maxCel®

Plant Growth Regulator Solution

For Use on Apple, Pear, Pistachio and Non-Bearing Trees

ACTIVE INGREDIENT:	By Wt.
6-benzyladenine	1.9%
OTHER INGREDIENTS	98.1%
TOTAL	100.0%

EPA Reg No. 73049-407
EPA Est. No. 33762-IA-001 List No. 11815

INDEX:

KEEP OUT OF REACH OF CHILDREN
CAUTION

1.0

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.

HOT LINE NUMBER
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, you may also call toll-free 1-800-892-0099 for treatment information.

2.0 PRECAUTIONARY STATEMENTS

2.1 HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Wear protective eyewear, long-sleeved shirt and long pants, chemical-resistant gloves and shoes and socks. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

2.2 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 for all uses must wear:

- Protective eyewear.
- Long sleeved shirt and long pants
- Chemical-resistant gloves (such as barrier laminate; butyl, nitrile or neo-prene rubber; polyvinyl chloride or viton)
- Shoes plus socks

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.

2.3 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.

2.4 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 disposing of equipment washwater or rinsate.

3.0 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 State/Tribal agency responsible for pesticide regulation.

4.0 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,

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4.0 AGRICULTURAL USE REQUIREMENTS (CONT.)

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 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
- For all uses: Chemical-resistant gloves (such as barrier laminate; butyl, nitrile or neo-prene rubber; polyvinyl chloride or viton)
- Shoes plus socks

5.0 PRODUCT INFORMATION

IMPORTANT: Before application, read all directions thoroughly. **Use *MaxCel* only as directed.**

MaxCel contains 1.9% (w/w) 6-benzyladenine (6BA). 6BA is a potent plant growth regulator belonging to the group of growth regulators known as cytokinins.

Consult your local Valent Agricultural Specialist (1-800-6-VALENT), for specific information regarding the use of this product in your particular orchard(s).

Compatibility With Other Agricultural Products
Information on tank mix compatibility of *MaxCel* is limited at this time.

6.0 APPLICATION INSTRUCTIONS

GENERAL

Notice: Read the entire label. Use only according to label directions.

- Do not apply this product through any type of irrigation system.
- Apply in the morning or evening when conditions are best for slow drying (cooler temperatures and higher humidity), in order to ensure adequate absorption of the product. If applied in the morning, assure that the leaves are not too wet from dew.
- To minimize foaming of spray solution, reduce agitation and add the product to the tank after filling to 1/2 capacity with water.
- Product performs best at water pH between 5-7; do not exceed pH of 8.5.
- No surfactant is required.
- Apply spray solutions in properly maintained and calibrated equipment.

Apple and Pear Uses

For apple and pear, do not exceed a total of 310 fluid ounces of product (182 grams of 6-benzyladenine) per acre per season for all uses.

6.1 APPLE

Use	Application Rate	Spray Volume	Spray Timing
For enhancement of fruit size.	Apply 10-50 ppm spray concentration. (Refer to the dilution table for assistance.)	Use sufficient volume to ensure complete tree coverage.	Make 2-4 applications, starting at petal fall, and continuing at 3-10 day intervals.

Additional Instructions:

- Direct 80% of the spray into the upper 2/3rds of the tree canopy.
- Apply in a sufficient amount of water to ensure thorough coverage without excessive runoff. Use calibrated spray equipment (such as an airblast sprayer) to ensure uniform coverage of leaves and fruit. Adjust water volumes based on tree size and spacing. In many cases, spray volumes of approximately 100 gallons per acre have been shown to be adequate.
- Applications will be most effective when the maximum temperature is above 65º F on the day of application, and the following 2 - 3 days.
- **Do not exceed 2.65 oz. 6-benzyladenine per acre per season.**
- **Do not apply within 86 days of harvest.**

NOTE: This use may cause fruit thinning in some easy to thin varieties, and/or under conditions favorable for thinning.

6.2 APPLE AND PEAR

Use	Application Rate	Spray Volume	Spray Timing
For fruit thinning, sizing, and enhanced return bloom.	Apply 75-200 ppm spray concentration. (Refer to the dilution table for assistance.)	Use sufficient volume to ensure complete tree coverage.	Apply when the average diameter of king fruitlets is between 5 - 15 mm. 10 mm is optimal. Do not apply more than twice in a season.

Additional Instructions:

- Direct 80% of the spray into the upper 2/3rds of the tree canopy.
- Applications will be most effective when the maximum temperature is above 65° F on the day of application, and the following 2-3 days.
- Use higher rates in orchards that have a history of being difficult to thin, in varieties known to be difficult to thin, and in cool weather situations.
- Apply in a sufficient amount of water to ensure thorough coverage without excessive runoff. Use calibrated spray equipment (such as an airblast sprayer) to ensure uniform coverage of leaves and fruit. Adjust water volumes based on tree size and spacing. In many cases, spray volumes of approximately 100 gallons per acre have been shown to be adequate.

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- **Do not exceed a total of 310 fluid ounces of product (182 grams of 6-benzyladenine) per acre per season.**
- **Do not exceed 6.42 oz. 6-benzyladenine per acre per season.**
- **Do not apply within 86 days of harvest.**

NOTE: Generally, only one application is sufficient for fruit thinning. If a second application is desired to obtain additional thinning:

1. Allow 7-10 days to observe the effect of the first application.
2. Spray the second application before the average diameter of king fruitlets exceeds 20 mm.

6.3 BRANCHING APPLICATION

For increased branching of nursery stock and young trees to improve branch angles, stimulate bud break and improve tree structure.

Table 1. Foliar Applications

Crop	Rate	Timing
Apples and Pears (Nursery and Orchard) (NOT FOR USE IN CA) **Non-Bearing Sweet Cherries** (Nursery and Non-Bearing Orchard only) (NOT FOR USE IN CA)	**250 - 500 ppm**[1] (8 - 16 fluid ounces *MaxCel* per 5 gallons of spray solution)[2]	For orchard trees (apples, pears and non-bearing sweet cherries) make first application at 1 - 3 inches of new terminal growth. Target application to the site where branching is desired (e.g., at trellis wires). 1 - 4 applications can be made at targeted sites where additional branching is desired as tree height increases through the season. For nursery stock make first application after trees have reached a height at which lateral branching is desired. 1 - 4 additional applications can be made each time the main leader adds 5 inches of new growth, or about every 7 - 10 days.

[1] Parts per million

[2] On orchard trees (apple and pear), do not exceed 310 fluid ounces per acre per season for all use patterns combined (branching, thinning, return bloom, and size enhancement). On nursery trees (apple, pear, and non-bearing sweet cherry), **do not exceed 320 fluid ounces (20 pints) per acre per season**.

Additional Instructions:

- Add a buffer or acidifier as needed to keep the final spray solution pH between 5 and 7.
- In the orchard, make a precision application targeted at the site where branching is desired using a single nozzle such as with a backpack sprayer, squirt bottle, or single nozzle on an orchard or boom sprayer. In the nursery, targeted site applications may also be made with more than one nozzle on orchard or boom sprayers, using sufficient water for good coverage without reaching the point of runoff. Typically 40 gallons per acre has been shown to be adequate.
- Best results with this application method will be on the current season's growth. This application method is not recommended on wood that is older than one year.
- Do not apply in temperatures below 40º F or above 90º F. Best results will be from applications made when air temperatures are between 65º F - 75ºF.
- Do not tank mix with streptomycin or apply streptomycin on the same day.
- Warmer sites with faster growth rates will be able to make up to the maximum 5 applications per season. Cooler sites with slower growth rates will use fewer applications—usually up to 3 applications.
- Applications to non-bearing sweet cherries must not be made later than one year prior to first anticipated harvest.
- **Do not exceed 10.58 oz. 6-benzyladenine per acre per season.**
- **Do not apply within 86 days of harvest on apples or pears with fruit intended for harvest.**

Table 2. Application to Buds and Bark – Latex Application

Crop	Rate	Timing
Apples and Pears (Nursery and Orchard) **Non-Bearing Sweet Cherries** Orchard only) (NOT FOR USE IN CA)	**1500 - 5000 ppm**[1] (1.2 - 4.0 fluid ounces *MaxCel* per pint of solution)	Apply in the spring when terminal buds begin to swell but before shoots emerge.

[1] Parts per million

[2] Latex paint or water

Additional Instructions:

- Make targeted spot applications to buds and/or bark at the sites where branching is desired using a brush, sponge, or paint roller.
- For best results, use a dark-colored interior latex paint as the solution carrier. Do not use exterior paint. Do not use any paint that also contains a mildewcide, such as bathroom paint.
- Whether using paint or water as the solution carrier, the addition of a non-ionic penetrating surfactant will improve absorption and response.
- Application can be made with or without supplemental branch induction tactics on one-year-old wood. For two- and three-year-old wood, use the higher end of the rate range in conjunction with an additional tactic such as nicking, notching, partial scoring, or cambium crushing. For wood older than 3 years, refer to the section titled: Special Instructions to Reduce Blind Wood on Apples with Type 4 Growth Habit.
- If using in conjunction with additional tactics, be aware of the associated risks of bacterial infection from *Erwinia* and *Pseudomonas* and open wounds in the tree bark, and implement appropriate risk-mitigation measures. Consult your local Valent Agricultural Specialist (1-800-6-VALENT) for specific information.
- Do not apply this rate of *MaxCel* or use this application method after bud break. Applications after bud break have been known to cause injury to tender shoot tips and fail to promote shoot growth from that point.
- For best results, apply in temperatures above 50º F.

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- Applications to non-bearing sweet cherries must not be made later than one year prior to first anticipated fruit harvest.

Special Instructions to Reduce Blind Wood on Apples with Type 4 Growth Habit:

To force break of paradormant buds and promote resulting shoot extension on older wood of apple trees, make a notch immediately above the dormant bud and apply up to 1500 ppm of *MaxCel* directly into the notch using a squirt bottle or paint brush. Notching and application should be done in the spring when temperatures warm. If applications are made after bud break, use caution to prevent contact of the *MaxCel* solution with green tissue to avoid injury to tender shoot tips.

For optimum results, the notch must penetrate through the cambium layer. Be aware of the associated risks of bacterial infection from *Erwinia* and *Pseudomonas* in open wounds, and implement appropriate risk-mitigation measures, including avoiding notching when conditions are favorable for infection.

6.5 PISTACHIO

Use	Application Rate	Spray Volume	Spray Timing
To increase yield, and reduce alternate bearing.	Apply 25-50 ppm spray concentration. (Refer to the dilution table for assistance.)	Us sufficient volume to ensure complete tree coverage.	Always make two applications: 1st: Early-to-mid June 2nd: Early-to-mid July

Additional Instructions:

- Apply in a tank mix with low biuret urea foliar nutritional spray at the rate of 6.25 - 12.5 lbs nitrogen per acre at both spray timings.
- Use calibrated airblast spray equipment to ensure uniform coverage of leaves and fruit. Adjust water volumes based on tree size and spacing. In many cases, spray volumes of approximately 100 gallons per acre have been shown to be adequate.
- **Do not exceed 2.65 oz. of 6-benzyladenine per acre per season.**
- **Do not apply within 60 days of harvest.**

6.6 *MaxCel* Dilution Table

Fluid ounces of *MaxCel* per 100 gallons of spray required to obtain given ppm concentrations.

10 ppm	20 ppm	25 ppm	50 ppm	75 ppm	100 ppm	125 ppm	150 ppm	175 ppm	200 ppm	500 ppm
6	12	16	32	48	64	80	96	112	128	320

Note: *MaxCel* contains 75 grams active ingredient per 128 fluid ounces (one gallon).

7.0 STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in a cool and dry place.

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 and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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. Offer for recycling if available. If recycling is not available puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

8.0 NOTICE TO USER

To the fullest extent permitted by 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. To the fullest extent permitted by law, user assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

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