

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 26, 2020

Ian Murphy
Federal Registrations Manager
Bayer CropScience
2 T.W. Alexander, P. O. Box 12014,
RTP, NC 27709

Subject: Registration Review Label Mitigation for Cyclanilide and Mepiquat

Product Name: STANCE Plant Regulator

EPA Registration Number: 264-841 Application Dates: 4/26/2018

Decision Numbers: 563394;563395

Dear Mr. Murphy

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Cyclanilide and Mepiquat Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements 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 Agency find or if it is brought to our attention that a website contains false 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.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at Stanton.darius@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

## **STANCE™ Plant Regulator**

#### For Use on Cotton

#### **ACTIVE INGREDIENTS:**

	:hlorophenylaminocarbonyl)-cyclc		·2.1%
Mepiquat chloride (N,	N-dimethylpiperidinium chloride)*	*	8.4%

OTHER INGREDIENTS: 89.5%
TOTAL: 100.0%

\* Contains 0.184 pounds cyclanilide per gallon.

EPA Reg. No. 264-841

EPA Est. No.

# KEEP OUT OF REACH OF CHILDREN CAUTION

For <u>MEDICAL</u> And <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

See [Back][Side] Panel for First Aid Instructions and [Leaflet][Booklet] for Complete Precautionary Statements and Directions for Use. (Note to reviewer: Location of additional precautionary statements, directions for use will vary between those listed, depending on container type/size.)

#### **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.			
	Call a poison control center or doctor for treatment advice.			
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.			
IF SWALLOWED:	Immediately call a poison control center or doctor for treatment advice.			
	Do not induce vomiting unless told to do so by a poison control center or doctor.			
	Have person sip a glass of water if able to swallow.			
	Do not give anything by mouth to an unconscious person.			
IF INHALED:	Move person to fresh air.			
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.			
	Call a poison control center or doctor for further treatment advice.			

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

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

#### ACCEPTED

Jun 26, 2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 264-841

<sup>\*\*</sup> Contains 0.736 pounds mepiquat chloride per gallon.

#### PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Do not contaminate food or feedstuffs.

#### PERSONAL PROTECTIVE EQUIPMENT

#### Applicators and other handlers must wear:

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

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **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**

#### **Users 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.
- User should 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.

This product may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by minimizing spray drift.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination Systems (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer system without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 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.

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:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
- Shoes plus socks

#### **RUNOFF PREVENTION**

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

#### **SPRAY DRIFT**

#### **Aerial Applications:**

- Applicators are required to use a medium to coarser droplet size, as defined by ASABE Standard S572.1.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- The spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The boom length must not exceed 75% of the wingspan for airplanes or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, use 1/2 swath displacement upwind at the downwind edge of the field.
- Orient nozzles so the spray is directed toward the back of the aircraft.

#### **Ground Boom Applications:**

- Applicators are required to use a medium to coarser droplet size, as defined by ASABE Standard S572.1.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- When using ground application equipment, apply with nozzle height no more than 3 feet above the ground or crop canopy.
- When applying via airblast, turn off outward spraying nozzles on the outside row of the vineyard. In addition, applications must be directed into the canopy foliage. Applications must not be made over the top of the canopy.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size - Ground Boom**

- **Volume** Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### Controlling Droplet Size - Aircraft

• Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT- Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### PRODUCT INFORMATION

STANCE is a low dose foliar plant regulator for cotton, utilizing the active ingredients cyclanilide and mepiquat chloride in a 1:4 ratio. STANCE modifies plant growth to reduce plant height resulting in a more manageable cotton crop. Additional benefits include: earliness, increased fruit retention, less boll rot, better light interception of lower leaves, improved defoliation and harvest efficiency.

#### **APPLICATION INSTRUCTIONS**

STANCE is a low dose plant regulator with use rates ranging from 2.0 to 5.0 fl. oz. per acre for early and midseason crop management. Sequential applications can be made with a minimum of 7 days between applications (see Timing and Application Rate Table). Consult with your local Bayer CropScience Representative or Cotton Extension Specialist for guidance with exceptionally challenging situations. STANCE can be tank mixed with insecticides, miticides and foliar fertilizer (see Mixing Instructions).

Prior to application(s) the field should be carefully scouted for stress from factors including: weather, nematode, mite or insect damage, disease stress, herbicide injury or fertility stress. Application(s) should not be made to cotton under stress.

- For ground application use a minimum of 10 gallons of water per acre using nozzles that will develop a Medium spray category as defined by ASAE S-572. Typical nozzles include hollow cone, flat fans, extended range flat fans, and Turbo Teejet.
- For aerial equipment apply in a minimum of 2 gallons of water per acre.

#### **APPLICATION TIMING AND RATES**

Begin applications at matchead square (first square of a typical cotton plant is  $\frac{1}{8}$  to  $\frac{1}{4}$  inch in diameter). First application should be applied when 50% of the cotton plants have one or more matchead squares. Begin sequential applications 7-14 days later or when regrowth occurs. Allow a minimum of 7 days between applications.

Use rates of 2.0 to 5.0 fl. oz. per acre based on field examination and the degree of vegetative vigor. For moderate vegetative vigor use 2.0 fl. oz. per acre and for high vegetative vigor use 3.0 to 5.0 fl. oz per acre. For high management situations, modification in application interval in addition to rate increase can provide enhanced crop management. Allow a minimum of 7 days between applications. Do not exceed 22 fl. oz. per crop per year.

For sequential applications following a matchhead square treatment or for applications initiated after matchhead square, use 2.0 to 5.0 fl. oz. per acre as needed based on field examination and degree of vegetative vigor (see Timing and Application Rate Table).

**STANCE Plant Regulator Timing and Application Rate Table** 

Timing of Application	Use this Amount of STANCE (fl. oz./Acre)	For High Management Situations, Use this Amount of STANCE (fl. oz./Acre) *	At the Indicated Rate One Gallon of STANCE will Treat:
Application beginning at the matchhead square growth stage and sequential applications or applications beginning after matchhead square growth stage.	2.0 to 3.0	Up to 5.0	64 (2.0 fl. oz.) to 25.6 (5.0 fl. oz.) Acres

Allow a minimum of 7 days between applications.

Do not exceed 22 fl. oz. per crop per year.

#### LATE SEASON APPLICATIONS

Applications of STANCE can help manage certain late season crop situations such as fields that don't cut out completely, fields where cotton continues to grow after cut-out and other similar situations. Late season applications alone are not a substitute for appropriate early season crop management and should not replace early season STANCE usage. Very rank fields with vigorous regrowth due to poor boll load and optimum growing conditions may not fully respond to a late season application at the maximum suggested use rate.

Late season applications of STANCE may provide better response on fields that have also received early season applications of STANCE.

<sup>\*</sup>High management situations are defined as situations where any one of the following conditions may occur: aggressive watering, aggressive fertilization or aggressive varieties.

Apply up to 8.0 fl oz per acre for a late season application(s). Consult with your local Bayer CropScience Representative or Cotton Extension Specialist for guidance with exceptionally challenging situations.

ALLOW A MINIMUM OF 7 DAYS BETWEEN APPLICATIONS. DO NOT EXCEED 22 FL. OZ. PER CROP PER YEAR. APPLICATIONS CAN BE MADE UP TO 30 DAYS PRIOR TO HARVEST.

#### **USE OF ADJUVANTS**

STANCE is generally rain-safe in 4 - 8 hours. If rain is expected within 4 hours, use of a high quality EPA-exempt surfactant can reduce the rain-safe period to 2 hours.

#### **MIXING INSTRUCTIONS**

STANCE Plant Regulator is a suspension concentrate (SC) formulation and must be applied with calibrated spray equipment. STANCE is formulated to mix readily in water. Prior to adding STANCE to the spray tank, ensure that the spray tank is thoroughly cleaned and free of other pesticides that may injure cotton. STANCE is compatible with most insecticides and miticides. STANCE can be tank mixed with foliar fertilizers if prior experience and/or test strips has proven to be compatible and non-injurious. Prior to preparing a tank mix always perform a compatibility test mix with all tank mix components. Mix the finished spray solution as follows:

- 1. Fill the spray tank half-full with water.
- 2. Start agitation.
- 3. Add STANCE and continue agitation.
- 4. If mixing with a dry flowable/wettable powder tank mix partner, prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry of dry materials to the spray tank.
- 5. If mixing with a liquid tank mix partner, add the liquid tank mix partner.
- 6. Complete filling the spray tank with water.

Ensure that all spray system lines including pipes, booms, and screens have the correct concentration of the spray solution by flushing out the system lines before starting the crop application. Maintain agitation until the contents of the tank is sprayed. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying is resumed. Screen size in nozzles or line strainers must be 50 mesh or larger.

#### RESTRICTIONS

Do not tank mix this product with other products containing mepiquat chloride.

Do not apply within 30 days of harvest.

Do not apply this product through any kind of irrigation equipment.

Do not plant another crop within 75 days of last application.

Small grain and leafy vegetable crops may be planted 75 days after last application. Any crops other than small grain and leafy vegetable crops may be planted 4 months after last application.

Do not graze or feed cotton forage to livestock.

Do not apply more than 8 fl oz of STANCE (0.0115 lbs of cyclanilide active ingredient) per acre per single application.

Do not apply more than 22 fl. oz. of this STANCE per acre per season.

Do not exceed a maximum of 0.132 lbs. of mepiquat chloride active ingredient per acre per year through combined or repeated uses of any products containing mepiquat chloride. The total annual maximum use rate of STANCE at 22 fl. oz. equals 0.127 lbs. of mepiquat chloride active ingredient per acre per year.

Do not exceed a maximum of 0.25 lbs. of cyclanilide active ingredient per acre per year through combined or repeated uses of any products containing cyclanilide, such as STANCE and FINISH 6 PRO. The total annual maximum use rate of STANCE at 22 fl. oz. equals 0.0316 lbs. of cyclanilide active ingredient per acre per year. The annual maximum use rate of FINISH 6 PRO at 42.6 fl. oz. equals 0.125 lbs. of cyclanilide active ingredient per acre per year. The combined annual maximum use rates of STANCE and FINISH 6 PRO equals 0.157 lbs. of cyclanilide active ingredient per acre per year.

Stress: Prior to application(s) the field should be carefully scouted for stress from factors including: weather, nematode, mite or insect damage, disease stress, herbicide injury or fertility stress. Application(s) should not be made to cotton under stress.

#### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Store at temperatures between 32°F and 110°F. If allowed to freeze, remix before using.

#### PESTICIDE DISPOSAL

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

#### **CONTAINER DISPOSAL**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke

#### DO NOT REUSE EMPTY CONTAINER

#### IMPORTANT: READ BEFORE USE

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

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

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

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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#### **NET CONTENTS: 1 GALLON**

Stance is a trademark of Bayer.



Bayer CropScience LP 800 N. Lindbergh Blvd. St. Louis, MO 63167 1-866-99BAYER (1-866-992-2937)

Stance Plant Regulator (PENDING) 04/24/2018, 01/16/2020, 01/29/2020, 05/12/2020