

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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MAR 11 2009

Mr. Bill Washburn Regulatory Manager Arysta LifeScience North America LLC 15401 Weston Parkway, suite 150 Cary, NC 27513

Subject: Notification(s) for Label Revisions under PRN 98-10 and PRN 2007-4

Dear Mr. Washburn

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notices (PRN) 98-10 and 2007-4 dated, January 28, 2009 for:

EPA Registration 66330-346

Pix® Concentrate Plant Regulator

The Registration Division (RD) has conducted a review of the request(s) for applicability under PRN 98-10 and PRN 2007-4 and finds that the label changes requested fall within the scope of PRN-98-10 and PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Joyce Edwards of my staff at 703-308-5479.

Sincerely,

Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)

Office of Pesticide Programs

Form Approved, OMB No. 2070-0060, Approval expires 05 Please read instructions on reverse before completing form. **United States OPP Identifier Number** ☐ Registration **Environmental Protection Agency** ☐ Amendment Washington, DC 20460 **⊠** Other: Application for Pesticide - Section I 1. Company/Product Number 2. EPA Product Manager Proposed Classification 66330-346 **TONY KISH** 4. Company/Product (Name) PM# None Restricted PIX® CONCENTRATE PLANT REGULATOR 22 5. Name and Address of Applicant (Include ZIP Code) 6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(l), my product is similar or identical in composition and labeling NOTIFICATION Arvsta LifeScience North America, LLC 15401 Weston Parkway, Suite 150 EPA Reg. No. _____ Carv. NC 27513 Product Name Check if this is a new address Section - II Final printed labels in response to Agency letter dated Amendment - Explain below. Resubmission in response to Agency letter dated "Me Too" Application Notification - Explain below. Other - Explain below Explanation: Use additional page(s) if necessary. (For Section I and Section II.) Notification of label change per PR Notice 2007-4. This notification is consistent with guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140. 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 USC Sec 1001 to willfully make any false statement to EPA. I further understand that if the amendment is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA. Notification of label change per PR Notice 98-10. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 USC Sec 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA. Section - III 1. Material This Product Will Be Packaged In: Unit Packaging Water Soluble Packaging Type of Container Child-Resistant Packaging Yes Yes* Yes Metal Νo X No No Plastic If "Yes" No. per If "Yes" No. per Glass Unit Packaging wgt. container Package wgt. container *Certification must Paper be submitted Other (Specify) 3. Location of Net Contents Information 4. Size(s) Retail Container Location of Label Directions On Label | Label Container 1.0 gal., 2.5 gal, 5.0 gal and Bulk On labeling accompanying product 6. Manner in Which Label is Affixed to Product Lithograph Other Paper glued Stenciled Section - IV 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application of individual to be contacted, if necessary, to process this application of individual to be contacted. Name Telephone No. (ไก้ร!ude Area Code) Bill Washburn Regulatory Manager 901-432-5118 6. Date Application Certification Received I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I 👸 acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both ે (Stamped) under applicable law. 2. Signature

Regulatory Manager

5. Date

01/28/09

Bill Washburn

4. Typed Name

Biel Woohlung



January 28, 2009

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Mr. Tony Kish, PM 22
Document Processing Desk (NOTIF)
Office of Pesticide Programs – 7504P
U.S. Environmental Protection Agency
One Potomac Yard, Room S-4900
2777 South Crystal Drive
Arlington, VA 22202

Subject:

PIX® CONCENTRATE PLANT REGULATOR

EPA Reg. No. 66330-346

Notification of Label Change per PR Notice 2007-4

and PR Notice 98-10

Dear Mr. Kish:

Please find the following enclosed:

- Application for Pesticide Registration (Other) dated 01/28/09.
- One highlighted copy of subject label, showing all changes.
- One clean copy of the subject label.

Notification of label change per PR Notice 2007-4. This notification is consistent with guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140. 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 USC Sec 1001 to willfully make any false statement to EPA. I further understand that if the amendment is not consistent with the requirements of 40 CFR §§ 156.10, 156.140. 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Also in this submission, we are using PR Notice 98-10 to update the name of the company, emergency telephone numbers and warranty. Arysta LifeScience North America Corporation was changed to Arysta LifeScience North America, LLC.

Please acknowledge acceptance of this notification by stamping the extra copy of this letter and returning in the enclosed self-addressed stamped envelope. Should you have any questions or comments, please do not hesitate to contact me at 901-432-5118 or by e-mail at bill.washburn@arystalifescience.com

Sincerely,

Bill Washburn

Regulatory Manager

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Arysta LifeScience North America, LLC 15401 Weston Parkway, Suite 150, Cary, NC 27513 Phone 919-678-4900 Fax 919-678-2194 www.arystalifescience.com

PR Notice 2007-4

4/17

NOTIFICATION

MAR 1 2 2009

Pix ® Concentrate Plant Regulator

For use in cotton

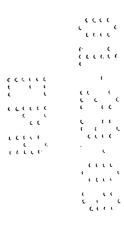
| Active Ingredient: | |
|--|--------------------------|
| Mepiquat Chloride: N,N-dimethylpiperidi | nium chloride23.6% |
| Inert Ingredients: | <u>76.4%</u> |
| Total | 100.0% |
| *Equivalent to 2.0 pounds of active ingred | dient per gallon. |
| EPA Registration Number 66330-346 | EPA Establishment Number |

KEEP OUT OF REACH OF CHILDREN CAUTION

See inside booklet for complete Precautionary Statements, Statement of Practical Treatment, Direction For Use, and Conditions of Sale and Warranty.

| Net | contents: | |
|-----|-----------|--|
| | | |

Manufactured for: ARYSTA LIFESCIENCE NORTH AMERICA, LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513



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 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 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 month to an unconscious person.

If on skin or clothing:

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.

HOT LINE NUMBER

EMERGENCY TELEPHONE NUMBERS: Have the product container or label with you when calling a poison control center or doctor or going for treatment.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call

CHEMTREC 1-800-424-9300

Precautionary Statements

Hazards to Humans and Domestic Animals

Caution: Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistant category selection chart.

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethelene or polyvinyl chloride
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If he such instructions for washables, use detergent and hot water. Keep and was PPE separately from other laundry.

Engineering Controls Statement

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

User should:

- Wash hands 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, 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 washwaters.

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 thought 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.

All applicable directions, restrictions, precautions, and Conditions of Sale and Warranty are to be followed. This labeling must be in the user's possession during application.



Agricultural Use Requirements

Use his 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 the 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) for 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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Storage and Disposal

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

Pesticide Storage: Do not store below 32oF or above 100oF. Store in a dry place away from heat or open flame.

Pesticide Disposal: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or reinstate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Plastic Containers: Triple rinse container (or equivalent) promptly after emptying. Containers less than or equal to 5 gallons: 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. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Containers greater than 5 gallons: 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 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 is 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. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable containers: Refill this container with pesticide only. Do not reuse this 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 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.

I. General Information

Pix® Concentrate plant regulator is a foliar applied plant regulator that modifies the cotton plant in several beneficial ways. It is the only such compound that allows the grower to manage the cotton plant for short-season production leading to reduced risk of harvest. The use of Pix Concentrate will also result in several or all of the following:

- Height reduction and more open canopy
- Better early boll retention and/or larger bolls
- Less boll rot
- Improved defoliation
- Reduced trash and lower ginning cost

Most of these effects often favorably influence the yield potential of the cotton plant. The purple color of Pix Concentrate may fade under some conditions; however, effectiveness is not related to color of spray solution or the color of **Pix Concentrate Spray Coverage**

Under most circumstances, water is the recommended diluent, however oil is permitted in the following states low volume (ULA) aerial applications: Alabama, Arkansas, Florida, Georgia, Louisiana, Missouri, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas. Refer to Air and Ground Application sections for spray volumes. Regardless of method or gallonage of application, through coverage of the cotton foliage is required.

Cleaning Application Equipment

Clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product, particularly if a product with no potential to injure crops was used.

II. Application Instructions

Early Application

On both short-staple and Pima cotton, the grower has the option of low-rate multiple applications (see Table 1) or higher, less frequent dosages (see Table 2) which greatly

facilities his management flexibility. The multiple application option gives the producer the ability to discontinue usage of **Pix Concentrate** if any significant stresses occur after an earlier application. In such case, the total quantity of **Pix Concentrate** used over a season may be reduced. If stress is relieved, the grower has the option of continuing treatments with **Pix Concentrate**. In addition, the rate and timing ranges indicated in the **Application Rates and Timings Tables** allow the grower to tailor his usage of **Pix Concentrate** to the degree of vegetative vigor in a given field. In areas where insecticides, miticides, or foliar fertilizers are frequently applied, the timings are such that tank mixing is often possible. (see section **VII. General Restrictions and Limitations**) Fields should be carefully scouted and **Pix Concentrate** should not be applied if plants are under severe stress from weather factors, mite, insect or nematode damage, disease stress, herbicide injury, or fertility stress.

In the absence of these stresses, up to 5 low-rate multiple applications can be made each season. After the first application (at matched square in the absence of stress), the rate and timing of subsequent applications will depend on vegetative vigor. Under good growing conditions, additional treatments should be made at 7-14 day intervals. However, if new growth at any time is excessive, higher rates of **Pix Concentrate** can be used.

If significant lass of squares or young bolls has occurred earlier due to insect pressure or other stresses, but now these stresses have been alleviated, the need for **Pix Concentrate** is increased – excess vegetative growth is likely because of poor fruit load.

Late Season Application

Late application of Pix Concentrate (approximately during the fourth to sixth week of blooming) can provide certain benefits to cotton. However, it should not and does not substitute for early season use – the time of the greatest benefit from the use of **Pix Concentrate**. Late season application can lead to one or more of the following:

- Reduction in late season vegetative growth or regrowth after cutout or defoliation
- More complete and manageable cutout
- Better defoliation
- Earlier maturity
- Reduction in trash
- Lower ginning cost

Some of these effects may favorably influence the yield potential and fiber quality. A late season application of **Pix Concentrate** should be applied only if fields are not drought or nutrient stressed; that is, those fields likely to experience additional vegetative growth or regrowth. However, fields that are very rank and extremely vigorous due to a combination or poor boll load and excellent growing conditions may not respond as much as desired to late season applications at the suggested rates.

Timing for Late Season Application

On fields where cotton cuts out and then starts regrowth: Apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This application time if often, but not always, 5-6 weeks after the first bloom.

On fields where cotton never completely cuts out: Apply Pix Concentrate when there are 4-6 nodes above the white flower (NAWF). Measure NAWF by counting the number

of mainstem nodes from the first position white bloom (the one closest to the mainstem) to the terminal. Count the nodes with the first position white bloom as zero and the last node in the terminal, which is counted, should have a leaf at least the size of a quarter. Generally, the NAWF first reaches 4-6 nodes during the fourth to sixth week of bloom. During this time, the NAWF should be decreasing about one node every 5-6 days – if its rate of decrease is less, the plant is not cutting out soon enough (the crop is too vigorous). If the fifth week of bloom arrives and NAWF is still above 5-6, apply **Pix Concentrate**.

Use Rate for Late Season Application

Apply 1.4-4.2 fluid ounces of Pix Concentrate per acre. Use the lower rate on cotton with only moderate additional growth potential, and the higher rate on fields likely to continue vigorous growth.

Air Application Spray Volume

Water as Diluent: Use a minimum of 2 gallons of water per acre in all states except California. In California, use a minimum of 5 gallons per acre.

Oil as Diluent: Use a minimum of 1 quart of oil per acre. When using oil as a diluent, the oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- Be nonphytotoxic
- Contain only EPA-exempt ingredients
- Provide good mixing quality in the jar test
- Be successful in local experience

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. If the oil does not contain an emulsifier, one must be added during mixing at a volume equal to 3% of the final volume of the mixing tank. Do not apply Pix Concentrate ULA without using emulsifiers. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see Compatibility Test for Mix Components

Arial Application Methods and Equipment Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry using dry formulations.

- 1. The distance for the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees. Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the publication titled <u>A Summary of Aerial Application</u> Studies by the Spray Drift Task Force.

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversion section of this label).

Controlling Droplet Size

Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Use a minimum of 5 gallons of water per acre. Increase water volume to at least 10 gallons of water per acre if grass foliage or crop canopy is dense.

Pressure – Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzle instead of increasing pressure. Use up to 40 psi. **Number of nozzles** – Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation: Orienting nozzles so that the spray is released backward, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type – Use a nozzle that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types. Use only diaphragm-type nozzles that produce fan spray patterns.

Boom length- For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application – Applications should be made at a height greater than 10 feet above the top of the largest plants. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a cross wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Do not apply Pix Concentrate by aircraft when wind is blowing more 10 mph. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Temperature and Humidity

When making application in low relative humidity, set equipment up to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicated good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) minimal (e.g. when wind is blowing away from the sensitive areas). Do not apply Pix Concentrate by air if sensitive species are within 200 feet downwind.

Ground Application

Spray Volume

Water as Diluent: Use 2 gallons of Spray solution per acre in all states except California. In California use a minimum of 5 gallons per acre.

Table 1. Application rates and Timing: Low Rate Multiple Applications
The times and rates of application have been carefully researched and the Directions For
Use should be observed as specified below. See section VI. General Restrictions and
Limitations.

| Geographic Area | Time of Application | Fields with Moderate Vegetative Vigor; Rate Per Acre | Fields with High Vegetative Vigor; Rate Per Acre |
|--|--|--|--|
| Al, AR, AZ, CA, FL, GA, LA, MO, MS, NC, NM, OK, | First Application: Optimal results Hill be achieved when plants are in the matchhead square stage of growth. | 0.35 fluid ounces | 0.70 fluid ounces |
| SC, TN, TX, VA | Second application: 7-14 days later, or when regrowth occurs | 0.35 fluid ounces ² | 0.70 fluid ounces ² |
| | Third application: 7-14 days later, or when regrowth occurs | 0.35-0.70 fluid ounces ² | 0.70-1.4 fluid ounces ² |
| | Fourth Application: | 0.35-1.4 fluid ounces ² | 0.70-2.1 fluid ounces ² |

| 7-14 days later, or when regrowth occurs Fifth application (if needed): 7-14 days later, or when regrowth | 0.70-1.4 fluid ounces ² | 0.70-2.1 fluid ounces ² |
|--|------------------------------------|------------------------------------|
| occurs Late Season: Refer to Late Season Application of Pix® Concentrate | 1.4-2.8 fluid ounces ² | 2.1-4.2 fluid ounces ² |

¹ Matchhead square is when the first square of a typical cotton plant is 1/8 - ¼ inches in diameter. The first application should be applied when 50% of the plants have one or more matchhead squares.

Table 2. Application Rates and Timing

The times and rates of application have been carefully researched and section II.

Application Instruction should be observed as specified below. See section VI. General Restrictions and Limitations.

| Geographic | | Rate Per |
|--|---|-------------------------|
| Area | Time of Application | Acre |
| AL, AR, AZ, CA, FL, GA, LA, MO, MS, NM, NC, SC, TN, VA | First Application: Apply Pix Concentrate to actively growing cotton that is 20-30" tall, provided cotton is not more than 7 days beyond early bloom stage (5-6 blooms 25 row). If cotton is 24" tall and has no blooms, apply Pix Concentrate. Use 1.4 fluid ounces per acre on cotton where excessive vegetative growth is not likely to be a problem, and 2.8 fluid ounces per acre in areas tending to have excessive vegetative growth. | 1.4-2.8 fluid ounces |
| | Second application for control of excessive vegetative growth: If the cotton field has a history of vigorous growth or if conditions after the first application of Pix Concentrate favor vigorous growth, make a second application 2-3 weeks after the first application. | 1.4-2.8 fluid ounces |
| | Third application for control of excessive vegetative growth: If the cotton field has a history of vigorous growth or if conditions continue to favor vigorous growth, make a third application 1-2 weeks after the second application. | 1.4-2.8 fluid ounces |
| | Late Season application: Refer to Late Season Application in section II. Application Instructions. | 1.4-4.2 fluid ounces |
| OK, TX (except Rio Grande Valley) | Area where excessive vegetative growth is not a problem First application: Apply Pix Concentrate to actively growing cotton in the early bloom stage (5-6 blooms per 25 row feet). If no blooms are present and the cotton is 20" tall and actively growing, apply Pix Concentrate. | 1.4 fluid ounces |
| | Second application: If conditions after the first application of Pix Concentrate favor vigorous growth, make a second application 2-3 weeks after the first application. | 1.4 fluid ounces |
| | Third application: If conditions after the second application of Pix Concentrate continue to favor vigorous growth, make a third application 1-2 weeks after the second application. | 1.4 fluid ounces |
| | Late Season application: Refer to Late Season Application in section II. Application Instructions. | 1.4-4.2 fluid ounces |

²Use higher rates if previous application was not made or if growing conditions are conducive to vigorous growth.

| OK, TX (including Rio Grande Valley) | Areas where excessive vegetative growth is a problem First Application: Apply Pix Concentrate to actively growing cotton that is 20-30" tall, provided cotton is not more than 7 days beyond early bloom stage (5-6 blooms 25 row). If cotton is 24" tall and has no blooms, apply Pix Concentrate. | 1.4 fluid ounces |
|---|---|----------------------|
| | Second application for control of excessive vegetative growth: If the cotton field has a history of vigorous growth or if conditions after the first application of Pix Concentrate favor vigorous growth, make a second application 2-3 weeks after the first application. | 1.4-2.8 fluid ounces |
| | Third application: If conditions after the second application of Pix Concentrate continue to favor vigorous growth, make a third application 1-2 weeks after the second application. | 1.4-2.8 fluid ounces |
| | Late Season application: Refer to Late Season Application in section II. Application Instructions. | 1.4-4.2 fluid ounces |

Table 3. Conversion Table

| I WOIC OF COLL OF STOR | I I WALL | | | |
|------------------------|-------------------------------|--|--|--|
| Conver | sion Chart | | | |
| Pix® Concentrate p | lant regulator and Pix* | | | |
| Pix Concentrate Rate | Pix Concentrate Rate Pix Rate | | | |
| 0.35 fluid ounces | 2 fluid ounces (1/8 pint) | | | |
| 0.70 fluid ounces | 4 fluid ounces (1/4 pint) | | | |
| 1.40 fluid ounces | 8 fluid ounces (1/2 pint) | | | |
| 2.80 fluid ounces | 16 fluid ounces (1 pint) | | | |

^{*1}oz. of Pix Concentrate = 5.7 oz. of Pix

III. Additives

If rain is expected within 8 hours, use a high quality, EPA-exempt surfactant to make **Pix® Concentrate** rain-safe after 4 hours

Compatibility Test for Mix Components

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for pint of recommended label rate per acre.

- 1) Water: For 20 gallons per acre spray volume, use 3.3 cups (800ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) Products in PVA bags: Cap the jar and invert 10 cycles
- 3) Water-dispersible products: (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) Cap the jar and invert 10 cycles.
- 4) Water-soluble products: (such as Pix Concentrate) Cap the jar and invert 10 cycles
- 5) **Emulsifiable concentrates:** oil concentrate Cap the jar and invert 10 cycles.
- 6) Water-soluble additives: Cap the jar and invert 10 cycles
- 7) Let the solution stand for 15 minutes
- 8) **Evaluate** the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

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IV. Mixing Order

- 1) Water: Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2) Products in PVA bags: Rinse the tank thoroughly before adding any material in PVA bags as boron residue will prevent adequate mixing. Place the water-soluble PVA bag into the mixing tank. The water-soluble PVA bag will dissolve in water to allow the contents to disperse. Wait until all water-soluble PVA bags have fully dissolved and the plant regulator is evenly mixed in the spray tank before continuing. To prepare spray solution for aerial application use a mixing tank or mixing vat first to get the product into suspension before transferring suspension to air application equipment.
- 3) Water-dispersible product: (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
- 4) Water-soluble products:
- 5) Emilsifiable concentrates
- 6) Remaining quantity water

Only moderate agitation should be used while mixing and transporting.

V. General Tank Mixing Information

Pix Concentrate has an aqueous base, and as such, is compatible with mist insecticides and miticides. You may combine Pix Concentrate with foliar fertilizers if prior experience has shown the original liquid formulation of Pix Concentrate to be compatible and noninjurious under your conditions. Always perform a Compatibility Test for Mix Components before preparing a tank mix application.

Read and follow the applicable **Restrictions and Limitations and Directions For**Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

VI. General Restrictions and Limitations

- Maximum seasonal use rate: Do not apply more than a total of 8.4 fluid ounces of Pix® Concentrate plant regulator (0.132 pounds a.i.) per acre, per season.
- The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 (0.35 pounds a.i. per gallon) or 8.4 fluid ounces or Pix Concentrate (2.0 pounds a.i. per gallon) or 0.375 pound of Pix DF (35% active) or 1 water-soluble packet of Pix DF per 0.33 acre.
- **Preharvest Interval (PHI):** Do not apply within 30 days of harvest.
- Restricted Entry Interval (REI): 12 hours.
- Do not plant another crop within 75 days of last treatment.
- Stress: Do not apply to cotton plants under severe stress from weather factor, mite, insect, or nematode damage, disease, herbicide injury, or fertility stress. If using the low rate multiple option, discontinue use until the stress is

alleviated. Do not apply a single application of 1.4-2.8 fluid ounces of **Pix Concentrate** to cotton that is stressed due to lack of soil moisture.

- Do not graze or feed cotton forage to livestock.
- Do not apply through any type of irrigation equipment.

Table 4. Restrictions and Limitations

| Стор | Minimum Time from Application to Harvest (PHI) | Maximum Rate Per Acre Per Application | Maximum Rate Per Acre Season | Livestock Grazing or Feeding | Aircraft Application |
|--------|--|---------------------------------------|------------------------------------|------------------------------------|-------------------------|
| Cotton | 30 days | 4.2 fluid | 8.4 fluid | No | Yes |
| | | ounces | ounces | | |

Crops:

This product can be used on the following crops:

Cotton

Look inside for complete Registrations and Limitations and Application instructions.

Warranty and Disclaimer Statement

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. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America, LLC ("Arysta"), and can cause crop injury, injury to nontarget crops or plants, ineffectiveness of the product, or other unintended consequences. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

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