazuin at (703)305-7381.

Sincerely yours.

(S)  
Cynthia Giles-Parker  
Product Manager (22)  
Fungicide Branch  
Registration Division (7505C)

Attachment: Label stamped "ACCEPTED with COMMENTS"

# K-SALT™ FRUIT FIX™ 800

**A HORMONE TYPE PRODUCT FOR THINNING APPLES, CITRUS, OLIVES,  
PEARS AND FOR CONTROL OF PRE-HARVEST DROP OF APPLES AND PEARS**

**ACTIVE INGREDIENT:**

1-Naphthaleneacetic Acid, Potassium Salt ..... 24.2%

**INERT INGREDIENTS:**..... 75.8%

**TOTAL:** ..... 100.0%

Equivalent to 20.2% 1-Naphthaleneacetic Acid or 800 grams (1.76 lbs.) per gallon.

## KEEP OUT OF REACH OF CHILDREN WARNING – AVISO

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.)

<b>FIRST AID</b>	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have a person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>EMERGENCY INFORMATION</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. <b>FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:</b> Transportation: CHEMTREC..... 1-800-424-9300 Other: AMVAC..... 1-323-264-3910	

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

EPA Reg. No. 5481-413  
EPA Est. No. 5481-CA-1

Net Weight:  
As Marked on Container

**ACCEPTED  
with COMMENTS  
in EPA Letter Dated:**

DEC 1 2003

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
this product has been found to  
comply with the tolerance side  
requirements of the Act.



4100 E. Washington Blvd.  
Los Angeles, CA 90023 U.S.A  
1-323-264-3910 • www.amvac-chemical.com

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**WARNING:** Causes eye irritation. Do not get in eyes. Harmful if swallowed. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER 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.

**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 contaminate water by disposal of equipment washwaters. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when conditions favor drift from treated areas. Do not use in a greenhouse.

**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 persons maybe in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

K-SALT FRUIT FIX 800 thins the fruit of apples, pears and certain varieties of citrus and olives to provide an adequate return bloom the following season. K-SALT FRUIT FIX 800 controls pre-harvest drop of apples and pears leading to a larger harvest and a reduction of losses from windfall and knockdown. Do not apply this product through any type of irrigation system.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with this 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 24 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 made of any waterproof material
- Shoes plus socks
- Protective eyewear

K-SALT FRUIT FIX 800 is an auxin-type hormone product for use in fruit production. The response of fruit trees to application may be varied in different years. In reviewing the results, the grower needs to consider the wide variation in varieties, climatic factors, dosage, tree vigor, and fruit set before choosing the desired rate and correct timing for application.

Apply in sufficient water for good even coverage with your specific equipment. Application can be made in as little as 50 gallons of water per acre and up to 400 gallons of water per acre and is highly dependent on type of equipment used and density of the foliage. Uniform and even distribution of the spray is imperative. For rates and application timing for your specific variety and location, consult your local Extension Pomologist for recommendations.

## K-SALT FRUIT FIX 800 COMPATIBILITY WITH OTHER PRODUCTS

K-SALT FRUIT FIX 800 is compatible with a wide range of pesticides. The mixture should be field tested on a small scale to insure the product performance and plant safety before large-scale field use. Observe all cautions and limitations on labeling of all products used in mixtures. **DO NOT APPLY TANK MIX COMBINATIONS UNLESS YOUR PREVIOUS EXPERIENCE INDICATES THE MIXTURE IS EFFECTIVE AND WILL NOT RESULT IN APPLICATION PROBLEMS OR PLANT INJURY.**

## CHEMICAL THINNING

### Apples

Because of differences in varieties, climatic factors, tree vigor and fruit set, the application rate for thinning can range from 2 to 20 ppm and application timing can range from petal fall to 30 days after full bloom (0.6 fl. oz. of K-SALT FRUIT FIX 800 in 100 gallons of water will make 10 ppm spray). The higher concentrations should be limited to vigorous trees with high fruit set potential. Use the lower concentrations for weaker, less vigorous trees and less food reserves and lower fruit set potential. Use 2 to 5 ppm when a surfactant (wetting agent) is added. Use surfactant (wetting agent) according to manufacturer's recommendations, but not more than 1 pint per 100 gallons of spray. Mid-season to late blooming varieties such as Red Delicious, Golden Delicious, Fuji, Gala, Granny Smith and Romes should be treated 5 to 21 days after full bloom depending on locality and other factors. For concentrate spray, use K-SALT FRUIT FIX 800 at the rate of 0.5 to 1.0 fl. oz. per acre. Application in sufficient water for uniform and even distribution of the spray is imperative.

Thinning sprays are most effective when the king apple fruitlets are between 5 to 10 mm in diameter. During cool springs, delay application as necessary until the largest fruits are 7 mm to 10 mm in diameter and forecasted daytime temperatures are likely to rise above 60°F within the next five days. The preferred application temperature is between 70°F and 75°F. Applications are not recommended below 60°F or above 80°F. When daytime temperatures exceed 85°F, over-thinning may occur. Good thinning can be obtained under the latter conditions with lower rates of chemicals.

Tank mix combinations of K-SALT FRUIT FIX 800 and Carbaryl (e.g. Sevin® 4F & Sevin® XLR Plus) have successfully thinned several early-maturing, heavy-setting varieties, as well as hard-to-thin apple varieties in accordance with the most restrictive of label limitations and precautions. Also a petal fall application of K-SALT FRUIT FIX 800 followed 7 to 10 days later by an application of K-SALT FRUIT FIX 800 + Carbaryl has improved thinning on hard-to-thin varieties such as Golden Delicious Fuji, Gala, and Rhode Island Greening. No label dosage rates should be exceeded. This product can not be mixed with any product containing a label prohibition against such mixing.

**IMPORTANT:** K-SALT FRUIT FIX 800 should not be used on early season varieties (those that ripen before MacIntosh) such as Yellow Transparent, Early Williams Red and Oldenburg since severe injury or over-thinning may occur. Amid-Thin®W is recommended for these early season varieties.

### Pears - Bartlett, Bosc and Comice

Apply K-SALT FRUIT FIX 800 at a spray concentration of between 10 to 15 ppm for dilute spray in up to 400 gallons of water per acre or at a rate of 2 to 3 fl. oz. of product (13 to 19 grams of active ingredient) per acre for concentrated spray (0.6 fl. oz. of K-SALT FRUIT FIX 800 in 100 gallons makes 10 ppm of spray solution). Apply K-SALT FRUIT FIX 800 once per year 15 to 28 days after full bloom with a surfactant (wetting agent). Apply in sufficient water for good, uniform and even distribution of the spray. K-SALT FRUIT FIX 800 may not adequately thin Bartlett pears in some seasons. The preferred application temperature is between 70°F and 75°F. Application is not recommended below 60°F or above 80°F.

### Olives

**TIMING IS CRITICAL!** Spray when young fruits are 1/8 to 3/16 inch in diameter or 12 to 18 days after full bloom. Thinning is effective on all varieties except Sevillano. Do not apply during bloom unless you wish to remove all your fruit. Apply a solution of 120 ppm by adding 7.2 fl. oz. of K-SALT FRUIT FIX 800 and a wetting agent (i.e. Dreft 14 to 16 oz.) to 100 gallons of water 12 days after full bloom. The spray concentration should be adjusted upward by 10 ppm for each day following full bloom during the thinning period. Severe over-thinning may result from application to trees during hot and dry conditions.

**Oranges, Tangerines (Mandarins), Tangelos, and Tangors**

Spray at the rate of 100 to 500 ppm (6 fl. oz. per 100 gallons water equals 100 ppm). The degree of thinning obtained with K-SALT FRUIT FIX 800 is highly variable and temperature related. Severe over-thinning may result from application to trees during hot, dry conditions. Do not apply to "non-thrifty" trees. The grower must determine a suitable concentration and time of application for his cultivars and location.

Concentrations in the 100 to 150 ppm ranges should be tried and applications made when the fruits are in an early stage of development (5 to 20 mm in diameter) and near the normal period of "June drop" (in Florida the period of natural drop occurs in May). Higher thinning activity should be expected during hot weather. Therefore, lower concentrations should be used during hot weather (85°F to 95°F). The effectiveness of K-SALT FRUIT FIX 800 diminishes rapidly below 85°F. The entire fruiting area of the tree should receive a thorough coverage of the spray solution. Do not apply more than one application per year. Do not use on varieties where both young fruits and fruits close to maturity are present on trees. Do not apply within 150 days of harvest.

**CONTROLS PRE-HARVEST DROP**

**Apples and**

Apply to apples 7 to 14 days prior to harvest. Separate sprays should be applied to early and late maturing varieties. Do not make more than two applications and do not delay picking beyond optimum maturity. Do not spray within two days of harvest. K-SALT FRUIT FIX 800 becomes effective in 3 to 4 days after application and controls drop for two weeks.

**Ground Application:** Use 4 to 8 fl. oz. of K-SALT FRUIT FIX 800 (25 to 50 grams of active ingredient) per acre in sufficient water to ensure good coverage. Under normal conditions, the 8 fl. oz. rate per acre should be used.

**Aerial Application:** Use 4 to 8 fl. oz. in at least 5 gallons of water per acre. Aircraft should utilize spray equipment which gives thorough coverage to all portions of the trees. Apply only when weather conditions favor minimal spray drift. Use lower rates for normal foliage and fruiting and higher rates for dense foliage and heavy fruiting. Do not apply within two days of harvest.

**Bartlett, Bosc, and D'Anjou Pears**

Apply to pears 5 to 7 days prior to harvest. Separate sprays should be applied to early and late maturing varieties. Do not make more than two applications and do not delay picking beyond optimum maturity. Do not spray within two days of harvest. K-SALT FRUIT FIX 800 becomes effective in 3 to 4 days after application and controls drop for two weeks.

**Ground Application:** Use 2 to 4 fl. oz. of K-SALT FRUIT FIX 800 (12.5 to 25 grams of active ingredient) per acre in sufficient water to ensure good coverage. Under normal conditions, the 4 fl. oz. rate per acre should be used. When Bartlett and Bosc are interplanted, spray only once per season. Use a maximum of 4 fl. oz. of product per acre per season on Bartlett to prevent premature ripening.

**Aerial Application:** Use 2 to 4 fl. oz. in at least 5 gallons of water per acre. Aircraft should utilize spray equipment which gives thorough coverage to all portions of the trees. Apply only when weather conditions favor minimal spray drift. Use lower rates for normal foliage and fruiting and higher rates for dense foliage and heavy fruiting. Do not apply within two days of harvest.

**PRESERVING ORNAMENTAL HOLLY BOUGHS**

To delay leaf drop of holly boughs, make a "dip solution" containing 2 to 4 fl. oz. in 100 gallons of water (equal to 33 to 66 ppm). Dip holly boughs as soon as possible after cutting. Allow excess solution to drain. Do not soak or leave boughs in dip solution. Replenish dip solution as needed. To maintain concentration, replace with fresh solution every 3 to 4 days. Package while moist to keep boughs fresh until used. Maintain a 34°F to 40°F temperature in bough storage area.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**STORAGE:** Store product in original container in a cool (not in direct sunlight), dry, locked place out of reach of children. Do not allow product to freeze.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**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 conforms 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.

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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.

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K-SALT™ is a trademark of Amvac Chemical Corporation.  
FRUIT FIX™ is a trademark of Amvac Chemical Corporation.  
Sevin® is a registered trademark of Rhone-Poulenc.

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