CPPU™ Plant Growth Regulator

CTIVE INGREDIENT	BY WEIGHT
ForchlorfenuronOTHER INGREDIENTS	
TOTAL	. 100.00%

This package contains 8 grams active ingredient.

KEEP OUT OF REACH OF CHILDREN CAUTION

	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 swallowed:	 Call a poison control center or doctor immediately for treatment advice. Have a 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.
NOTES:	 Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In the event of a medical emergency, you may also contact the National Pesticide Telecommunications Network (NPTN) at 1-800-858-7378.

EPA REG. NO. 71049-4

EPA EST. NO. 48498-CA-001

MANUFACTURED for: KIM-C1, LLC 2547 West Shaw Avenue, #116 Fresno, CA 93711

NET CONTENTS: One Quart (8 grams active ingredient)

PRECAUTIONARY STATEMENT HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION – Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed, inhaled or absorbed through skin. Do not breathe 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: long-sleeved shirt and long pants, chemical-resistant gloves such as barrier laminate, viton, butyl rubber, nitrile rubber, neoprene rubber, or polyvinyl chloride (PVC), shoes plus socks, and protective eyewear, goggles, safety shield, or safety glasses.

User Safety Requirements

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 hands thoroughly with soap and water 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 below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

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.

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.

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

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 (<u>REI</u>) 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: long-sleeved shirt and long pants; chemical-resistant gloves such as barrier laminate, viton, butyl rubber, nitrile rubber, neoprene rubber, or polyvinyl chloride (PVC); shoes plus socks; protective eyewear such as goggles, safety shield, or safety glasses.

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GENERAL DIRECTION FOR USE

IMPORTANT: Before application, read all use directions thoroughly. Use CPPU Plant Growth Regulator only as directed.

This CPPU Plant Growth Regulator package contains 8 grams of N-(2-chloro-4-pyridinyl)-N'-phenyl urea, or forchlorfenuron. Each fluid ounce CPPU Plant Growth Regulator contains 0.25 grams of forchlorfenuron active ingredient (a.i.). Thus, 4 fluid ounces equals one gram of forchlorfenuron active ingredient.

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

- Product efficacy requires thorough coverage of the flowers and/or fruit. Uniform spray coverage is essential to achieve the desired results.
- For best results, apply CPPU Plant Growth Regulator 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 CPPU Plant Growth Regulator to plants under stress. If plants under stress are treated, the effect may be reduced.
- DO NOT use overhead irrigation until sprays of CPPU Plant Growth Regulator have dried completely.
- DO NOT apply CPPU Plant Growth Regulator 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 CPPU Plant Growth Regulator is prohibited.
- Use of <u>adjuvants</u>: Adjuvants, if used, should be of a non-ionic nature, such as Latron B1956®, and should not exceed 0.1% (v/v).
- Tank Mix: Except when specifically noted in the SPRAY GUIDELINES BY CROP
 section of this label, do not combine CPPU Plant Growth Regulator in spray tank
 with pesticides, adjuvants, or fertilizers unless your prior use has shown the
 combination physically compatible, effective and non-injurious under your conditions
 of use.

- Spray Method Restrictions: Use only dilute sprays. Use kicker nozzles directed onto
 fruit from beneath the canopy on row and airblast sprayers. DO NOT apply by ULV
 or concentrate methods.
- DO NOT treat fruit by dipping. Use of the dip method for applying CPPU Plant Growth Regulator 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.

SPRAY GUIDELINES BY CROP

Almonds |

Make a single application of CPPU® Plant Growth Regulator using 20 to 40 fluid ounces per acre (10–15 ppm) in 100 to 200 gallons spray per acre, depending on tree size. One application made from 80% petal fall to the time when nutlet length averages 4-6 mm will promote increased fruit retention and increase yield. Make only one application per year.

Blueberries

Blueberries in California

Highbush blueberries grown in California have been shown through research to respond to application of CPPU Plant Growth Regulator with increased berry size. This response is dependent on spray application timing in relation to the blueberry plant's physiological growth stage. Vigorous plants with capacity to support increased crop load have responded best to CPPU applications. Do not use on Duke and Reka varieties in California.

Harvest may be delayed if CPPU is used, due to the longer time period for the larger treated berries to mature.

Rates and Timing

Make a single application of CPPU Plant Growth Regulator using 8-12 fluid ounces (2-3 grams a.i.) per acre. Make sure that berries are thoroughly covered by spray. Do not exceed the maximum rate of 12 fluid ounces (3 grams a.ai.) per acre. Do NOT make more than one application per season.

Spray Volume

Crop response to this product depends upon accurate, thorough application. Apply with ground sprayer only. It is important to wet all berries thoroughly. Apply enough spray volume to achieve thorough coverage and avoid spraying to runoff. Spray volumes of 100 GPA applied with conventional spray equipment have been shown to provide satisfactory coverage of vigorous, productive blueberry bushes.

Surfactant

A suitable non-ionic surfactant may be used with CPPU, but it should not be used in amounts in excess of 0.25% (v/v). Be sure to follow surfactant label directions,

especially for silicone-type non-ionic surfactants that are used at very low concentrations in the spray mixture.

Rabbiteve Blueberries in the Southeastern United States

Rabbiteye blueberries grown in the Southeastern United States have been shown through research to respond to applications of CPPU Plant Growth Regulator with increased berry set and berry size. These responses are dependent on spray application timing in relation to the blueberry plant's physiological growth stage. Vigorous plants with capacity to support increased crop load have responded best to CPPU applications.

Harvest may be delayed if CPPU is used, due to the longer time period for the larger treated berries to mature.

Rates and Timing

Make one to two applications of CPPU Plant Growth Regulator using 8 fluid ounces (2 grams a.i.) per acre in each application. Make the first application during bloom when 80% of the flowers have opened. If a second application is made, apply 8 fluid ounces (2 grams a.i.) per acre approximately 14 days after the first application, but no later than 21 days after petal fall.

Spray Volume

Crop response to this product depends upon accurate, thorough application. Apply with ground sprayer only. It is important to wet all flowers and/or berries thoroughly. Apply enough spray volume to achieve thorough coverage and avoid spraying to runoff. Spray volumes of 100 GPA applied with conventional spray equipment have been shown to provide satisfactory coverage of vigorous, productive blueberry bushes.

Surfactant

A suitable non-ionic surfactant may be used with CPPU, but it should not be used in amounts in excess of 0.25% (v/v). Be sure to follow surfactant label directions, especially for silicone-type non-ionic surfactants that are used at very low concentration in the spray mixture.

Other Blueberries Grown Outside of California

Follow the use directions for "Rabbiteye Blueberries in the Southeastern United States" in addition to the following instructions:

- 1. All varieties have not been fully 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.
- 2. Higher Rates to Delay Harvest If harvest delay is desired and will aid in broadening harvest time, then higher rates should be used. If it is desired to broaden harvest timing with delayed fruit maturity, use rates as high as 40 fluid ounces (10 grams a.i.) per acre.

Bushberries (Black Currant, Red Currant, Elderberry, Gooseberry and Lingonberry)

Make one to two spray applications of CPPU Plant Growth Regulator using 8 fluid ounces (2 grams a.i.) per acre each time to accelerate plant growth. Make each application using 50 to 100 gallons of water. Make the first application during bloom and the second application approximately 14 days later but not later than 21 days after petal fall.

Harvest may be delayed if CPPU is used, due to the longer time period for the larger treated berries to mature.

Cherries (Sweet)

Make a single application of CPPU® Plant Growth Regulator using 20 to 40 fluid ounces per acre (10-15 ppm) in 100 to 200 gallons spray per acre, depending on tree size. Early application at bloom, at shuck split or a later application at straw color to color break will increase fruit diameter. To promote increased resistance to splitting from rain, make application at color break. Make only one application per year. Do not harvest fruit for 7 days after application.

Figs

Make a single application of CPPU[®] Plant Growth Regulator using 20 to 40 fluid ounces per acre (10-15 ppm) in 100 to 200 gallons of spray per acre, depending on tree size. Making the application when the average fig diameter is 12 – 15 mm, will increase the size of the Breba crop of the Mission variety figs. It is essential that budbreak uniformity be promoted as much as possible to maximize the number of figs that will be influenced with the single application of CPPU[®] Plant Growth Regulator. Make only one application per year.

<u>Grapes</u>

Seedless Grape

An application of CPPU Plant Growth Regulator has been shown to increase berry size. Increased berry size improves cluster weight, total yield and pack out. CPPU Plant Growth Regulator may improve fruit quality in cold storage. CPPU Plant Growth Regulator 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 12 to 24 fluid ounces (3 to 6 grams a.i.) can provide a berry size increase with minimal harvest delay. The higher rate range of 32 to 40 fluid ounces (8 to 10 grams a.i.) will maximize berry size and maximize harvest delay. Preliminary field trials have shown that harvest delay following CPPU Plant Growth Regulator applications do not always occur, and may be dependent upon weather conditions as well as the rates of product (both CPPU Plant Growth Regulator and Gibberellic acid) used. DO NOT exceed the maximum rate of 40 fluid ounces of CPPU Plant Growth Regulator (10 grams a.i. per acre) and do not apply

this amount of product in less than 250 gallons per acre. DO NOT make more than one application per season.

	Table 1 – Application Rate Calculations – Dilution Guidelines					
CPI	PU Plant G	Frowth Regi	alator			
	Grams		Gal.			
PPM*	a.i./A	Ounces	Per A	Comments		
5	2	8	100	Intermediate size increase with minimum maturity delay.		
5	4	16	200	Intermediate size increase with minimum maturity delay.		
6	6	24	250	Intermediate size increase with minimum maturity delay.		
6	8.	32	350	Intermediate size increase with minimum maturity delay.		
8	3	12	100	Intermediate size increase with minimum maturity delay.		
8	6	24	200	Intermediate size increase with minimum maturity delay.		
8	8	32	250	Intermediate size increase with minimum maturity delay.		
10	4	16	100	Maximum size increase with maximum maturity delay.		
10	8	32	200	Maximum size increase with maximum maturity delay.		
10	10	40	250	Maximum size increase with maximum maturity delay.		

^{*} Parts Per Million

Recommended rates are for CPPU Plant Growth Regulator alone. Due to additive effect with Gibberellic acid (GA), berry size can be further increased when combined in a tank mix solution with GA using 20 to 40 ppm GA.

Timing

Make a single application per season based on average berry diameter. The timing will vary by variety (See Table 2). 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 Gibberellic acid berry thinning effects. To maximize berry size use the highest rate of CPPU Plant Growth Regulator in combination with Gibberellic acid (See the Gibberellic acid label for rates.). Preliminary field testing has indicated that CPPU Plant Growth Regulator and Gibberellic acid tank mixes applied at the time of the second Gibberellic acid "sizing" spray will result in optimum berry sizing for common varieties such as "Thompson Seedless". However, a combined spray application of CPPU Plant Growth Regulator and Gibberellic acid may delay maturity more than either product alone, particularly when highest label rates of Gibberellic acid are used.

Spray Volume

Use a volume of water between 200 and 350 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.

Seeded Grape for Fresh Market

An application of CPPU Plant Growth Regulator has been shown to increase berry size. Increased berry size improves cluster weight, total yield and pack out. CPPU Plant Growth Regulator may improve fruit quality in cold storage. CPPU Plant Growth Regulator 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

For specified rates, see Table 1. 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. DO NOT exceed the maximum rate of 40 fluid ounces (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 2). Applications to flowering clusters will cause excessive fruit set.

Spray Volume

Use a volume of water between 200 and 350 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.

Table 2 - Suggested I	Berry Diameters fo	r Timing CPPU	J Plant Gr	owth Regula	tor
	Sprays for Fres	h Market Grap	es		

Avg. Berry Diameter (mm)		
6 - 10		
8 - 14		
6 - 8		
9 - 12		
14 - 20		
12 - 14		

¹ All varieties have not been fully tested. Most other seedless varieties, such as Crimson, Fantasy, and Black Beauty would be best treated 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 Grapes for Wine

An application of CPPU Plant Growth Regulator has been shown to increase berry set, or berry size depending upon time of application. CPPU Plant Growth Regulator treatment may delay grape maturity by slowing the accumulation of soluble solids. 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

Make a single application of CPPU Plant Growth Regulator using 8 to 40 fluid ounces (2 to 10 grams a.i.) per acre, making sure that clusters are thoroughly covered. In general, use lower rates to increase berry set (8-12 fluid ounces per 100 GPA). The higher the concentration the greater response for berry size and maturity delay. DO NOT exceed the maximum rate of 40 fluid ounces per acre. DO NOT make more than one application per season.

Timing

Make a single application per season. To increase berry set, apply CPPU Plant Growth Regulator during bloom. To increase berry size, apply a single application of CPPU Plant Growth Regulator 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 water between 100 and 200 gallons per acre (GPA). Spray volumes lower than 100 GPA may result in poor coverage and reduce the effectiveness of the application.

Grapes for Raisins

An application of CPPU Plant Growth Regulator following the label directions increases fruit set and/or berry size, and may affect drying ratio. CPPU Plant Growth Regulator application may delay maturity (reduced soluble solids), 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 CPPU Plant Growth Regulator using 8 to 40 fluid ounces (2 to 10 grams a.i.) per acre, making sure that clusters are thoroughly covered. In general, use lower rates to increase berry set (8-10 fluid ounces per 100 GPA). Use higher rates (24 to 40 fluid ounces) to increase berry size. The higher the rate, the greater the response for berry size and maturity delay. DO NOT exceed the maximum rate of 40 fluid ounces 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 millimeters (mm).

Spray Volume

Use a volume of water between 100 and 200 gallons per acre (GPA). Spray volumes lower than 100 GPA may result in poor coverage and reduce the effectiveness of the application.

Additional Varieties for Raisins

All varieties have not been fully tested. 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.

Kiwifruit

An application of CPPU Plant Growth Regulator following the label directions will result in increased fruit size.

Rates

Make a single application of CPPU Plant Growth Regulator using 8 to 16 fluid ounces (2 to 4 grams a.i.) for intermediate size enhancement. For maximum berry size enhancement, use 24 to 32 fluid ounces (6 to 8 grams a.i.). Make sure that fruit are thoroughly covered. DO NOT exceed the maximum rate of 32 fluid ounces (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 mm. Fruit will generally be in this range at 2-3 weeks following bloom.

Spray Volume

Use a volume of water between 100 and 200 gallons per acre (GPA). Spray volumes lower than 100 GPA may result in poor coverage and reduce the effectiveness of the application.

Pears

Make a single application of CPPU[®] Plant Growth Regulator using 20 to 40 fluid ounces per acre (10–15 ppm) in 100 to 200 gallons of spray per acre, depending on tree size. Application at 15 – 25 days post-petal fall will promote increased fruit size resulting in increased yield per acre. Increased solids will usually result from increased cell division early in the fruit formation cycle.

Application of CPPU® Plant Growth Regulator too early, i.e. before 15 days following petal fall will result in increased calyx end growth on pears, which may become objectionable. If uneven budbreak occurs and budbreak is spread over an extended period of time, use of CPPU® Plant Growth Regulator will cause some fruit, particularly late occurring fruit, to have elongated calyx end development. This condition can be minimized with the use of Dormex to promote uniform budbreak. Make application later in cycle to increase fruit size and minimize elongated calyx end formation. Make only one application per year.

Pistachios

Make a single application of CPPU[®] Plant Growth Regulator using 20 to 40 fluid ounces per acre (10–15 ppm) in 100 to 200 gallons of spray per acre, depending on tree size. To increase nut weight, apply at the beginning of kernel formation, when shells start to fill, approximately 5 to 7 weeks after bloom. Make only one application per year.

Plum/Prune

Make a single application of CPPU[®] Plant Growth Regulator using 20 to 40 fluid ounces per acre (7–15 ppm) in 100 to 200 gallons of spray per acre, depending on tree size. Apply during bloom to increase fruit set. Make only one application per year.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of KIM-C1, LLC. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, KIM-C1, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of KIM-C1, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, KIM-C1, LLC disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at KIM-C1, LLC's election, the replacement of product.

Latron B1956 is a trademark of Rohm and Haas

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(Final label 4-15-14 from 12-9-13 and 3-31-14 EPA Stamped Accepted labels)