

73049-487

5/9/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Jayne Walz
Valent BioSciences
870 Technology Way
Libertyville, IL 60048

MAY 9 2013

Subject: Product Name: POMAXA Plant Growth Regulator
EPA Reg. No. 73049-487
Amendment dated 5/7/2013 to reduce the Pre-Harvest Interval(PHI)
OPP Decision Number: 478422

Dear Ms. Walz:

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended, to reduce the PHI, is acceptable. The PHI was reduced from one week to two days for both apples and pears, to match that of EPA Reg. No. 5481-541 as the products are substantially similar. A PHI of two days is also allowed by the 2007 Revised Naphthaleneacetic Acid Reregistration Eligibility Decision (RED). A copy of the label, stamped "Accepted", is enclosed for your review.

If you have any questions concerning this letter, please contact Kaitlin Keller at 703-308-8172 or keller.kaitlin@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Tony Kish".

Tony Kish
Product Manager 22
Fungicides Branch
Registration Division (7504P)

Enclosure: Label stamped "Accepted"

**POMAXA™
Plant Growth Regulator**

Active Ingredient	
1-Naphthalene Acetic Acid, Sodium Salt*.....	3.5%
Other Ingredients.....	96.5%
Total.....	100.0%

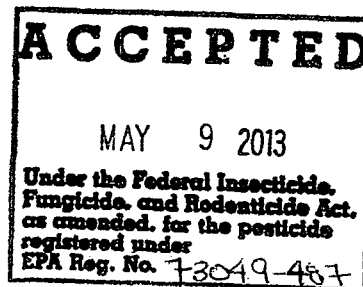
* Equivalent to 3.1% of 1-Naphthaleneacetic Acid (NAA).

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Registration No. 73049-487
EPA Establishment No. 33762-IA-001

Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048



Net Contents:

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • 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 in eyes	<ul style="list-style-type: none"> • 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 clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Harmful if absorbed through skin or eyes, swallowed or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist.

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.

Follow the 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 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, 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 washwaters. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when weather conditions favor drift from treated areas.

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 agency responsible for pesticide regulation. Do not apply this product through any type of irrigation system. Do not use in a greenhouse.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 (REI). 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 REI. **The REI is 48 hours.**

The 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 made of any waterproof material
- Shoes plus socks.

GENERAL INFORMATION

PoMaxa™ Plant Growth Regulator (hereafter referred to as PoMaxa™) contains 1-Naphthalene Acetic Acid, Sodium Salt, an auxin that mimics the natural plant growth regulator, 1-indoleacetic acid. PoMaxa™ is used in commercial fruit production for thinning to increase fruit size and quality, prevention of pre-harvest fruit drop and promoting return bloom on cultivars that are prone to alternate bearing. Fruit tree response to PoMaxa™ can vary in different years. Review previous year's product performance and consider factors such as cultivar, prevailing and anticipated climatic conditions, location, tree vigor, fruit set potential, pollination before choosing the rate and timing of application.

Importance of Spray Volume: Use sufficient water to ensure uniform spray coverage. Make ground applications in up to 500 gallons of water per acre. Make aerial applications in 5-20 gallons of water per acre. Consider the spray equipment, density of the foliage, tree spacing, coverage desired and spray pattern prior to choosing your spray volume. Consider variables in rate and application timing for each cultivar and orchard location prior to establishing the spray program. Consult your Valent Agricultural Specialist for specific recommendations for your particular orchard(s).

Product Compatibility: When diluted with the recommended amount of water, PoMaxa™ is physically compatible with a wide range of commonly used spray products. However, the full range of compatibility under local conditions must be established by the user. To do so, premix a small quantity of the desired tank mix and look for possible adverse

changes (e.g., settling out, flocculation, etc.). Do not spray if any adverse changes are observed. Avoid mixtures of several materials and very concentrated spray mixtures. Follow label precautions and limitations for all products used in any tank mix. Ensure that there is always proper agitation in the tank. To ensure crop safety, spray a small area to test for adverse effects prior to the general use of a tank mix combination that you have not previously used. Consult your local Valent Agricultural Specialist for local recommendations or when tank mixing any product you have not previously used with PoMaxa™

Drift Advisory: Do not apply PoMaxa™ when weather conditions are likely to cause spray drift onto non-target crops.

Maximum Use Rate Per Application: Do not exceed 54 fluid ounces (fl oz) of PoMaxa™ per acre per application.

Maximum Seasonal Application Rate: Do not exceed 161 fl oz of PoMaxa™ per acre per season. In California: Do not exceed 54 fl oz of PoMaxa™ per acre per season.

CHEMICAL THINNING OF APPLES

Rates: Tree response to PoMaxa™ application varies greatly by cultivar, weather before and after application, tree vigor, pollination, fruit set and fruitlet size at time of application. Previous orchard history and past thinner performance can help a grower determine the best spray program for that orchard. A typical rate for a moderate-to-thin apple cultivar in an orchard which requires 100 gallons of water per acre to achieve drip is 2 fl oz of PoMaxa™ per acre. For an acre requiring 200 gallons to achieve drip, use at least 4 fl oz per acre. Higher rates will be needed for more difficult-to-thin cultivars, large vigorous trees with high fruit set potential or when applications are made towards the end of the thinning window. Lower rates will be best for weaker trees with poor pollination and lower fruit set potential. See Table 1 for recommendations by cultivar. Use table 2 for help in preparing spray solutions based on Tree Row Volume (TRV).

Timing and Application Conditions: PoMaxa™ is applied from full bloom to 30 days after full bloom. PoMaxa™ applications are effective when temperatures are from 60F to 80F and when the king fruitlets are 5 to 10 mm in diameter. Applications will be most effective when made at temperatures from 70F to 75F and when the king fruitlets are 5 to 10 mm in diameter. Applications at temperatures below 60F can result in under-thinning. Applications made at temperatures above 85F can result in over-thinning. Slow drying conditions enhance efficacy. One application of PoMaxa™ is usually adequate for thinning. A second application can be made for additional thinning, but do not apply earlier than 7 days after the first application. Direct sprays to the top two-thirds of the tree canopy for optimal performance.

Note on Tank Mix Combinations: Tank mixtures of reduced-rate combinations of PoMaxa™ and products such as MaxCel® Plant Growth Regulator Solution or carbaryl

can enhance overall thinning response. Do not mix PoMaxa™ with any product having label restrictions against such mixing. Always apply in accordance with the limitations and precautions of the most restrictive label. Always test any tank-mix for efficacy, compatibility and phytotoxicity on a small-scale prior to applying on a large-scale.

Cultivar Sensitivity and Potential for Phytotoxicity: Some cultivars are sensitive to PoMaxa™. Exercise caution prior to large scale use. Exercise caution when considering applications of PoMaxa™ to trees younger than five years of age, as damage to the trees can occur. Misshapen fruit formation (e.g. “pygmy” fruit) or phytotoxicity can occur on some cultivars when applied at higher rates, when temperatures exceed 85°F or when applications are made when fruit size exceeds 15 mm. Exercise caution when using PoMaxa™ on ‘Delicious’ and ‘Fuji’ apples which are particularly susceptible to such effects. The incidence of “pygmy” fruit development may be increased in susceptible cultivars by combinations of PoMaxa™ with MaxCel or other 6-BA products. Consult your local Valent Agricultural Specialist for specific recommendations regarding tank mixes or combination thinning programs.

TABLE 1. PoMaxa™ rates^a for thinning apples (fl oz / 100 gal of Tree Row Volume (TRV)^b)

Cultivars	PoMaxa™ fl oz / 100 gal (TRV)	Typical Application Timing ^c
Easy-to-thin: 'Granny Smith', 'Braeburn', 'Pink Lady', 'Cortland', 'Delicious', 'Baldwin', 'Idared', 'Jonathan', 'Northern Spy', 'McIntosh', 'Red Delicious', 'Rome Beauty', 'Stayman', 'Rhode Island Greening', and others	0.5 – 3.0	Petal fall (3-7 mm fruit size) and/or early fruit set (8-10 mm fruit size).
Moderately difficult-to-thin: 'Gala', 'Golden Supreme', 'Honeycrisp', 'Cameo', 'Gingergold', 'Jerseymac', 'Rome', 'Jonagold', 'Empire', 'Oldenberg' ('Duchess'), 'Red Astrachan', 'Spartan', 'Mutsu' ('Crispin'), 'Yellow Transparent', 'Williams Early' and others	1.0 - 4.0	
Difficult-to-thin: 'Fuji', 'Golden Delicious', 'Jonamac', 'Lodi', 'Macoun', 'York', 'York Imperial', 'Yellow Newton', 'Paula Red', 'Early McIntosh', and others	1.5 - 4.0	

Notes:

^aRate ranges are intended as a general guide. Desired results may require higher or lower rates than listed in the table. When PoMaxa™ is used in combination with a non-ionic surfactant such as Regulaid® or in tank mix with another apple thinning product, reduce the application rate as appropriate.

^bTRV is the volume of water required per acre to achieve drip at the time of application. Consult your Valent Agricultural Specialist for assistance in calculating TRV.

^cThinning becomes increasingly difficult as fruit size increases. Adjust the rate of PoMaxa™ to obtain desired results. Application to fruit >15 mm may result in misshapen or “pygmy” fruit in sensitive cultivar.

PROMOTION OF NEXT SEASON RETURN BLOOM ON APPLE

PoMaxa™ promotes return bloom of:

- Biennial bearing cultivars during an “off year”
- Young trees that are slow to bear fruit
- Mature trees that are likely to produce only a limited number of blossoms in the following year.

PoMaxa™ enhances return bloom of certain apple cultivar such as: ‘Fuji’, ‘Jonagold’, ‘Mutsu’, ‘Braeburn’ and ‘Golden Delicious’.

Rate and Timing: Apply PoMaxa™ at 2 to 8 fl oz per acre six to eight weeks after petal fall. Apply in sufficient water to ensure thorough coverage based on tree row volume. Additional applications made at 7 to 14 day intervals at 2 to 8 fl oz per acre can improve results.

Caution: PoMaxa™ can result in early ripening, increased water core, or leaf drop in certain sensitive early summer cultivars such as ‘Early McIntosh’ even when applied at low rates. PoMaxa™ can affect fruit quality and tree vigor when applied at rates higher than 8 fl oz per acre.

CONTROL OF PRE-HARVEST DROP OF APPLES

Rate and Timing: PoMaxa™ reduces pre-harvest drop and losses from wind and mechanical knockdown when applied at 8 to 32 fl oz per acre. Apply PoMaxa™ within one to four weeks of anticipated harvest. Use cultivar type, climatic conditions and other factors in determining the rate and timing. For maximum effectiveness, apply PoMaxa™ only when orchard temperatures are 70F or higher. Treatments are effective within 1 to 3 days after application and can prevent fruit drop for up to two weeks depending upon use rates and environmental conditions. PoMaxa™ has been known to sometimes advance fruit maturity when used alone for pre-harvest drop control. Do not delay harvest beyond optimum fruit maturity. Improvement in fruit size and color can be expected in certain cultivars. Apply PoMaxa™ at weekly intervals as needed. Consult your Valent Agricultural Specialist for specific recommendations regarding rate and timing for your particular orchard(s). PoMaxa™ pre-harvest interval (PHI) is 2 days.

Application: Apply PoMaxa™ by ground or by air in sufficient water to ensure thorough coverage. Ground applications must be made in sufficient water to ensure adequate coverage to fully wet the canopy. Aerial applications must be made using at least 5 gallons of water per acre. Do not apply when weather conditions are likely to cause spray drift.

CHEMICAL THINNING OF PEARS

Rates: Tree response to PoMaxa™ applications varies greatly based on the cultivar, climatic factors before and after application, tree vigor, pollination, fruit set, fruit size and

previous orchard history. Good record keeping and evaluating use rates prior to large scale use can help a grower determine the best spray program for a particular orchard. A typical rate for thinning 'Bosc' or 'Bartlett' pears is 4 fl oz of PoMaxa™ per acre when applied in 100 gallons of water to achieve drip, or 8 fl oz when applied in 200 gallons to achieve drip (see Table-2 for use rates). Use higher rates for optimal thinning when applied late, or to large, vigorous trees with high fruit-set potential.

Timing and Application Conditions: PoMaxa™ can be applied from full bloom to 30 days after full bloom, but efficacy is optimal when applied 2 to 3 weeks after full bloom. One application for thinning is usually adequate. However, if additional thinning is desired, apply no earlier than 7 days after the first application. Applications are most effective when made between 70F and 75F. Applications are not recommended below 60F or above 80F.

Spray Advisory: Some cultivars of pears such as 'D' Anjou' are prone to over-thinning and under certain conditions are susceptible to the formation of "pygmy" fruit. Consult your Valent Agricultural Specialist for specific regional recommendations.

CONTROL OF PRE-HARVEST DROP ON PEARS

Rate and Timing: PoMaxa™ reduces pre-harvest drop of many pear cultivars when applied at 8 to 32 fl oz per acre. Response to PoMaxa™ varies by cultivar. Evaluate efficacy and post-harvest fruit quality on a small scale prior to applying on a large-scale. Apply higher rates for cultivars such as 'D' Anjou' and to large vigorous trees with high fruit-set potential. Apply lower rates on smaller, less vigorous trees with low fruit-set potential. Apply within one to four weeks prior to harvest. Treatments are effective within 1 to 3 days after application and can prevent fruit drop for up to two weeks depending upon use rates and environmental conditions. Fruit size is generally improved. Apply no more than twice per season for pre-harvest drop control. Do not delay harvest beyond optimum maturity. Pre-harvest interval (PHI) is 2 days.

Application: Apply by ground or by air in sufficient water to ensure thorough coverage. Apply aerially in at least 5 gallons of water per acre. Apply only when weather conditions are not likely to cause spray drift.

Table 2. PoMaxa™ Spray Preparation

Use listed fl oz of PoMaxa™ to prepare the desired final parts per million (ppm) of NAA^a for Tree Row Volume^b sprays in gallons per acre (gpa)

ppm NAA	TRV expressed as gallons per acre			
	100 gpa	200 gpa	300 gpa	400 gpa
	fl oz of PoMaxa™	fl oz of PoMaxa™	fl oz of PoMaxa™	fl oz of PoMaxa™
5	2	4	6	8
10	4	8	12	16
15	6	12	18	24
20	8	16	24	32

Notes:

^aBased on NAA acid equivalent

^bTRV is the volume of water required per acre to achieve drip at the time of application. Consult your state Cooperative Extension Service or a Valent Agricultural Specialist for assistance in calculating TRV.

STORAGE AND DISPOSAL

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

Pesticide Storage

Keep containers tightly closed when not in use.

Pesticide Disposal

Wastes resulting from the use of this product must 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 (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container ¼ full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

Warranty and Disclaimer

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

MaxCel® is a registered trademark of Valent BioSciences Corporation
Regulaid® is a registered trademark of KALO, Inc.