

# United States Environmental Protection Agency WASHINGTON, DC 20460

CHEMICAL SAFETY AND POLLUTION PREVENTION

Ms. Kelly Rahn **Amvac Chemical Corporation** 4695 MacArthur Court, Suite 1250 Newport Beach, CA 92660

MAR 2 0 2013

Subject:

K-Salt Fruit Fix 800

EPA Reg. No. 5481-413

Amendment dated 1/31/2013 Correcting Signal Word to "Warning"

EPA Decision No. 475920

Dear Ms. Rahn,

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended, to change the signal word from "Caution" to "Warning" based on eye irritation data that indicates a Category II acute toxicity assignment, is acceptable. The Agency further confirms that the appropriate acute toxicity data for EPA Reg. No. 5481-413 are MRIDs 42266001- 42266005. A copy of the label, stamped "Accepted" is enclosed for your review.

If you have any questions, please contact Kaitlin Keller by phone at (703)-308-8172 or via email at keller.kaitlin@epa.gov.

Sincerely,

Tony Kish

Product Manager 22

Fungicide Branch

Registration Division (7504P)

Enclosure: Label stamped "Accepted"

# K-SALT® FRUIT FIX® 800

Fungicide, and Redenticide Act, as amended, for the posticide

A HORMONE TYPE PRODUCT FOR THINNING APPLES, CITRUS DERIGHTOR 1916 PEARS AND FOR CONTROL OF PRE-HARVEST DROP OF APPLES AND PEARS

ACTIVE INGREDIE	TE.	IIN	GK	HJ D	HENT:
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1-Naphthaleneacetic Acid, Potassium Salt	24.2%
INERT INGREDIENTS:	75.8%
TOTAL:	100.0%

Equivalent to 20.2% 1-Naphthaleneacetic Acid (1-NAA) or 830 grams (1.83 Ibs.) 1-NAA per gallon.

# KEEP OUT OF REACH OF CHILDREN **WARNING**

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.)

FIRST AID				
If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.			
	Remove contact lenses, if present, after the first 5 minutes, then			
	continue rinsing eye.			
	. Call a poison control center or doctor for treatment advice.			
If on skin or	Take off contaminated clothing.			
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.			
	• Call a poison control center or doctor for treatment advice.			
If swallowed:	. Call a poison control center or doctor immediately for treatment			
	advice.			
<i>,</i>	Have person sip a glass of water if able to swallow.			
	Do not induce vomiting unless told to do so by a poison control center			
	or doctor.			
	Do not give anything by mouth to an unconscious person.			
If inhaled:	• Move person to fresh air.			
	. If person is not breathing, call 911 or an ambulance, then give			
	artificial respiration, preferably mouth-to-mouth if possible.			
	• Call a poison control center or doctor for further treatment advice.			
EMERGENCY INFORMATION				
Have the product of	container or label with you when calling a poison control center or doctor,			
or going for treatn	· · · · · · · · · · · · · · · · · · ·			
	OWING EMERGENCIES, PHONE 24 HOURS A DAY:			
Transportation:	,			
	1-800-424-9300			
	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



# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Causes substantial but temporary eye injury. Harmful if swallowed, absorbed through skin or inhaled. Do not get in eyes, or on skin or clothing. Avoid breathing spray mist.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

All mixers, loaders, applicators, flaggers and other handlers must wear:

Long-sleeved shirt and long pants,

Shoes plus socks

Chemical-resistant gloves (except for pilots), and

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 exist, 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/PPE 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 may be 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 48 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.

A variety of factors including weather conditions (e.g., wind directions, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.

Wind speed restrictions:

Do not apply when wind speeds are greater than 10 mph at the application site.

Specific language for orchard airblast:

Sprays must be directed into the crop canopy.

Outward pointing nozzles should be turned off at row ends and when spraying outer rows.

For ground based applications and aerial applications, use only medium or coarser spray droplets (or nozzles) according to ASABE (\$572) definition for standard nozzles.

For broadcast use, the maximum application rate is 0.11 pounds per acre of 1-NAA equivalent for all uses except olive trees which may use up to 0.33 pounds per acre of 1-NAA equivalent.

The maximum application rate per year or crop cycle is not exceed 0.33 pounds per acre of 1-NAA equivalent.

The minimum interval between applications is to be no less than 5 day.

#### 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 1-NAA 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 -413.20130315 acute tox.

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<sup>®</sup>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 1-NAA) 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 1-NAA by adding 7.0 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. Do not exceed 24 fl.oz. per acre per treatment or per season.

# 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 1-NAA). 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. Do not exceed 8 fl.oz. per acre per application or 24 fl.oz. per acre per season.

#### CONTROLS PRE-HARVEST DROP

# **Apples**

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.

<u>Ground Application:</u> Use 4 to 8 fl. oz. of K-SALT FRUIT FIX 800 (25 to 50 grams of 1-NAA) per acre in sufficient water to ensure good coverage. Under normal conditions, the 8 fl. oz. rate per acreshould 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.

<u>Ground Application:</u> Use 2 to 4 fl. oz. of K-SALT FRUIT FIX 800 (12.5 to 25 grams of 1-NAA) 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.

<u>Aerial Application</u>: 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 35 to 69 ppm 1-NAA). 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.

**PESTICIDE 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:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or

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disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, 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.

# 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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K-SALT® is a trademark of Amvac Chemical Corporation.

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