

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SEP 5 2008

Terri Siemer-Aal, Associate Seimer & Associates, Inc. Regulatory Agent for KIM-C1, LLC 1612 11<sup>th</sup> Street Reedley, CA 93654

Subject:

WIAL PROT

KT-30 Plant Growth Regulator EPA Reg. 71049-1 Your Submission Dated April 11, 2007 Label Amendment to Include Bushberry, subgroup 13B-07B

Dear Ms. Seimer-Aal,

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable.

One copy of the label stamped "Accepted" is enclosed for your records. This label supersedes all labels previously accepted for this product. Please submit one copy of the final printed label before the product is released for shipment.

Should you have any questions or concerns do not hesitate to contact Tawanda Maignan via e-mail at Maignan. Tawanda@epa.gov or telephone at 703.308.8050.

Sincerely,

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Shaja Brothers Joyner Product Manager (20) Fungicide Branch Registration Division

Enclosure

# KT-30<sup>™</sup> Plant Growth Regulator

# ACTIVE INGREDIENT

# **BY WEIGHT**

Forchlorfenuron	.98.00%
OTHER INGREDIENTS	2.00%

This package contains 8 grams active ingredient.

# KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
If swallowed:	<ul> <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>
If inhaled:	<ul> <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>
If in eyes:	<ul> <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>
NOTES:	<ul> <li>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</li> <li>In the event of a medical emergency, you may also contact the National Pesticide Telecommunications Network (NPTN) at 1-800-858-7378.</li> </ul>

EPA REG. NO. 71049-1

EPA EST. NO. 33762-IA-001

ACCEPTED 2008 SEP 5 Under the Federal Insecticide, Fungicide, and Rodenticide Act, 25 amended, for the pesticide registered under RPA Reg. No. 7/D49-1 049-

MANUFACTURED for: KIM-C1, LLC 135 W. Shaw Avenue, #102 Fresno, CA 93704

NET CONTENTS: 0.018 lbs. a.i. (8 grams active ingredient)

# PRECAUTIONARY STATEMENT HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION** – Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe dust, vapors or spray mist.

#### **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 C on an EPA chemical resistance category selection chart.

APPLICATORS AND OTHER HANDLERS MUST WEAR: coveralls over longsleeved shirt and long pants, chemical-resistant gloves such as barrier laminate or viton, chemical-resistant footwear, plus socks, protective eyewear, and chemical-resistant headwear.

Follow manufacturer's instructions for cleaning/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 thoroughly with soap and water after handling and 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, or to areas where surface water is present or to intertidal areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

# **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.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 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). 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 over long-sleeved shirt and long pants;

chemical-resistant gloves such as barrier laminate or viton;

chemical-resistant footwear, plus socks;

protective eyewear: (goggles, face shield, or safety glasses)

chemical-resistant headwear.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

**IMPORTANT:** Before application, read all use directions thoroughly. Use KT-30 only as directed.

This KT-30 one quart bottle contains 8 grams of Forchlorfenuron.

KT-30 is an extremely potent plant growth regulator (PGR) that has been shown to improve the fruit size and fruit set of grapes and kiwi. However, excessive rates of KT-30 can result in undesirable results. For specific effects and benefits, see the Spray Guidelines by Crop section.

- Product efficacy requires thorough coverage of the fruit. Uniform spray coverage is essential to achieve the desired results.
- For best results, apply KT-30 under slow drying conditions, e.g. early in the morning, late in the afternoon, or at night, in order to ensure adequate uptake.
- For best results, the water pH should be close to neutral, and always below 8.5.

- DO NOT apply KT-30 to plants under stress. If plants under stress are treated, the effect may be reduced.
- DO NOT use overhead irrigation until sprays of KT-30 have dried completely.
- DO NOT apply KT-30 if rain is expected before sprays have dried completely.
- DO <u>NOT</u> apply this product through any type of irrigation system.
- Aerial application of KT-30 is prohibited.
- Use of <u>adjuvants</u>: Adjuvants, if used, should be of a non-ionic nature, such as Latron B1956<sup>®</sup>, and should not exceed 0.1% (v/v).
- Compatibility: Tank mixes of KT-30 with materials other than ProGibb®, Promalin®, and Accel®, or a suitable non-ionic surfactant are not recommended.
- Spray Method Restrictions: Use only dilute sprays. DO NOT apply by ULV or concentrate methods. Use drop nozzles directed onto fruit from beneath the canopy on row and airblast sprayers. In order to minimize spray drift, it is recommended that whenever possible average spray particle size be 200µ or larger.
- DO NOT treat fruit by dipping. Use of the dip method for applying KT-30 may result in residues exceeding tolerance restrictions.

Consult your local KIM-C1 agricultural representative for specific information on the best use recommendations for your particular crop.

# **DISSOLVING INSTRUCTIONS**

To properly dissolve KT-30 Plant Growth Regulator, the following instructions must be followed very closely. Failure in following the instructions will result in incomplete dissolution of the active ingredient and poor field product performance.

Each one quart KT-30 PGR plastic bottle contains 8 grams of KT-30 PGR crystalline powder. To dissolve the 8 grams of material, completely fill the one quart bottle with solvent (i.e. 90% isopropanol) and follow the directions below for dissolving.

# **OPTION 1.** "*PREFERRED OPTION*" (To be done one or more days before spraying)

Using a funnel, pour isopropanol into the one quart bottle containing the 8 grams of KT-30 PGR, close the cap tightly and shake the container vigorously for 3-4 minutes. Let the container stand overnight. The next day, observe the bottom of container to assure that there are no particles left undissolved. For the process to be complete, you should not see any particles. If you see any particles, continue shaking the container until all particles have disappeared. At this point you can proceed to use the product.

NOTE: Once dissolved, KT-30 PGR is very stable if kept closed tight under standard pesticide storage conditions. Therefore, you may elect to dissolve all the KT-30 PGR material that you intend to use during the season, well ahead of time. This will ensure total dissolution of the crystalline powder and avoid having to shake the bottles for a long time just prior to spraying.

#### **OPTION 2.** (To be done the day of spraying)

Using a funnel, pour isopropanol into the one quart bottle containing the 8 grams of KT-30 PGR, close the cap tightly and shake the container vigorously for at least 20 minutes. Observe the bottom of container to assure that there are no particles. If you see any particles, continue shaking the container until all particles have disappeared. At this point you can proceed to use the product.

#### **DO NOT:**

- Do Not mix the powder from different bottles into one.
- Do Not pour the powder into the bottle containing the isopropanol.

## SPRAY TANK MIXING INSTRUCTIONS

Fill the sprayer half way and add the desired amount of the KT-30 PGR solution (prepared per instructions above). With continuous agitation, add the rest of the water and the non-ionic surfactant if you are using one.

# SPRAY GUIDELINES BY CROP

**Bushberries** (Aronia Berry; Blueberry, Highbush; Blueberry, Lowbush; Currant, Buffalo; Chilean Guava; Currant, Black and Currant, Red; Barberry, European; Elderberry; Gooseberry; Cranberry, Highbush; Honeysuckle, Edible; Huckleberry; Jostaberry; Juneberry; Lingonberry; Currant, Native; Salal; Buckthorn, Sea)

#### Blueberry

KT-30 has been shown through research to increase berry set, particularly in Rabbiteye cultivars, and berry size in Rabbiteye and Northern Highbush cultivars. If harvest delay is desired and will aid in broadening harvest time, then higher rates described below should be used. Total yield and quality of the fruit will be improved. Best results are obtained when KT-30 is used in properly managed blueberries. All varieties have not been fully tested. Northern Highbush varieties have been most widely tested and have shown the most promising results. Southern Highbush varieties have shown some early dark discoloration when berry tissue is in the sun. This discoloration disappears as the berry colors up during the ripening process. At harvest there is no discoloration evident on fully ripe berries. This condition appears to only develop in the southeast and has not been observed in the west.

In the southeast, the Southern Highbush varieties may develop a severe leaf burn that can be extensive. If a grower did want to treat Southern Highbush varieties, only a few bushes should be treated until it can be established that treatment can occur without harming the leaves.

All other varieties have not been tested. If less widely planted varieties are to be treated, smaller treatments are recommended until grower experience with variety is obtained. If additional information is needed, check with your local extension agent.

### Rates

Making a single application of KT-30 using 2 to 3 grams a.i. per acre in 100 gallons of spray will promote set or increase fruit size. Make sure that fruit and canopy are thoroughly covered. Do not exceed the maximum rate 3 grams per acre unless it is desired to broaden harvest timing with delayed fruit maturity. In this instance use rates as high as 10 grams per acre. Do NOT make more than one application per season.

# Timing

Application timing is very important for optimal response. Timing should be based on flower development. The single application during bloom to increase berry set and berry size should be made at the beginning of the bloom period (bloom is defined as 50% open bloom). If the increased set is not desired, make the single application approximately 10-14 days following petal fall to increase fruit size and with higher rates to delay harvest.

# **Spray Volume**

Depending upon foliage volume, spray application should be made using somewhere between 50 and 250 gallons per acre. Increase spray volumes as required by bush size and avoid spraying past runoff. Use of the higher gallonage does not permit use of an increased amount of KT-30. Do NOT exceed the maximum rate of 10 grams a.i. per acre of KT-30 and do not apply in less than 50 gallons per acre (GPA). Spray volumes lower than 50 GPA may result in poor coverage and reduce the effectiveness of the application.

#### Tank Mixing

Do not tank mix KT-30 with any other agrochemical except a suitable nonionic surfactant. A non-ionic surfactant should not be used in amounts in excess of 0.25% (v/v).

#### Grapes

#### Seedless Grape

An application of KT-30 has been shown to increase berry size. Increased berry size improves cluster weight, total yield and pack out. KT-30 may improve fruit quality in cold storage. KT-30 treatment may delay grape maturation, i.e. slow Brix accumulation. Color development may be delayed in colored varieties. These factors may cause a delay in harvest. The higher the rate of product applied, the greater the potential for maturity delay.

#### Rates

Thorough coverage of the clusters is critical to achieve the desired response. In general, the higher the concentration, the greater response for berry size and maturity (harvest) delay. A lower rate range of from 3 to 6 grams a.i. per acre can provide a berry size increase with minimal harvest delay. The higher rate range of 8 to 10 grams a.i. per acre will maximize berry size and maximize harvest delay. Field trials have shown that harvest delay following KT-30 applications do not always occur, and may be dependent

upon weather conditions as well as the rates of product used. DO NOT exceed the maximum rate of 10 grams a.i. per acre of KT-30 and do not apply this amount of product in less than 200 gallons per acre. DO NOT make more than one application per season.

## Timing

Make a single application per season based on average berry diameter. The timing will vary by variety (See Table 1). Make sure that the latest developing marketable clusters have completed shatter and final berry set by the time the application is made. Applications to flowering clusters will cause excessive fruit set and may overcome ProGibb berry thinning effects. To maximize berry size use the highest rate of KT-30 in combination with ProGibb (See the ProGibb label for rates). Field testing has shown that KT-30 and ProGibb tank mixes applied at the time of the second ProGibb "sizing" spray will result in optimum berry sizing for common varieties such as "Thompson Seedless". However, a combined spray application of KT-30 and Pro-Gibb may delay maturity more than either product alone, particularly when highest label rates of ProGibb are used.

### Spray Volume

Use a volume of water between 200 and 500 gallons per acre (GPA), but do not spray past runoff. Spray volumes lower than 200 GPA may result in poor coverage and reduce the effectiveness of the application.

# **Tank Mixing**

KT-30 can be applied alone, or it may also be tank mixed with ProGibb "sizing" sprays. KT-30 may also be applied in combination with a non-ionic surfactant. Other tank mix combinations with KT-30 are not recommended.

## Seeded Grape for Fresh Market

An application of KT-30 has been shown to increase berry size. Increased berry size improves cluster weight, total yield and pack out. KT-30 may improve fruit quality in cold storage. KT-30 treatment may delay grape maturation, i.e. slow Brix accumulation. Color development may be delayed in colored varieties. These factors may cause a delay in harvest. The higher the rate of product applied, the greater the potential for maturity delay.

#### Rates

Thorough coverage of the clusters is critical to achieve the desired response. In general the higher the concentration the greater response for berry size and delayed maturity. DO NOT exceed the maximum rate of 10 grams a.i.

per acre and do not apply this amount of product in less than 200 gallons per acre. DO NOT make more than one application per season.

## Timing

Make a single application per season based on average berry diameter. The timing will vary by variety (See Table 1). Applications to flowering clusters will cause excessive fruit set.

## **Spray Volume**

Use a volume of water between 200 and 500 gallons per acre (GPA), but do not spray past runoff. Spray volumes lower than 200 GPA may result in poor coverage and reduce the effectiveness of the KT-30.

#### Tank Mixing

Tank mixes of KT-30 with any materials except a suitable non-ionic surfactant (see Use of Adjuvant section) are not recommended.

Variety <sup>1</sup>	Avg. Berry Diameter (mm)
Thompson Seedless	6 - 10
Flame Seedless	8 - 14
Perlette	6 - 8
Ruby Seedless	9 - 12
Red Globe	14 - 20
Emperor	12 - 14

<sup>1</sup> All varieties have not been fully tested. This includes other seedless varieties, such as Crimson, Fantasy, and Black Beauty. It would be best to treat when berry diameter is between 10-14 mm. It is suggested that additional seeded varieties be treated when berry diameter is between 12-16 mm.

# Seeded Grape for Wine

One application of KT-30 has been shown to increase berry set, or berry size. KT-30 treatment may delay grape maturity and color development. These factors may cause a delay in harvest. The higher the rate of product applied, the greater the potential for maturity delay.

#### Rates

Make a single application of KT-30 using 2 to 10 grams a.i. per acre, making sure that clusters are thoroughly covered with spray. DO NOT exceed the maximum rate of 10 grams a.i. per acre.

### Timing

Make a single application per season. To increase berry set, apply KT-30 during bloom. To increase berry size, apply KT-30 14 to 21 days after the completion of berry shatter. The timing may vary by variety. All varieties have not been fully tested.

## Spray Volume

Use a volume of 200 gallons per acre (GPA). Spray volumes lower than 200 GPA may result in poor coverage and reduce the effectiveness of the application.

#### Tank Mixing

Tank mixes of KT-30 with any materials except a suitable non-ionic surfactant (see Use of Adjuvant section) are not recommended.

## Grapes for Raisins

An application of KT-30 following the label directions increases fruit set and/or berry size, and may decreased drying ratio. KT-30 application may delay maturity, which may cause a delay in harvest. The higher the rate of product applied, the greater the potential for delayed maturity.

# Rates

Make a single application of KT-30 using 2 to 10 grams a.i. per acre, making sure that clusters are thoroughly covered. In general, use lower rates to increase berry set (2 to 3 grams a.i. per 100 GPA). Use higher rates (6 to 10 grams a.i.) to increase berry size. The higher the rate, the greater the response of berry size and maturity delay. DO NOT exceed the maximum rate of 10 grams a.i. per acre. DO NOT make more than one application per season.

## Timing

To increase berry set, make a single application at bloom. To increase berry size, make a single application when the berry diameter averages 8 to 10 mm.

#### Spray Volume

Use a volume of 200 gallons per acre (GPA). Spray volumes lower than 200 GPA may result in poor coverage and reduce the effectiveness of the application.

## **Tank Mixing**

Tank mixes of KT-30 with any materials except a suitable non-ionic surfactant (see Use of Adjuvant section) are not recommended.

# **Additional Varieties for Raisins**

Most seedless raisin varieties will respond when treated using the rates and timings described above. Use lower rates to minimize size enhancement and maturity delay.

#### <u>Kiwifruit</u>

An application of KT-30 following the label directions will result in increased fruit size.

### Rates

For intermediate fruit size enhancement use lower rates and use higher rates to maximize fruit size. Use 2 to 8 grams a.i. per acre. Make sure that fruit are thoroughly covered. DO NOT exceed the maximum rate of 8 grams a.i. per acre. DO NOT make more than one application per season.

# Timing

Make the single application when the berry length averages 30-45 millimeters. Fruit will generally be in this range at 2-3 weeks following bloom.

# **Spray Volume**

Minimum spray volume is 200 GPA. Spray volumes lower than 200 GPA may result in poor coverage and reduce the effectiveness of the application.

#### Tank Mixing

Tank mixes of KT-30 with any materials except a suitable non-ionic surfactant (see Use of Adjuvant section) are not recommended.

# **STORAGE AND DISPOSAL:**

Do not contaminate water, food, or feed by storage or disposal. Keep pesticide in original container.

**PESTICIDE STORAGE**: Keep under cool conditions. **PROHIBITIONS:** Open dumping is prohibited.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. 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 disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

# Warranty/Liability

To the extent consistent with applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompany directions.

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