

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

August 12, 2019

Keeva Shultz Agent for Adjuvants Unlimited, LLC Adjuvants, LLC 3621 West 5<sup>th</sup> Street Tulsa, OK 74127

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Acceptable

Label Amendment to Update the Restricted Entry Interval (REI) from 12 to 24 hours.

Product Name: AP-8030

EPA Registration Number: 89402-1 Application Date: 07/30/2019 OPP Decision Number: 554085

Dear Ms. Shultz:

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

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false

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or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Alex Horansky by phone at (703) 347-0128 or via email at Horansky.alex@epa.gov.

Sincerely,

Gina Burnett, Senior Regulatory Advisor Biochemical Pesticides Branch

Biopesticides and Pollution Prevention Division (7511P)

NE

Office of Pesticide Programs

Enclosure

# ACCEPTED 08/12/2019 Under the Federal Insecticide, Fungicide

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 89402-1

AP-8030

# Nematicide and Fungicide\*

For Use in Nut Trees, Stone\*, Pome\*, Tropical\* and Citrus Fruits, Cucurbits\* and Melons\*, Vines (All Grapes), Strawberries, Cane Fruits\*, Blueberries\*, Carrots and other Vegetable Crops\*.

# **ACTIVE INGREDIENTS:**

Octanoic Acid	
Nonanoic Acid	
Decanoic Acid	
OTHER INGREDIENTS:	70.0%
TOTAL:	1 <del>00.0%</del>

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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 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.			
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.			
	Have person sip a glass of water if able to swallow.			
	Do not induce vomiting unless told to by a poison control center or doctor.			
	Do not give anything to an unconscious person.			
HOT LINE NUMBER				

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-hour medical emergency assistance (human or animal) call **1-800-222-1222**. For chemical emergency assistance (spill, leak, fire, or accident) call ChemTrec at **1-800-424-9300**.

EPA Reg. No.: 89402-1 EPA Est. No: XXXXX-XXX

Lot No.: xxxxxxx

Net Contents:

# Manufactured For [By]:

Adjuvants Unlimited, LLC 3633 Charles Page Boulevard Tulsa, OK 74127

Patents Pending

\*NOT REGISTERED FOR USE IN CALIFORNIA

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION/PRECAUCION

Causes substantial but temporary eye irritation. Avoid contact with skin. Do not get in eyes, on skin, or on clothing. Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. 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.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

# Applicators and other handlers must wear:

- Protective eyewear such as goggles, face shield, or safety glasses
- · Coveralls worn over short-sleeve shirt and short pants
- Socks and chemical resistant footwear
- Chemical resistant gloves
- When mixing and loading, wear a chemical resistant apron

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergents and hot water. Keep and wash PPE separately from other laundry.

# **USER SAFETY RECOMMENDATIONS**

### **Users Should:**

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

**For terrestrial uses only:** This pesticide is slightly toxic to fish and aquatic invertebrates. Use care when applying in areas adjacent to any body of water.

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 when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

# STORAGE AND HANDLING

**DO NOT** contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store container in cool place until used. Store at temperatures above 32°F. Avoid excessive heat during storage

**Pesticide Disposal:** Wastes resulting from use of this product must be disposed of on-site or at an approved waste disposal facility.

# **Container Disposal:**

**Non-refillable Containers:** Do not reuse or refill this container. Offer for recycling if available. Clean container immediately after emptying.

Non-refillable container equal to or less than 50 lbs. or 5 gals.: 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.

Non-refillable Container greater than 50 lbs. or 5-55 gals.: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Refillable Container (50 lbs. or larger): Refill this container with this pesticide only. Do not reuse this

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container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Dispose of in a sanitary landfill or by other procedures approved.

# **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.

# Shake well before using.

# 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, 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 24 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:

- Protective evewear
- Coveralls worn over short-sleeve shirt and short pants
- Boots plus socks
- Waterproof gloves

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

# PRODUCT USE INFORMATION

AP-8030 is a soil applied nematicide and fungicide\* based on naturally occurring fatty acids and derivatives. It can be applied with surface application followed by irrigation. Or, it can be applied directly into irrigation water using micro-irrigation (individual spaghetti tubes), drip, drip tape, or strip tubing. The amount of irrigation in the application should be sufficient to wet the soil to the root zone. This amount will vary according to crop and soil type. Do not use quantities exceeding the maximum recommendation per crop grouping. AP-8030 can be used in crops including Nut Trees, Stone, Pome\*, Tropical\* and Citrus Fruits, Cucurbits\* and Melons\*, Vines (All Grapes), Berries\*, and other Vegetables Crops\*. Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications of low doses are permitted during the growing season but total amount applied must not exceed the maximum allowed.

(\* Not registered for use in California)

# **Resistance Management**

Although resistance in nematode and fungal populations has not been shown for AP-8030, repeated use of a

single product may lead to a loss of efficacy over time. Contact your local Extension Specialist, certified crop advisor or sales representative for additional resistance management recommendations.

Apply AP-8030 as part of an Integrated Pest Management (IPM) program to control nematodes and fungi\*. Proper cultural practices such as field sanitation, scouting, planting of resistant rootstocks and cultivars, proper pest identification and rotation of pesticides with different modes of action will help prevent development of resistance to AP-8030 and minimize economic levels of pest damage.

### **Pests Controlled**

AP-8030 controls several different species of nematodes and fungi\* as a soil applied application. This list includes, but is not limited to the following:

- Root Knot, Lesion\*, Citrus and Ring\* nematode species
- Armillaria\*, Verticillium\*, Fusarium\*, Phytophthora\*, and Macrophomina\* fungus species (\* Not registered for use in California)

AP-8030 controls nematodes and fungi\* present in the soil only at the time of application. It will not control pests introduced into the soil after application (re-infestation). A single application of AP-8030 will not provide season long control and does not guarantee a pest free crop at harvest.

Follow all label directions when using AP-8030. To ensure uniform application, soil must have adequate moisture for even distribution or sufficient water must be applied after surface application. To ensure proper application and incorporation apply to smoothed soil surfaces free of clods, weeds and crop residues. If these conditions are not met, loss of control or crop injury may occur. Contact your Extension Specialist, Certified Crop Advisor or Adjuvants Unlimited, LLC sales representative.

# \*DO NOT APPLY AP-8030 VIA ANY TYPE OF AERIAL APPLICATION.

# MIXING INSTRUCTIONS

IMPORTANT: Do not mix with any other pesticide, adjuvant, penetrator, foliar nutrients, chelating agents (such as EDTA) or fertilizer, unless prior testing proves compatibility and efficacy of the combination(s).

Be sure sufficient agitation is present to properly mix the spray solution.

Fill tank ½ with water, add AP-8030 and finish filling to desired volume. Continue agitation at frequent intervals or continuously.

# **Application Through Irrigation Systems (Chemigation)**

Apply AP-8030 alone (no additional products applied with AP-8030) through irrigation systems. Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, drip tape or microspray irrigation. **Do not apply through any other type of irrigation system. Avoid any application to plant foliage.** Lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about calibration, contact your State Extension Service specialist, equipment manufacturer or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

### Using Water from Public Water Systems

 Do not apply AP-8030 through any irrigation system physically connected to a public water system.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. AP-8030 may be applied through irrigation systems that are supplied by a public water system, but only if the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before

beginning chemigation, always make sure that the air gap exists and there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements.

# **Operating Instructions for All Recommended Types of Irrigation Systems**

- 1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact your State Extension Service specialist, equipment manufacturer or other experts.
- 2. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 6. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 7. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

# **APPLICATION INSTRUCTIONS**

The broadcast spray rate of AP-8030 is 15 to 45 gallons per acre per year (total) depending on soil type, disease\* and nematode pressure, cultural practices (including bed width and spray band width) and methods used to form planting beds. Apply in a single application or preferably split into multiple applications as needed. **Do not apply more than 45 gallons broadcast equivalent of AP-8030 per acre per year.** All instructions below are based on these use rates, but adjusted for banded sprays and irrigated bands. (\* AP-8030 Not registered for this use in California)

# **Banded Spray Applications**

# **Newly Transplanted Trees (All Soil Types)**

Make applications of AP-8030 two to three weeks before transplanting. Follow application with appropriate irrigation to move product into root zone. Refer to Table 1 for use rates. Make an application before leaf drop in the autumn of the planting year, using either broadcast spray or irrigation application (see Irrigation Instruction section). Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications are permitted during the growing season, but total amount applied must not exceed the maximum allowed.

# Nut Trees, Stone\* and Pome\* Fruit, and Citrus Trees (One Year Old Minimum)

(\* Not registered for use in California)

AP-8030 can be applied throughout the year; multiple applications are recommended during the growing season at a minimum interval of 21 days, but total amount applied must not exceed the maximum allowed. Refer to Table 1 for use rates. Do not exceed a total application of 45 gallons broadcast equivalent per acre per year.

Make applications to overlap spray on row middles to form the band. For example, to apply a 6 foot band, spray on 3 feet to either side of the row middle, where the trees are centered. Spray entire length of row. Apply using a minimum of 20 gallons per 1,000 linear row feet spray volume.

Apply by banded spray - Use rates shown in Table 1.

As soon as practicable after spraying, incorporate using 0.25 to 1.0 acre inches of water using overhead (solid set or microspray irrigation). Amount of applied water will depend on soil type. Observe caution to not incorporate deeper than 12 inches. **DO NOT DELAY INCORPORATION.** 

TABLE 1. Use rates for nut trees, stone\* and pome\* fruit, and citrus trees

Use Rate	Spray Band Width						
(Broadcast)	4 ft.	6 ft.	8 ft.				
	Quarts of	Quarts of AP-8030 per 1,000 Linear Feet of Row					
5 gpa (minimum of 4 applications recommended	2	2.7	3.7				
7.5 gpa (minimum of 3 applications recommended)	3	4	5.5				
15 gpa (minimum of 2 applications recommended)	6	8	11				
30 gpa	12	16	22				
45 gpa maximum rate	18	24	33				

Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications are recommended during the growing season but total amount applied must not exceed the maximum allowed. AP-8030 can be applied throughout the year, apply before bud break and after harvest, but before leaf drop.

# Newly Transplanted Grape Vines (All Types), Cane Fruit\*, and Blueberries\* (All Soil Types)

Apply AP-8030 two to three weeks before transplanting. Follow application with appropriate irrigation to move product into root zone. Refer to Table 2 for use rates. An application is recommended before leaf drop in the autumn of the planting year, using either broadcast spray or irrigation application (see Irrigation Instructions) section. Do not exceed a total of 45 gallons broadcast equivalent per acre per year. Multiple applications are recommended during the growing season, but total amount applied must not exceed the maximum allowed.

# Grape Vines (All Types), Cane Fruit\*, and Blueberries\* (One Year Old Minimum) (\* Not registered for use in California)

AP-8030 can be applied throughout the year; multiple applications are recommended during the growing season at a minimum interval of 21 days, but total amount applied must not exceed the maximum allowed. Refer to Table 2 for use rates. Do not exceed a total application of 45 gallons broadcast equivalent per acre per year.

Make applications to overlap spray on row middles to form the band. For example, to apply a 2 foot band, spray on 1 foot to either side of the row middle, where the vines, canes or bushes are centered. Spray entire length of row. Apply using a minimum of 20 gallons per 1,000 linear row feet spray volume.

# Apply by banded spray - Use rates shown in Table 2.

As soon as practical after spraying, incorporate using 0.25 to 1.0 acre inches of water using overhead (solid set or microspray irrigation) or drip irrigation. Amount of applied water will depend on soil type. Observe caution to not incorporate deeper than 12 inches. **DO NOT DELAY INCORPORATION.** 

TABLE 2. Use rates for newly planted and established grape vines (all types), cane fruit\*, and

**blueberries\*** (\* Not registered for use in California)

Use Rate	Spray Band Width					
(Broadcast)	1 ft. 2 ft. 3 ft.					
	Quarts of AP-8030 per 1,000 Linear Feet of Row					

<sup>(\*</sup> Not registered for use in California)

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5 gpa (minimum of 4 applications recommended)	0.5	1	1.5
7.5 gpa (minimum of 3 applications recommended)	0.75	1.5	2.3
15 gpa (minimum of 2 applications recommended)	1.5	3	4.5
30 gpa	3	6	9
45 gpa Maximum Rate*	4.5	9	13.5

Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications are recommended during the growing season but total amount applied must not exceed the maximum allowed. AP-8030 can be applied throughout the year, apply before bud break and after harvest, but before leaf drop.

# Strawberries, Melons\*, Cucurbits\*, and other Vegetables\* (Transplant Only)

(\* Not registered for use in California)

Prepare beds in normal grower fashion. Spray AP-8030 on top of shaped beds such that complete width of bed is covered. Immediately incorporate with power tiller into top four (4) inches of bed, place drip tape and plastic mulch. Pre-water beds with only enough water that soil is wet no more than 12 inches deep. Transplant after 7 days or longer as soil moisture allows.

**Apply by broadcast spray prior to planting only-** 15 to 45 gallons per acre\*. Do not broadcast spray on growing crops. Product may be applied via irrigation, see **Chemigation** section below. \*Do not exceed a total application of 45 gallons broadcast equivalent per acre per year.

# Restriction:

Do not use AP-8030 on direct seeded crops, until crop is emerged and established.

# Chemigation

Read all instructions above on maintenance and calibration of irrigations systems.

The amount of product required for a drip application will vary with the width of the bed (in strawberries, cucurbits\*, melons\*, or other vegetables\*) or treated zone (in trees and vines), row length and wetting front of the application. For all applications, assume the wetting front is equal to the bed width or treated zone.

The amount of water needed for an application will depend on several factors including initial soil moisture level, soil texture, % organic matter and the calibration and placement of the drip emitters within the bed and the emitter spacing. Allow enough time for the system to become fully charged, then apply AP-8030. It is preferable that some water be applied before injecting AP-8030, to avoid application to dry soil. After injection, complete cycle to incorporate AP-8030 to no greater than 12-inch depth. Resume normal irrigation cycles for trees and vines as needed, and after transplanting all other crops.

# Nut Trees, Stone\* and Pome\* Fruit, and Citrus Trees

(\* Not registered for use in California)

For newly transplanted trees, apply AP-8030 two to three weeks prior to spring planting or two to three weeks prior to bud break on established trees. Subsequent applications are permitted before leaf drop in the autumn. Irrigate a band of 4-8 feet square per tree (16 to 64 square feet per tree) with smaller treatment areas for young trees and larger areas for mature trees. Incorporate AP-8030 to 12-inch depth in the irrigated area. Treated area is affected by size of tree, emitter placement and water volume applied. Treat by drip irrigation only or as a supplement to broadcast treated banded application in transplanted trees.

Apply via drip or microspray irrigation. Apply AP-8030 two to three weeks before transplanting.

Apply to an area of approximately 4' X 4'. Follow application with appropriate irrigation to incorporate AP-8030 to 12 inch depth in the irrigated area. Refer to Table 4 for use rates. Make an application (recommended) before leaf drop in the autumn of the planting year, using either drip or microspray irrigation. Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications during the growing season are recommended with a minimum of 21 days between applications, but total amount applied must not exceed the maximum allowed.

# Established Nut Trees, Stone\* and Pome\* Fruit, and Citrus Trees

(\* Not registered for use in California)

Apply via drip or microspray irrigation. Apply up to an area of approximately 8' X 8'. Follow application with appropriate irrigation to incorporate AP-8030 to 12-inch depth in the irrigated area. Refer to Table 4 for use rates. Make an application (recommended) before leaf drop in the autumn, using either drip or microspray irrigation application. Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications during the growing season are recommended with a minimum of 21 days between applications, but total amount applied must not exceed the maximum allowed.

**Apply via drip or microspray irrigation (See section on irrigation system requirements) -** See Table 3 for application rates.

### Restriction:

• Do not exceed a total application of 45 gallons broadcast equivalent per acre per year.

TABLE 3. APPLICATION RATE CALCULATION FOR DRIP IRRIGATION on nut trees, stone\* and pome\* fruit, and citrus trees (\* Not registered for use in California)

		Quarts of AP-8030 per 100 Trees				
Dimension of Treated Zone	Area Treated per Tree (Sq. Feet)	7.5 gpa Minimum of 2 applications	15 gpa Up to 3 applications	30 gpa 1 application only	45 gpa, 1 application only, Maximum Rate*	
4 X 4	16	1	2	4	6	
5 X 5	25	1.7	3.5	7	10.5	
6 X 6	36	2.5	5	10	15	
7 X 7	49	3.5	7	14	21	
8 X 8	64	4.5	9	18	27	

Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications are recommended during the growing season but total amount applied must not exceed the maximum allowed. AP-8030 can be applied throughout the year, apply before bud break and after harvest, but before leaf drop. See specific directions for newly transplanted vines and trees.

# Newly Transplanted Grape Vines (All Types), Cane Fruit\*, and Blueberries\* (All Soil Types)

(\* Not registered for use in California)

Apply via drip or microspray irrigation. Apply AP-8030 two to three weeks before transplanting. Irrigate a band of 1 to 3 feet wide along the whole row. Incorporate AP-8030 to 12-inch depth in the irrigated area. Follow application with appropriate irrigation to move product into root zone. Refer to Table 4 for use rates. Make a second application before leaf drop in the autumn of the planting year, using either broadcast spray or irrigation application (see Irrigation Instruction section). Do not exceed a total application of 45 gallons

broadcast equivalent per acre per year. Multiple applications during the growing season are recommended, with a minimum of 21 days between applications, but total amount applied must not exceed the maximum allowed.

# Established Grape Vines (All Types), Cane Fruit\*, and Blueberries\*

(\* Not registered for use in California)

Apply via drip or microspray irrigation. Irrigate a band of 1 to 3 feet wide along the whole row. Incorporate AP-8030 to 12-inch depth in the irrigated area. Refer to Table 4 for use rates. Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications during the growing season are

recommended, with a minimum of 21 days between applications, but total amount applied must not exceed the maximum allowed.

For drip irrigation and microspray irrigation, AP-8030 can be added directly to the irrigation systems (subject to restrictions in general irrigation section) and applied with sufficient water and duration to fully wet the width of the band or treated area to a depth of no greater than 12 inches.

**Apply via drip or microspray irrigation (See section on irrigation system requirements) -** See Table 4 for application rates.

TABLE 4. APPLICATION RATE CALCULATION FOR DRIP IRRIGATION on grape vines (all types), cane fruit\*, and blueberries\* (\* Not registered for use in California)

Use Rate	Irrigated Band Width				
(Broadcast)	1 ft.	3 ft.			
	Quarts of AP-8030 per 1,000 Linear Feet of Row				
7.5 gpa Minimum 2 applications	0.75	1.5	2.25		
15 gpa Maximum 3 applications	1.5	3	4.5		
30 gpa Maximum 1 application	3	6	9		
45 gpa Maximum 1 application	4.5	9	13.5		

'Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications are recommended during the growing season but total amount applied must not exceed the maximum allowed. AP-8030 can be applied throughout the year, apply before bud break and after harvest, but before leaf drop.

# Strawberries, Melons\*, Cucurbits\*, and other Vegetables\* (Transplant Only)

(\* Not registered for use in California)

Since annual crops can be more sensitive to crop injury, Table 5 allows for multiple applications at lower use rates during growing season. Treat by drip irrigation only or as a sequential application to pre-plant broadcast treated beds

- For use on established beds with already transplanted or established seeded crops.
- Irrigate a band equal to the width of the bed along the whole row. Incorporate AP-8030 to 12-inch depth in the irrigated area.
- Treated area is affected by size of plant, emitter placement and water volume applied.

The amount of water needed for an application will depend on several factors including initial soil moisture level, soil texture, % organic matter and the calibration and placement of the drip emitters within the bed and the emitter spacing. Allow enough time for the system to become fully charged, then apply AP-8030. Timing of injection of AP-8030 depends on several factors including soil type, emitter placement and soil moisture. It is preferable that some water be applied before injecting AP-8030, to avoid application to dry soil. After injection, complete cycle to incorporate AP-8030 to no greater than 12 inch depth. Resume normal irrigation cycles for trees and vines as needed, and after transplanting all other crops.

**Apply by drip irrigation only** - Use rates shown in Table 5.

# **Restrictions:**

- Do not use AP-8030 on direct seeded crops (including carrots) prior to emergence. After stand establishment is completed, AP-8030 may be applied as directed in table 5.
- Do not apply to plant foliage. Only apply to soil using drip application.
- Do not exceed a total application of 45 gallons broadcast equivalent per acre per year.
- For strawberries, best results are achieved with multiple applications over the growing season, including at least once during fruit picking period.

TABLE 5. APPLICATION RATE CALCULATION FOR DRIP IRRIGATION on strawberries, carrots, melons\*, cucurbits\*, and other vegetables\* - transplant or established direct seeded crops. (\* Not

registered for use in California)

Use Rate	Irrigated Band Width					
(Broadcast)	1 ft.	2 ft.	3 ft.	4 ft.	5 ft.	6 ft.
		Quarts of A	P-8030 per 1,0	000 Linear Fee	et of Row	
7.5 gpa minimum 2 applications	1	2	3	4	5	6
15 gpa maximum of 3 applications	1.5	3	4.5	6	7.5	9
30 gpa maximum 1 application	3	6	9	12	15	18
45 gpa maximum 1 application	4.5	9	13.5	18	22.5	27

\*Do not exceed a total application of 45 gallons broadcast equivalent per acre per year. Multiple applications are recommended during the growing season but total amount applied must not exceed the maximum allowed. AP-8030 can be applied throughout the year but for best results apply pre-plant and repeat applications at minimum 21 day intervals.

# DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY

IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

RISKS OF USING THIS PRODUCT

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control Adjuvants Unlimited, LLC. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE FULLEST EXTENT ALLOWED BY LAW, AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER. Adjuvants Unlimited, LLC shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner or under conditions not specifically directed or approved on the label. LIMITED WARRANTY

Adjuvants Unlimited, LLC warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label **and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, ADJUVANTS UNLIMITED, LLC MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Adjuvants Unlimited, LLC or Seller is authorized to make or create any other express or implied warranty.

## LIMITATION OF LIABILITY

To the fullest extent allowed by law, Adjuvants Unlimited, LLC or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages.

TO THE FULLEST EXTENT ALLOWED BY LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING, CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHER WISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF ADJUVANTS UNLIMITED, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

#### PROMPT NOTICE OF CLAIM

To the extent consistent with applicable law allowing such requirements Adjuvants Unlimited, LLC must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from date of application, whichever is later, so that an immediate inspection of the affected property and growing crops can be made. To the extent consistent with applicable law if Buyer does not notify Adjuvants Unlimited, LLC of any claims, in such period, it shall be barred from obtaining any remedy.

NO AMENDMENTS

Adjuvants Unlimited, LLC and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.