

432-1448

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

MAR 5 - 2013

Geraldine Meunier  
Regulatory Manager  
Bayer Environmental Science  
P.O. Box 12014  
Research Triangle Park, NC 27709

Subject: Revised label - add uses on cotton  
Product Name: Cyclanilide 18% SC  
EPA Reg. No.: 432-1448  
Your submission: Amendment dated February 27, 2013  
OPP Decision Number: 474996

Dear Ms Meunier:

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

One copy of the label stamped "Accepted" is enclosed for your records. Please submit one copy of the final printed label before the product is released for shipment.

If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,

Driss Benmhend  
Acting Product Manager (20)  
Fungicide Branch  
Registration Division (7504P)

Enclosure

# Cyclanilide 18% SC

For Use In Outdoor Nursery, Plant Production Facilities, For Use As A Foliar Plant Regulator And Harvest Aid For Cotton.  
Do Not Use In Greenhouses.

<b>ACTIVE INGREDIENT:</b> Cyclanilide (1-[[[(2,4-Dichlorophenyl)amino]carbonyl]cyclopropanecarboxylic acid).....	18.00%
<b>OTHER INGREDIENTS:</b> .....	82.00%
<b>TOTAL:</b>	100.00%

\*Contains 1.62 pounds cyclanilide per gallon.

EPA Reg. No. 432-1448

EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN WARNING

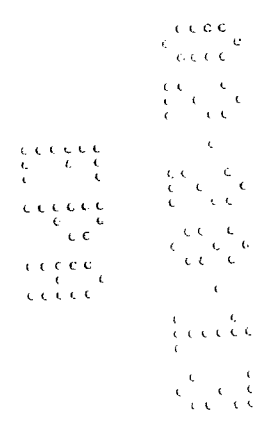
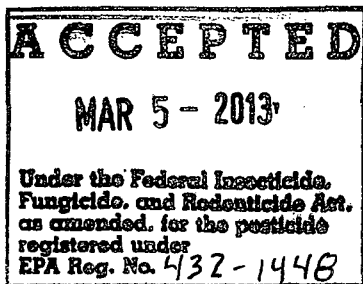
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-800-334-9745

### FIRST AID

<b>IF IN EYES</b>	-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.
<b>IF SWALLOWED:</b>	-Call a poison control center or doctor immediately for treatment advice. -Have person sip a glass of water if able to swallow. -Do not induce vomiting unless told to do so by a poison control center or doctor. -Do not give anything by mouth to an unconscious person.
<b>IF ON SKIN OR CLOTHING</b>	-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.



## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Harmful if swallowed. Avoid contact with skin or clothing. Wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves made of any waterproof material. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear protective eyewear, long-sleeved shirt, long pants, shoes plus socks, and chemical-resistant gloves made of any waterproof material.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product concentrate. Do not reuse them.

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

#### User Safety Recommendations

Users must wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Users must remove clothing immediately if pesticide gets inside. Then wash body thoroughly and change into clean clothing. The contaminated clothing should be washed before reuse.

Users must remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

#### 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.

#### 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 regulations. Read entire label before using this product.

#### PRECAUTIONS AND RESTRICTIONS

For local recommendations on rates, spray volumes (gallons of water per acre), and spray equipment under varying temperature and rainfall conditions consult Bayer Environmental Science Representative for his experience with this product in your area (Telephone 800-331-2867).

#### 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 intervals. 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: coveralls; chemical resistant gloves made of any waterproof material; shoes plus socks; protective eyewear.

# USE DIRECTIONS FOR CYCLANILIDE PLANT GROWTH REGULATOR

FOR USE IN OUTDOOR NURSERY AND PLANT PRODUCTION FACILITIES

DO NOT USE IN GREENHOUSES

## Use Information

Branching is typically induced near actively growing terminals. In some plants, such as California pepper tree and Chinese flame tree (*Koelreuteria bipinnata*), buds also break in blank wood below the terminal shoot apex. Effects on auxin activity are temporary, usually about 3 weeks. Additional treatments may be made to continue the effect. Treatment intervals for each specific use need to be evaluated on a case-by-case basis.

This product may replace the need to prune off the terminal growth to induce branching or can be used in conjunction with pruning or pinching.

Prior to the production-scale use of this product small-scale on-site testing should be implemented for the specific site and variety to determine appropriate rate to provide desirable performance. Cyclanilide may be used in a program approach with other plant growth regulators, but it is recommended that all uses in a program with other plant growth regulators be evaluated on a case-by-case basis.

## Application

Cyclanilide is applied as a broadcast spray. Spray foliage to drip. Entire plants or specific plant parts may be treated. Use of a non ionic adjuvant is recommended. Plants must be vigorously growing to achieve the branching response. This product is acidic. Application of cyclanilide on leaves treated with copper can result in leaf burn.

Cyclanilide can be used in nursery sites on any non-bearing plant. However, testing on a small scale on-site should be conducted to identify performance and impact on plant quality prior to use on a large scale. Consider testing various rates, timing, and one vs. two applications for optimal response at each location. Results may vary from year to year.

## Use on Ornamentals and Cut Flowers

The following are general guidelines. Plants must be in an active and vigorous growing condition at the time of application and for several weeks following the application. Consult the rate chart below for the correct amount of cyclanilide per gallon of water. Most varieties respond well to 1 to 2 applications of 50 to 200 ppm. Typically one application of 100 ppm is adequate. Responsive plants include Anise (*Illicium parviflorum*), Birch, Camellia, California pepper tree, Cherry, Chinese flame tree, *Codiaeum croton*, *Convolvulus* sp., Crabapple, Eastern redbud, *Euonymus* sp., *Ficus nitida*, Flowering quince, Hawthorn, Honey locust, Hydrangea, Indian hawthorn (*Raphiolepis indica*), Inkberry holly (*Ilex parviflorum*), Linden, Loquat, Oaks (*Quercus* sp), Oleander, Photinia, Rose, Spirea, *Xylosma senticosum*.

For Lilacs use 1-3 applications of 100-200 ppm one month apart to achieve the desired amount of branching.

Use 50 to 75 ppm rate range for Goldenrod (Solidago).

Some species respond to 5 to 20 ppm, including Bradford pears, and Myrtle (*Myrtus cummunis*).

Varieties that have been tested that did not exhibit desirable responses include: *Boronia*, *Capensis*, *Dieffenbachia*, *Daphne odora*, *Hosta*, *Jacaranda acutifolia*, *Nandina domestica*, Olive, *Pittosporum*, Norway and Red Maple, *Rhamnus*, *Schefflera*, Strawberry tree, *Wisteria*.

## Use on fruit trees (non-bearing)

Sweet cherry and Apple varieties: 1 to 2 applications of 50 to 100 ppm. Typically one application at 100 ppm provides acceptable branching. If using a two-spray regime, consider making the second application about 1 week later. Some reduction in growth of the central leader may be observed with two applications.

Pear and Plum varieties: 1 application of 5 to 20 ppm. Typically 10 to 20 ppm provides acceptable branching.

Treatments to nectarine have not been effective.

## Application timing for fruit trees (non-bearing)

The following information is for initial guidelines for application timing. It is important to have a vigorously growing plant at the time of application and for several weeks following application to obtain satisfactory branching and good development of new branches.

Induced branching of cherries tends to occur 4 to 8 inches above the height of the terminal shoot apex at the time of application. Induced branching in apples occurs about 1 to 4 inches below the height of the terminal shoot apex at the time of application.

Cyclanilide Rate Chart				
Final Concentration PPM	Amount Cyclanilide per volume of water			
	1 gallon Water	50 gallons Water	100 gallons Water	100 gallons Water
1	.02 ml	1 ml	2 ml	.07 fl oz
5	.1 ml	5 ml	10 ml	.34 fl oz
10	.2 ml	10 ml	20 ml	.68 fl oz
20	.4 ml	20 ml	40 ml	1.35 fl oz
50	1 ml	50 ml	100 ml	3.38 fl oz
100	2 ml	100 ml	200 ml	6.76 fl oz
200	4 ml	200 ml	400 ml	13.53 fl oz
500	10 ml	500 ml	1000 ml	33.83 fl oz
1000	20 ml	1000 ml	2000 ml	67.65 fl oz

Do not tank mix Cyclanilide SC with pesticides or liquid fertilizers containing micronutrients.

Use Restrictions

- Do not apply more than 0.34 lb ai/A per crop per year
- Do not apply more than 3 applications per crop per year

FOR USE AS A COTTON PLANT GROWTH REGULATOR

USE INFORMATION

Cyclanilide 18% SC in a 1:4 ratio with the active ingredient mepiquat chloride 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

Cyclanilide 18% SC must be tank mixed with the active ingredient mepiquat chloride. The table below provides an example of the ratios required to provide plant growth regulation in cotton. Sequential applications can be made, with a minimum of 7 days between applications. (See Timing and Application Rate Table). Cyclanilide 18% SC in combination with the active ingredient mepiquat chloride 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 matchhead square (first square of a typical cotton plant is 1/8 to 1/4 inch in diameter.) First application should be applied when 50% of the cotton plants have one or more matchhead squares. Begin sequential applications 7-14 days later, or when regrowth occurs. Allow a minimum of 7 days between applications. Use rates are based on field examination and the degree of vegetative vigor. (See Timing And Application Rate Table For Cotton Plant Growth Regulator Table)

For sequential applications following a matchhead square treatment or for applications initiated after matchhead square, use 0.23 fl oz to 0.34 fl oz per acre Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride as needed based on field examination and degree of vegetative vigor. (See Timing And Application Rate Table For Cotton Plant Growth Regulator Table)

**CYCLANILIDE 18% SC TIMING AND APPLICATION RATE TABLE FOR COTTON PLANT GROWTH REGULATOR**

	Fl oz Cyclanilide 18% SC/ A	Fl oz of 0.35 lb / gal formation of Mepiquat chloride /A
Application beginning at the matchhead square growth stage and sequential applications or applications beginning after matchhead square growth stage	0.23	4.2
	0.34	6.3
For High Management Situations*	0.57	10.5

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

Allow a minimum of 7 days between applications.  
Do not exceed 2.53 fl oz per acre per year.

**LATE SEASON APPLICATIONS**

Applications of Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride 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 usage of Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride. 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 Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride may provide better response on fields that have also received early season applications of Cyclanilide 18% SC plus the appropriate volume of mepiquat chloride.

Apply up to 0.91 fl oz of Cyclanilide 18% SC per acre plus the appropriate volume of mepiquat chloride 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 2.53 FL OZ PER ACRE PER YEAR. APPLICATIONS OF CYCLANILIDE 18% SC PLUS MEPIQUAT CHLORIDE CAN BE MADE UP TO 30 DAYS PRIOR TO HARVEST.**

**USE OF ADJUVANTS**

Cyclanilide 18% SC is 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**

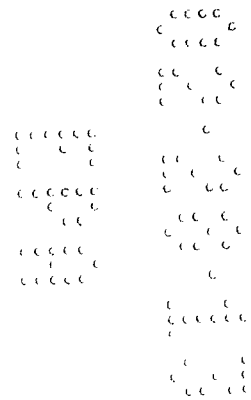
Cyclanilide 18% SC is a suspension concentrate (SC) formulation and must be applied with calibrated spray equipment. Cyclanilide 18% SC is formulated to mix readily in water. Prior to adding Cyclanilide 18% SC to the spray tank, ensure that the spray tank is thoroughly cleaned and free of other pesticides that may injure cotton. Cyclanilide 18% SC is compatible with most insecticides and miticides. Cyclanilide 18% SC 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 1/2 to 3/4 full with water.
2. Start agitation.
3. Add Cyclanilide 18% SC and continue agitation.
4. Add the appropriate amount of mepiquat chloride (see table above)
5. 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.
6. If mixing with a liquid tank mix partner, add the liquid tank mix partner.
7. Complete filling the spray tank with water.
8. Maintain agitation during tank filling and spraying process.

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 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 2.53 fl oz of Cyclanilide 18% SC per acre per season.
- Do not exceed a maximum of 0.132 lb of mepiquat chloride active ingredient per acre per year through combined or repeated uses of any products containing mepiquat chloride.
- Do not exceed a maximum of 0.25 lb 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 Cyclanilide 18% SC at 2.53 fl oz equals 0.0316 lb 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 lb of cyclanilide active ingredient per acre per year. The combined annual maximum use rates of STANCE and FINISH 6 PRO equals 0.157 lb 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.



## FOR USE AS A COTTON HARVEST AID

### USE INFORMATION

A foliar spray of Cyclanilide 18% SC in combination with ethephon will accelerate opening of mature cotton bolls, promote defoliation of both mature and juvenile foliage and reduce terminal regrowth. Treatments of Cyclanilide 18% SC in combination with ethephon can promote earlier harvest and enhances the potential for high quality, high yield, and an once-over harvest. Rainfall, stress, temperature fluctuations, residual nitrogen and yield potential can affect defoliation and/or regrowth.

### SPRAY PREPARATION

Add 1/2 to 3/4 of the required amount of water to the spray tank. Start agitation. Add the required amount of Cyclanilide 18% SC, then the required amount of ethephon, and the remaining amount of water. Mix only as much spray solution as can be used on the day of application. Storage and use of previous day's spray mix may result in equipment corrosion and reduced activity.

Do not spill the concentrated product on spray equipment, or any airplane parts. ANY SPILLS SHOULD BE IMMEDIATELY RINSED WITH PLENTY OF WATER AS Cyclanilide 18% SC and ethephon, IS CORROSIVE. Use of a nurse tank is highly recommended for avoiding possible spills of concentrated formulation on spray equipment.

### TANK MIXTURES WITH OTHER PRODUCTS

#### For Cotton Harvest

Cyclanilide 18% SC must be mixed with ethephon to be used as a Cotton Harvest Aid and may be applied as a tank mix or in sequential application with other harvest aid and insecticide products.

In some cases, crop conditions, such as rank growth, weed or insect infestations, drought, unutilized nitrogen, low temperature, high moisture, and heavy juvenile growth will require the inclusion of other products for satisfactory defoliation and terminal regrowth suppression. Cyclanilide 18% SC and ethephon can be tank mixed or sequentially applied with other products such as DEF® 6, FOLEX® 6EC, DROPP® 50WP, HARVADE® 5F, GINSTAR®, DROPP® ULTRA™, ROUNDUP®, METHYL PARATHION 4E or 4 lb, GUTHION® 2L or 3 and MALATHION™ 57EC for use on cotton in accordance with the most restrictive of the label limitations and precautions. No label dosage rates should be exceeded. Proper mixing sequences should be followed when making a tank mix. This product cannot be mixed with any product containing a label prohibition against such mixing. Follow all applicable use precautions and rate per acre recommendations on labels of products applied as tank mixtures or in sequence with Cyclanilide 18% SC and ethephon. In some cases, slight reduction in boll opening response has been observed when tank mixes with phosphate defoliant were used.

Cyclanilide 18% SC and ethephon tank mixes with DROPP® or DROPP® ULTRA™ on picker cotton and GINSTAR® on stripper cotton will enhance regrowth suppression and removal of juvenile foliage.

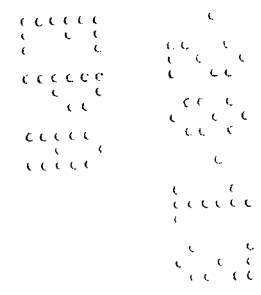
Under some conditions such as high temperatures or low soil moisture, tank mixtures with products such as FOLEX®, DEF®, DROPP® ULTRA™, GINSTAR® and METHYL PARATHION may result in leaf stick or leaf burn due to increased desiccation activity. To minimize leaf stick and leaf burn occurrence under these conditions, it is important to follow local recommendations and use the lower labeled rate of the tank mix partner product(s).

Good agitation in the spray tank is essential. A tank mixture should not be allowed to stand without agitation. Read and observe all appropriate label use directions and precautions for the defoliant used.

To improve mixing and coverage, it is recommended that Cyclanilide 18% SC and ethephon and tank mixtures Cyclanilide 18% SC and ethephon be mixed with adjuvants and/or compatibility agents which are cleared for application on cotton. Cyclanilide 18% SC and ethephon should be added to the tank after the addition of an adjuvant. Read and observe all appropriate label use directions and precautions for the adjuvant used.

**NOTE: UNDER CERTAIN CONDITIONS, TANK MIXTURES OF CYCLANILIDE 18% SC AND ETHEPHON WITH DESICCANTS CONTAINING SODIUM CHLORATE COULD RESULT IN THE FORMATION OF A HYPOCHLOROUS ACID WHICH ON HEATING WILL EMIT TOXIC CHLORIDE FUMES.**

**DO NOT MIX CYCLANILIDE 18% SC AND ETHEPHON WITH AMMONIUM THIOSULFATE. SUCH TANK MIXTURES MAY RESULT IN FORMATION OF TOXIC FUMES.**





**MIXING INSTRUCTIONS FOR USE AS A COTTON HARVEST AID**

1. Fill the spray tank 1/2 to 3/4 full with water.
2. Start agitation.
3. Add compatibility agents / adjuvants.
4. Add Cyclanilide 18% SC and continue agitation.
5. Add the appropriate amount of ethephon (see table)
6. 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.
7. If mixing with a liquid tank mix partner, add the liquid tank mix partner.
8. Complete filling the spray tank with water.
9. Maintain agitation during tank filling and spraying process.

**EQUIPMENT CLEANING**

Because of the acidic nature of this mixture, prolonged exposure to spray deposit will damage acrylic plastics, certain paints and metals. Rinse thoroughly with detergent and water all exposed acrylic plastic-type materials (e.g. aircraft windshields), and painted surfaces within an hour after exposure to spray deposits.

At the end of each day, rinse thoroughly with detergent and water all metal parts of the aircraft and the associated spray equipment exposed to the spray deposits.

**COTTON**

HOW TO USE	EXPECTED CONDITIONS	DOSAGE RATE FOR COTTON HARVEST AID APPLICATION		
		Cyclanilide 18% SC: fl oz/acre	Ethephon (6 lb/gal): fl oz/acre	Gals Water per acre
<p><b>Cyclanilide 18% SC (Under Normal Conditions):</b> The cotton crop must be in <b>cut-out</b> condition for Cyclanilide 18% SC to provide the expected boll opening, defoliation and terminal regrowth suppression.</p> <p>Cyclanilide 18% SC may be applied by air or ground equipment. For aerial applications, optimal gallonage should be 5 GPA and applied in a way to prevent drift. Ground applications should optimally use between 15 – 25 GPA and a spray boom with 3 hollow cone nozzles per row and a minimum spray pressure of 40 psi. For best performance, by either air or ground, choose the spray equipment and volumes which will ensure uniform coverage of foliage and bolls.</p>	Hot, dry over 80° F Dry	1.0	15.75	<p>3 Minimum (Aerial)</p> <p>10 Minimum (Ground)</p>
	75 to 80° F	1.5	24	
	Cool, but over 65° F or Rank cotton	2.0	31.5	
<p><b>Cyclanilide 18% SC Tank Mix Options for Unusual Situations:</b> Use Cyclanilide 18% SC with low rates of DROPP® (warm weather) or Cyclanilide 18% SC with low rates of FOLEX®/DEF® or GINSTAR® (warm or cool weather) on picker cotton. In addition to the above, GINSTAR® may be used on stripper cotton.</p>	When the cotton crop has been under stress conditions such as hot weather, drought, unutilized nitrogen, weed or insect infestations, low temperature, high moisture, heavy juvenile growth or rank cotton, defoliation and terminal regrowth suppression may be enhanced by tank mixing.	1.0 – 1.5	15.75 – 24.0	<p>Minimum (Aerial)</p> <p>10 Minimum (Ground)</p>

**WHEN TO APPLY**

Apply Cyclanilide 18% SC and ethephon when the cotton crop has cut-out and there are sufficient mature unopened bolls present (40 to 60%) to produce the desired yield. This state of growth may be estimated when the crop has reached 2100 - 2400 DD 60's for the year.

Two additional methods should also be used to estimate the proper crop maturity for applications of Cyclanilide 18% SC and ethephon.

**SHARP KNIFE TECHNIQUE**

Apply when the number of mature unopened bolls is sufficient to produce the desired crop and bolls have become very hard, cannot be sliced easily by a sharp knife; have seed coats that are tan in color, and the seed kernel is completely filled inside the cavity. At this stage, no gelatinous material is present inside the boll or seed.

**NODES ABOVE CRACKED BOLL**

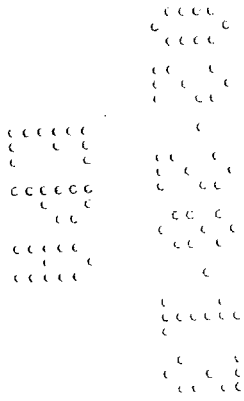
The crop is ready to treat when the top-most, first-position harvestable boll is 4 nodes above the uppermost, first-position cracked boll. Delaying treatment past this date is not likely to result in additional recoverable bolls at harvest.

**USE PRECAUTION**

Do not apply Cyclanilide 18% SC and ethephon if rain is expected within 6 hours. Rainfall within 6 hours of application may reduce product performance.

**RESTRICTIONS**

- Do not harvest cotton sooner than 7 days after a treatment with Cyclanilide 18% SC and ethephon.
- Do not apply this product through any kind of irrigation equipment.
- Do not plant any food crop within 30 days after last application. Small grains planted earlier than 1 month or intercropped within the cotton crop to which Cyclanilide 18% SC and ethephon will be applied may only be used as cover crops and may not be harvested for food or feed. Cyclanilide 18% SC and ethephon may cause yellowing and growth inhibition of treated small grains.
- In Arizona and California, any food crop can be planted 30 days after the last application. In the rest of the US, small grain or leafy vegetable crops can be planted only after 30 days, and all other food crops can be planted only after 4 months.
- Do not exceed a maximum of 2.0 lb ethephon active ingredient per acre per year through combined or repeated uses of any ethephon products.
- Do not exceed 0.25 lb cyclanilide active ingredient per acre per year.



## STORAGE AND DISPOSAL

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

### PESTICIDE STORAGE

Store in original container away from feed and food. Store in cool, dry area. Do not store in direct sunlight. Do not allow prolonged storage in temperatures that exceed 105°F (40°C) or in temperatures that fall below 14°F (-10°C).

### PESTICIDE DISPOSAL

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

### CONTAINER DISPOSAL

#### Rigid, Non-refillable containers (equal to or less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

#### Rigid Non-refillable containers (greater than 5 gallons or 50 lb)

##### **Non-refillable Containers**

Non-refillable containers - Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

##### **Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

##### **Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).**

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

##### **Refillable Containers**

Refillable container – Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

##### **Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing 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 pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least

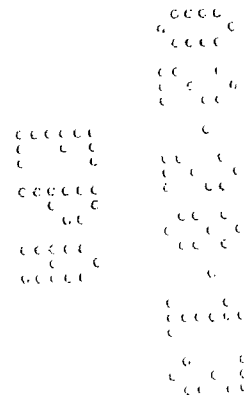
40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.— Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing 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 triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container. See Container Disposal instructions under Storage Disposal.



### WARRANTY STATEMENT

#### 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 LP. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP 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 LP 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 LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Produced for



**Bayer Environmental Science**

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