

71368-112

6/4/2014

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

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

JUN -4 2014

Matthew Granahan
Nufarm Americas Inc.
11901 S. Austin Ave.
Alsip, IL 60803

Subject: Notification per PR Notice 98-10 – Addition of State Restrictions
Product Name: Cheetah Herbicide
EPA Registration Number: 71368-112
Application Dated: May 19, 2014
Decision Number: 491518

Dear Mr. Granahan:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the subject product. Our review finds that the action falls within the scope of PRN 98-10. The label submitted with the application has been date-stamped "Notification" and placed in our records.

If you have any questions, please contact Sarah Meadows at (703)347-0505 or at meadows.sarah@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Montague".

Kathryn Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

	United States Environmental Protection Agency Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
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Application for Pesticide - Section I

1. Company/Product Number 71368-112	2. EPA Product Manager Kathryn Montague	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Cheetah Herbicide	PM# PM-23	
5. Name and Address of Applicant (Include ZIP Code) Nufarm Inc. 11901 S. Austin Ave. Alsip, IL 60477 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

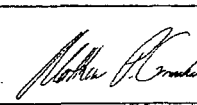
Label change consistent with PRN 98-10. See Attached

SEE ATTACHMENT FOR 98-10 CERTIFICATION STATEMENT.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt. No. per container		
3. Location of Net Contents Information		4. Size(s) Retail Container		5. Location of Label Directions	
<input checked="" type="checkbox"/> Label <input checked="" type="checkbox"/> Container		2.5, 30, 55, 220, 250, 265 gallons and Bulk		<input checked="" type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	
6. Manner in Which Label is Affixed to Product			<input checked="" type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input checked="" type="checkbox"/> Stenciled <input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Matthew Granahan	Title Regulatory Manager	Telephone No. (Include Area Code) (708) 377-1421
Certification 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 under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Regulatory Manager	
4. Typed Name Matthew Granahan matthew.granahan@us.nufarm.com	5. Date 05/19/2014	

4/31

GROUP 10 HERBICIDE

Cheetah™ Herbicide

A non-selective herbicide for post emergence broadcast use on canola, corn, cotton and soybean designated as LibertyLink®. Cheetah may be used for weed control in non-LibertyLink® cotton when applied with a hooded sprayer in-crop. Cheetah may also be applied as a broadcast burndown application before planting or prior to emergence of any conventional or transgenic variety of canola, sweet corn^[1], corn, cotton, olive, rice^[1], soybean or sugar beet. Cheetah may be used for post emergence weed control in listed tree, vine and berry crops. Cheetah may also be applied for potato vine desiccation.

[¹ - Not for use in California]

ACTIVE INGREDIENT

Glufosinate ammonium*

OTHER INGREDIENTS

TOTAL

*CAS Number 77182-82-2

**Equivalent to 2.34 pounds of active ingredient per gallon

NOTIFICATION

JUN - 4 2014

24.5%**

75.5%

100.0%

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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)

SEE INSIDE BOOKLET FOR FIRST AID AND PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 71368-112

EPA EST. NO.

MANUFACTURED FOR

NUFARM INC.

11901 SOUTH AUSTIN AVENUE

ALSIP, IL 60803



NET CONTENTS: GAL. (Liters)

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers >5

071368-00112.20140519.EPA Notification

PRODUCT INFORMATION

Cheetah is a water soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds in LibertyLink® canola, LibertyLink® corn, LibertyLink® cotton and LibertyLink® soybean and in trees, vines and berries. Cheetah may be applied for potato vine desiccation. Cheetah may also be applied as a broadcast burndown application before planting or prior to emergence of any conventional or transgenic variety of canola, sweet corn^[1], corn, cotton, olive, rice^[1], soybean or sugar beet.

[¹ – Not for use in California]

Cheetah is only foliar active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply Cheetah to actively growing weeds as described in the Weed Control Recommendations for Row Crops section to get maximum weed control. Uniform, thorough spray coverage is necessary to achieve consistent weed control. Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

Cheetah is rainfast four (4) hours after application to most weed species therefore rainfall within four (4) hours may necessitate retreatment or may result in reduced weed control.

Applications should be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters and velvetleaf control.

Consult your local Cooperative Extension Service or Nufarm Representative for guidelines on the optimum application timing for Cheetah in your region

Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present or when weeds are under stress due to environmental conditions such as drought, cool temperatures or extended periods of cloudiness.

To maximize weed control, do not cultivate from 5 days before an application to 7 days after an application.

ROTATIONAL CROP RESTRICTIONS*

Rotational crop planting intervals following application of Cheetah are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application)
Canola, Sweet Corn, Corn, Cotton, Rice, Soybeans and Sugar beets	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale and wheat)	70 Days
All Other Crops	180 Days

*See *Application Directions for Potato Vine Desiccation* for Rotational Crop Restrictions specifically after product applications to potatoes.

Integrated Weed Management

The active ingredient in Cheetah is glufosinate ammonium which is a glutamine synthetase inhibitor (Group 10). Integrated weed management guidelines promote an economically viable environmentally sustainable and socially acceptable weed control program regardless of the herbicide(s) used. The highlights of a successful integrated weed management include:

- 1 Correctly identify weeds and look for trouble areas within field to identify resistance indicators
- 2 Rotate crops
- 3 Start the growing season with clean fields
- 4 Rotate herbicide modes of action by using multiple modes of action during the growing season and apply no more than two applications of a single herbicide mode of action to the same field in a two year period. One method to accomplish this is to rotate herbicide tolerant trait systems.
- 5 Apply listed rates of herbicides to actively growing weeds at the correct time with the right application techniques
- 6 Control any weeds that may have escaped the herbicide application
- 7 Thoroughly clean field equipment between fields

Contact your local agronomic advisor for more specific information on integrated weed management for your area.

WEED CONTROL FOR ROW CROPS

Rates in ounces of formulated product per acre for the control of weeds at selected heights are shown in the weed control tables. In weed populations with mixed species, apply at a rate needed for the species that requires the highest rate.

Broadleaf Weed Control					
Weed Species	Maximum Weed Height or Diameter (Inches)		Weed Species	Maximum Weed Height or Diameter (Inches)	
	22 fl oz/A	29 fl oz/A ^{ab}		22 fl oz/A	29 fl oz/A ^{ab}
Amaranth, Palmer ²	NR	4	Morningglory, sharppod ²	2	4
Anoda, spurred	3	5	Morningglory, smallflower ²	4	6
Beggarweed, Florida	4	5	Morningglory, tall ²	6	8
Black medic	5	7	Mustard, wild	4	6
Blueweed, Texas	5	7	Nightshade, black	4	6
Buckwheat, wild	6	7	Nightshade, eastern black	6	8
Buffalobur	6	7	Nightshade, hairy	6	8
Burcucumber	6	10	Pennycress (stinkweed)	4	6
Catchweed bedstraw (cleavers)	2	4	Pigweed, redroot ²	3	4
Carpetweed	4	6	Pigweed, prostrate ²	3	4
Chickweed, common	6	8	Pigweed, spiny ²	3	4
Cocklebur, common	6	14	Pigweed, smooth ²	3	4
Copperleaf, hophornbeam	4	6	Pigweed, tumble ²	3	4
Cotton, volunteer ¹	6	8	Puncturevine	4	6
Croton, tropic	3	5	Purslane, common	2	4
Croton, woolly	2	4	Pusley, Florida	5	3

Eclipta	4	6	Ragweed, common	6	10
Devil's claw	2	4	Ragweed, giant	6	12
Fleabane, annual	6	8	Senna coffee	4	6
Gallinsoga, hairy	6	8	Sesbania, hemp	6	8
Gallinsoga, small flower	6	7	Shepherd's purse	6	8
Groundcherry, cutleaf	4	5	Sicklepod (java bean)	4	6
Geranium, cutleaf	4	6	Sida, prickly	4	5
Hempnettle	4	6	Smartweed, Pennsylvania	6	14
Horsenettle, Carolina ³	2	4	Smellmelon	4	6
Jimsonweed	6	10	Sowthistle, annual	6	8
Knotweed	3	5	Soybeans, volunteer ¹	6	8
Kochia ²	4	6	Spurge, prostate	2	4
Ladysthumb	6	14	Spurge, spotted	2	4
Lambsquarters, common ²	4	6	Starbur, bristly	4	6
Mallow, common	4	6	Sunflower, common	6	14
Mallow, Venice	6	8	Sunflower, prairie	3	5
Marestail ³	S	6-12	Sunflower, volunteer	6	10
Marshelder, annual	4	6	Thistle, Russian ³	S	6-12
Morningglory, entireleaf ²	6	8	Velvertleaf ²	3	4
Morningglory ivyleaf ²	6	8	Waterhemp, common ²	NR	5
Morningglory, pitted ²	6	8	Waterhemp, tall ²	NR	5

^a - In cotton, Cheetah may be applied at 29 fl oz/A three times per season

^b - Do not apply more than 22 fl oz/A of Cheetah post emergence in a single application to canola and corn

S - Indicates suppression

¹ - Volunteer LibertyLink crops from the previous season will not be controlled

² - For applications to corn, tank mixing with atrazine may enhance weed control of this species

³ - May require sequential applications for control

NR - Not Recommended

Grass Weed Control					
Weed Species	Maximum Weed Height or Diameter (Inches)		Weed Species	Maximum Weed Height or Diameter (Inches)	
	22 fl oz/A	29 fl oz/A ^{ab}		22 fl oz/A	29 fl oz/A ^{ab}
Barley, volunteer ³	3	4	Millet, wild proso	6	7
Barnyardgrass	3	5	Millet, proso volunteer	6	7
Bluegrass, annual	3	5	Oat, wild ²	3	4
Corn, volunteer ¹	10	12	Panicum, fall	3	5
Crabgrass, large ²	3	5	Panicum, Texas	4	6
Crabgrass, smooth ²	3	5	Rice, red	4	6
Cupgrass, woolly	6	12	Rice, volunteer ¹	4	6
Foxtail, bristly	6	8	Sandbur, field ²	5	2
Foxtail, giant	6	12	Shattercane	6	8
Foxtail, green	6	12	Signalgrass, broadleaf	3	5
Foxtail, robust purple	6	8	Sprangletop	4	6
Foxtail, yellow ²	3	4	Sorghum, volunteer	6	8
Goosegrass ³	2	3	Stinkgrass	4	6
Johnsongrass, seedling	3	5	Wheat, volunteer ²	4	5
Junglerice	3	5	Witchgrass	4	6

^a - In cotton, Cheetah may be applied at 29 fl oz/A three times per season

^b - Do not apply more than 22 fl oz/A of Cheetah post emergence in a single application to canola and corn

S - Indicates suppression

¹ - Volunteer LibertyLink crops from the previous season will not be controlled. A timely cultivation 7 to 10 days after an application and/or retreatment 10-21 days after the first application is recommended for controlling dense clumps of volunteer corn.

² - For best control of yellow foxtail, field sandbur, crabgrass, volunteer wheat and wild oats, treat prior to tiller initiation

³ - May require sequential applications for control

Biennial and Perennial Weeds**			
For Control of biennial and perennial weeds listed below, tank mix partners or sequential applications of Cheetah are recommended (22 fl oz/A followed by 22 fl oz/A).			
Alfalfa	Bursage, woollyleaf	Milkweed, common*	Quackgrass*
Artichoke, Jerusalem	Chickweed, Mouse-ear	Milkweed, honeyvine*	Sowthistle, perennial
Bermudagrass	Clover, Alsike	Muhly, wirestem*	Thistle, bull
Bindweed, field	Clover, red	Nightshade, silverleaf	Thistle, Canada
Bindweed, hedge	Dandelion	Nutsedge, purple*	Timothy*
Bluegrass, Kentucky	Dock, smooth	Nutsedge, yellow*	Wormwood, biennial
Blueweed, Texas	Dogbane, hemp*	Orchardgrass	
Bromegrass, smooth	Goldenrod, gray*	Poinsettia, wild	
Burdock	Johnsongrass, rhizome	Pokeweed	

* - Suppression Only

** - See the Application Direction for Use on Cotton section of this label for additional use rates

APPLICATION AND MIXING PROCEDURES

Do not use flood jet nozzles, controlled droplet application equipment or air assisted spray equipment. Uniform, thorough spray coverage is important to achieve consistent weed control.

Ground application: Refer to the *Rate Tables* for proper application rates. DO NOT apply when winds are gusty or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Cheetah with the spray boom as low as possible while maintaining a uniform spray pattern. Cheetah should be applied broadcast in a minimum of 10 gallons of water per acre using a minimum spray pressure of 40 psi and a maximum ground speed of 10 mph. The use of 80 degree or 110 degree flat fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Application of the spray at a 45 degree angle forward will result in better spray coverage. Under dense weed/crop canopies, a broadcast rate of 15-20 gallons of water per acre should be used so that thorough spray coverage will be obtained. DO NOT use raindrop nozzles. Boom height should be based on nozzle manufacturer recommendations. See the *Spray Drift Management* section of this label for additional information on proper application of Cheetah.

Aerial Application: Poor coverage will result in reduced weed control. For optimal weed control, apply Cheetah in a minimum of 10 gallons per acre. Apply Cheetah using nozzles and pressures that generate MEDIUM spray droplets category as reported by the nozzle manufacturer and in accordance to ASABE S 572 based upon the selected air speed. Do not use nozzles and pressures that result in COARSE sprays. FINE sprays should also be avoided to minimize spray drift risk. See the *Spray Drift Management* section of this label for additional information on proper application of Cheetah.

COMPATIBILITY TESTING

If Cheetah is to be mixed with pesticide products not listed on this label, test the compatibility of the intended tank mixture prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly. Check compatibility as follows:

- 1 Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1-quart jar.
- 2 For each pound of a dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
- 3 For each 16 fl oz of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
- 4 For each 16 fl oz of Cheetah to be applied per acre, add 0.5 teaspoon to the jar.
- 5 After adding all the ingredients, place a lid on the jar and tighten. Invert 10 times to mix.
- 6 Let the mixture stand for 15 minutes and evaluate the solution for uniformity and stability. Look for separation, large flakes, precipitates, gels, heavy oily film on the jar or other signs of incompatibility. If the tank mix partners are not compatible, do not use the mixture in a spray tank.
- 7 After compatibility testing is complete, dispose of any pesticide wastes in accordance with the *Storage and Disposal* section of this label.

MIXING INSTRUCTIONS

Tank Mix Instructions: Cheetah may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Cheetah cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rates and other restrictions.

Cheetah must be applied with properly calibrated and clean equipment. Cheetah is formulated to mix readily in water. Prior to adding Cheetah to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see *Cleaning Instructions*)

Mix Cheetah with water to make a finished spray solution as follows:

- 1 Fill the spray tank half full with water
- 2 Start agitation
- 3 If mixing with a 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 to the spray tank.
- 4 Add the appropriate amount of ammonium sulfate (AMS) to the spray tank.
- 5 If mixing with a liquid tank mix partner, add the liquid mix partner next.
- 6 Complete filling the spray tank with water.
- 7 Add the proper amount of Cheetah and continue agitation.
- 8 If foaming occurs, use a silicone based antifoam agent.

Ensure that all spray system lines including pipes, booms, etc. have the correct concentration of spray solution by flushing out the spray system lines before starting the crop application.

If tank mix partners recommended on Cheetah are added, maintain good agitation at all times until contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying is resumed. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers must be 50 mesh or larger.

CLEANING INSTRUCTIONS

Before using Cheetah, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank lines and filter particularly if a herbicide with the potential to injure crops was previously used. Equipment should be thoroughly rinsed using a commercial tank cleaner.

After using Cheetah, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

SPRAY DRIFT MANAGEMENT

Spray drift may result in injury to non target crops or vegetation. To avoid spray drift, do not apply when wind speed is greater than 10 MPH or during periods of temperature inversions. Do not apply when weather conditions, wind speed or wind direction may cause spray drift to non target areas. **AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.**

- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For all non aerial applications, wind speed must be measured adjacent to the application site on the upwind side immediately prior to application

Sensitive Areas: Cheetah should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Do not apply under circumstances where possible drift to unprotected persons or to food, forage, or other planting that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

Aerial Drift Management: The following drift management requirements must be followed to avoid off target drift movement from aerial applications to agricultural field crops.

- 1 The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2 Nozzles must always point backward parallel with the airstream and never be pointed downwards 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 *Aerial Drift Reduction Advisory Information*.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Information on 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 drift if applications are made improperly or under unfavorable environmental conditions (see *Wind, Temperature and Humidity and Temperature Inversions* below).

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

Controlling Droplet Size:

- **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure:** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles:** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation:** Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type:** Use a nozzle type 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 the largest droplets and the lowest drift.
- **Boom Length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. 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 crosswind, the swath will be displaced downward. 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. Applications should be avoided below 2 miles per hour due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry. Avoid spraying during conditions of low humidity and/or high temperatures.

Temperature Inversions: Do not make aerial or ground applications into areas of temperature inversions. 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 concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

APPLICATION DIRECTIONS FOR BURNDOWN USE

Cheetah may be applied as a burndown treatment prior to planting or prior to emergence of any conventional or transgenic variety of canola, corn, cotton, rice^[1], soybean or sugar beet. Apply a minimum of 29 fl oz/A of Cheetah for burndown of existing weeds just prior to planting or prior to emergence of canola, corn, cotton, rice^[1], soybean or sugar beets. For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity and bright sunlight improve the performance of Cheetah. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures.

- In cotton, if environmental conditions prevent timely applications, a single application may be made of up to 43 fl oz/A of Cheetah. If more than 29 fl oz/A are used in any single application, the season total may not exceed 72 fl oz/A, including all application timings.
- In soybeans, if environmental conditions prevent timely applications, a single application may be made of up to 36 fl oz/A of Cheetah. If 29-36 fl oz/A are used in a single burndown application, one additional in-season application may be made at up to 29 fl oz/A. The season total may not exceed 65 fl oz/A including all application timings.
- In canola, corn, rice^[1] and sugar beets, if environmental conditions prevent timely applications, a single application may be made of up to 36 fl oz/A of Cheetah. No additional applications of Cheetah may be made post emergence to the crop during the growing season.
- In rice^[1] following a burndown application, there must be a minimum 7 day holding period after flooding of the field.

	Burndown	In Season Applications of labeled glufosinate products (LibertyLink® varieties only)	Season Max
Cotton Use Pattern 1	29 fl oz/A	2 applications at 22-29 fl oz/A*	87 fl oz/A
Cotton Use Pattern 2	30-43 fl oz/A	1 application at 22-29 fl oz/A*	72 fl oz/A
Soybean Use Pattern	29-36 fl oz/A	1 application at 22-29 fl oz/A**	65 fl oz/A
Canola, Corn, Rice ^[1] , Sugar beets	29-36 fl oz/A	None	36 fl oz/A

* LibertyLink cotton OR with hooded sprayer for non LibertyLink varieties (See Cotton use directions)

** LibertyLink soybeans only (See Soybean use directions)

[¹ – Not for use in California]

APPLICATION DIRECTIONS FOR USE ON SUGAR BEETS

THOROUGH SPRAY COVERAGE IS VERY IMPORTANT Cheetah works best when weeds are actively growing. A cultivation may be made at least 5 days before a application of Cheetah or 5 days after a application of Cheetah.

APPLICATION TIMING

Applications of Cheetah on sugar beets may be made from the cotyledon stage up to the 10 leaf stage of the sugar beet. Cheetah is a foliar active material with no soil residual activity. For best results, apply to emerged young actively growing weeds. Weeds that emerge after application will not be controlled. Cheetah will have an effect on weeds that are larger than the recommended leaf stage, however, speed of activity and control may be reduced. Weed control may be reduced if application is made when heavy dew fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. Cheetah is rainfast 4 hours after application; therefore, rainfall within 4 hours may necessitate retreatment.

For best weed control and sugar beet yield, application of Cheetah should begin when weeds are up to 1 inch in height or diameter. Repeat applications should be made when newly germinated weeds again reach 1 inch in height or diameter. Refer to the *Rate Tables for Weed Control in Sugar Beets* for selection of the proper rate dependent upon the weed species present and size. A repeat application of Cheetah or a tank mix application with a residual herbicide selected from the tank mix partners listed on this label will be needed to control weeds that have not yet emerged at the time of application.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON SUGAR BEETS

DO NOT apply more than 30 fl oz/A of Cheetah in one application and **DO NOT** apply more than 60 fl oz/A of Cheetah on the sugar beet crop per growing season.

DO NOT apply Cheetah within 60 days of harvesting sugar beets.

DO NOT plant rotation crops in a field treated with Cheetah within 120 days after the last application of Cheetah with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale which may be planted 70 days after the last application of Cheetah. Corn, soybeans, canola and sugar beets tolerant to the active ingredient of Cheetah may be planted at any time.

DO NOT graze the treated crop or cut for hay.

DO NOT add surfactants. Anti foams or drift control agents may be added if needed.

DO NOT apply Cheetah if sugar beets show injury from prior herbicide applications or environmental stress (drought, excessive rainfall etc).

DO NOT apply Cheetah through any type of irrigation system.

RATE TABLES FOR WEED CONTROL IN SUGAR BEETS

The rate of Cheetah in fluid ounces (pints) of formulated product per acre to be used for the control of weeds at selected heights are shown in the following tables. In weed populations with mixed species, apply the rate needed for all species present.

Grass Weeds Controlled with Cheetah

Weed Species	Growth Stage of Weed* (Maximum Height)		Comments on Weed Growth Stage/Application Timing/Number of Applications
	15 fl oz/A (0.9 pt/A)	20 fl oz/A (1.25 pt/A)	
Barley, volunteer	1-2 leaf (2)	3-leaf (3)	Multiple applications may be required
Barnyardgrass	1-3 leaf (2)	4-5 leaf (3)	Maximum of 1 tiller
Corn, volunteer	1-2 leaf (3)	3-4 leaf (6)	
Crabgrass, large	1-3 leaf (2)	4-5 leaf (3)	Maximum of 1 tiller
Crabgrass, smooth	1-3 leaf (2)	4-5 leaf (3)	Maximum of 1 tiller
Cupgrass, woolly	1-5 leaf (4)	(8)	
Foxtail, giant	1-4 leaf (3)	5-6 leaf (4)	Maximum of 2 tillers
Foxtail, green	1-4 leaf (3)	5-6 leaf (4)	Maximum of 2 tillers
Foxtail, yellow	1-3 leaf (1)	4-leaf (2)	Apply prior to tillering
Millet, volunteer proso	1-3 leaf (2)	4-5 leaf (3)	Maximum of 1 tiller
Millet, wild proso	1-3 leaf (2)	4-5 leaf (3)	Maximum of 1 tiller
Oat, wild	1-2 leaf (2)	3 leaf (3)	Maximum of 1 tiller
Panicum, fall	1-3 leaf (2)	4-5 leaf (3)	Maximum of 1 tiller
Panicum, Texas	1-3 leaf (2)	4-5 leaf (3)	Maximum of 1 tiller
Sandbur, field	-	1-4 leaf (2)	Apply prior to tillering
Wheat, volunteer	1-2 leaf (2)	3 leaf (3)	Maximum of 1 tiller

*Apply up to 30 fl oz/A (1.88 pt/A) if weeds exceed the growth stage shown in the table.

For improved control of heavy populations or larger than recommended volunteer wheat, volunteer barley, yellow foxtail and wild oats Cheetah can be tank mixed with Assure® II Herbicide, Poast® Herbicide, Prism® Herbicide or Select® 2EC Herbicide

Perennial Weeds Controlled by Cheetah on Sugar Beets

Weed Species	Growth Stage of Weed* (Maximum Height/Diameter)		Comments on Number of Applications
	15 fl oz/A (0.9 pt/A)	20 fl oz/A (1.25 pt/A)	
Quackgrass		1-3 leaf (3)	Multiple applications required
Sowthistle, perennial		1-4 leaf (3)	Multiple applications required
Thistle, Canada		1-4 leaf (3)	Multiple applications required

*Apply up to 30 fl oz/A (1.88 pt/A) if weeds exceed the growth stage shown in the table.

Broadleaf Weeds Controlled by Cheetah on Sugar beets

Weed Species	Growth Stage of Weed* (Maximum Diameter)	
	15 fl oz/A (0.9 pt/A)	20 fl oz/A (1.25 pt/A)
Buckwheat, wild	1-4 leaf (2)	5-6 leaf (3)
Buffalobur	1-4 leaf (2)	5-6 leaf (3)
Carpetweed		1-4 leaf (2)
Chickweed, common	1-4 leaf (2)	5-6 leaf (3)
Cocklebur, common	1-6 leaf (3)	7-8 leaf (5)
Kochia	(1)	(2)
Ladysthumb	1-2 leaf (1)	3-4 leaf (3)
Lambsquarter, common	1-2 leaf (1)	4-5 leaf (3)
Mallow, Venice	1-4 leaf (2)	5-6 leaf (3)
Marshelder	1-2 leaf (1)	3-4 leaf (2)
Mustard, wild	1-4 leaf (2)	5-6 leaf (3)
Nightshade, eastern black	1-4 leaf (2)	5-6 leaf (3)
Pigweed, prostrate	(1)	(3)
Pigweed, redroot	1-2 leaf (1)	3-4 leaf (3)
Pigweed, smooth	1-2 leaf (1)	3-4 leaf (3)
Pigweed, spiny	1-2 leaf (1)	3-4 leaf (3)
Purslane, common	(1)	(2)
Ragweed, common	1-6 leaf (3)	7-8 leaf (5)
Ragweed, giant	1-4 leaf (2)	5-6 leaf (3)
Shepherd's purse	1-4 leaf (2)	5-6 leaf (3)
Smartweed, Pennsylvania	1-2 leaf (1)	3-4 leaf (3)
Sowthistle, annual	1-4 leaf (2)	5-6 leaf (3)
Sunflower, common	1-6 leaf (3)	7-8 leaf (5)
Thistle, Russian	(1)	(2)
Velvetleaf	1-2 leaf (1)	3-4 leaf (3)

*Apply up to 30 fl oz/A (1.88 pt/A) if weeds exceed the growth stage shown in the table

APPLICATION DIRECTIONS FOR USE ON CANOLA

Apply Cheetah only to canola labeled as LibertyLink. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

APPLICATION RATE AND TIMING

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity and bright sunlight improve the performance of Cheetah. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of Cheetah on canola may be made from the cotyledon stage up to the early bolting stage of the canola. Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth maturity or yield.

Apply Cheetah at 22 fl oz/A per application. A second application of Cheetah may be needed to control weeds that have not yet emerged at the time of application.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON CANOLA

- DO NOT use on canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
- DO NOT apply more than two applications of Cheetah per growing season. Sequential applications should be at least 10 days apart.
- DO NOT apply Cheetah within 65 days of harvesting canola.
- DO NOT apply more than 44 fl oz/A of Cheetah per growing season.
- If Cheetah was used in a burndown application, no post emergence applications may be applied to the crop.
- DO NOT graze the treated crop or cut for hay.
- DO NOT apply Cheetah if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall etc).
- DO NOT apply Cheetah through any type of irrigation system.
- Refer to the *Rotational Crop Restrictions* section under the Information heading of this label for the appropriate rotational crop plant back intervals.

SPRAY ADDITIVES

Cheetah must be applied with ammonium sulfate (AMS). Use only fine feed grade or spray grade AMS at 3 pounds per acre. Anti-foams or drift control agents may be added if needed. Use of additional surfactants or crop oils may increase risk of crop response.

CANOLA TANK MIX INSTRUCTIONS

Cheetah at 22 fl oz/A plus AMS may be used in tank mix combination with certain herbicides for improved control of larger than labeled grasses. Cheetah may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the canola to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Cheetah cannot be mixed with any product containing a label prohibition against such mixing. The AMS rate may be reduced to 1.5 lb/A when Cheetah is tank mixed with a reduced rate of one of the grass herbicides specified below.

TANKMIX PARTNERS FOR CHEETAH ON INVIGOR LIBERTYLINK CANOLA

Tank Mix Partner	Rate (fl oz/A)
Assure® II	4 - 5 fl oz/A
Poast®	6 - 8 fl oz/A
Select®2EC	2 - 3 fl oz/A
Select Max™	4 - 6 fl oz/A

APPLICATION DIRECTIONS FOR USE ON SWEET CORN^[1]

APPLICATION TIMING FOR SWEET CORN

Applications for Cheetah on sweet corn may be made from emergence until sweet corn is 24 inches tall or in the V 7 stage of growth, i.e. 7 developed collars, whichever comes first. Apply at a rate of 20 fl oz/A. Cheetah must be applied with ammonium sulfate (AMS) for use on sweet corn. Two applications of Cheetah can be made to sweet corn in a growing season.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON SWEET CORN

DO NOT apply Cheetah within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
DO NOT apply more than 40 fl oz/A of Cheetah on sweet corn per growing season.
DO NOT apply more than two applications of Cheetah to the sweet corn crop. Sequential applications should be at least 10 days apart. If Cheetah was used in a burndown application, no post emergence applications may be applied to the crop.
DO NOT use nitrogen solutions as spray carriers. A silicone based antifoam agent may be added if needed.
DO NOT apply Cheetah if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc).
DO NOT apply Cheetah through any type of irrigation system.
Refer to the *Rotational Crop Restrictions* section under the information heading of this label for the appropriate rotational crop plant back intervals.

See Application Directions for Use on Field Corn and Silage Corn for Application Methods, Mixing Instructions and Weed control Tables.

Tank Mix Instructions for use on Sweet Corn

Cheetah may be tank mixed with Laudis® Herbicide, Callisto®, Atrazine or Permit®. When using Cheetah in tank mix combinations, carefully follow the Directions for Use labeling of the selected partner.

[¹ – Not for use in California]

APPLICATION DIRECTIONS FOR USE ON FIELD CORN AND SILAGE CORN

Apply Cheetah only to corn labeled as LibertyLink. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

APPLICATION RATE AND TIMING

For best results, apply to emerged young actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Cheetah. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of Cheetah on corn may be made with over the top broadcast or drop nozzles from emergence until corn is 24 inches tall or in the V-7 stage of growth, i.e. 7 developed collars, whichever comes first. For corn 24 inches to 36 inches tall, only apply Cheetah using ground application and drop nozzles and avoid spraying into the whorl or leaf axils of the corn stalks. Applications of Cheetah following the use of soil applied insecticides will not injure corn.

Apply Cheetah at 22 fl oz/A per application. A second application of Cheetah or a tank mix application with a residual herbicide will be needed to control weeds that have not yet emerged at the time of application.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON FIELD CORN AND SILAGE CORN

- DO NOT apply Cheetah within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- DO NOT apply more than two applications of Cheetah to the corn crop. Sequential applications should be at least 10 days apart.
- DO NOT apply more than 44 fl oz/A of Cheetah on corn per growing season.
- If Cheetah was used in a burndown application, no post emergence applications may be applied to the crop.
 - DO NOT use nitrogen solutions as spray carriers. A silicone based antifoam agent may be added if needed.
- DO NOT apply Cheetah if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall etc)
- DO NOT apply Cheetah through any type of irrigation system.
- Refer to the *Rotational Crop Restrictions* section under the information heading of this label for the appropriate rotational crop plant back intervals.

SPRAY ADDITIVES

For corn and sweet corn, Cheetah must be applied with ammonium sulfate (AMS). It is recommended to use only fine feed grade or spray grade AMS at 3 lbs per acre (17 lbs/100 gallons). When temperatures exceed 85° F, the rate of AMS can be reduced to 1.5 lbs per acre (8.5 lbs/100 gallons) to reduce potential leaf burn.

Use of additional surfactants or crop oils may increase risk of crop response.

CORN TANK MIX INSTRUCTIONS

Certain herbicide tank mixes may aid in the performance of Cheetah. No additional surfactant is needed with any tank mix partner. Cheetah may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the corn to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Cheetah cannot be mixed with any product containing a label prohibition against such mixing.

TANKMIX PARTNERS FOR CHEETAH ON LIBERTYLINK CORN

2,4-D	HalexGT	Pendimethalin ¹
acetochlor	Hornet®WDG	Permit®
Aim™ ²	Impact®	Python®WDG
Atrazine	Laudis®	s metolachlor ²
Callisto®	Lexar® ²	Spirit®
Camix® ²	Lumax® ²	Status®
Capreno®	Metolachlor ²	Yukon®
Distinct™	nicosulfuron	Zemax
Guardsman Max®	NorthStar™	

¹ Tank mixing with pendimethalin may result in reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail and volunteer corn.

² It is recommended that these products are tank mixed at half the use rate with Cheetah to reduce risk of crop response.

CORN INSECTICIDE TANK MIX PARTNERS FOR CHEETAH

To provide weed and insect control in corn Cheetah may be mixed with the following insecticides.

Ambush® Insecticide	Tombstone™ Hellos®	Pounce® 3 2EC Insecticide
Asana® XL Insecticide	Lorsban® 4E Insecticide	Warrior™ Insecticide
Baythroid® XL Insecticide	Tombstone™	Nufarm Lambda-cyhalothrin 1 EC

APPLICATION DIRECTIONS FOR USE ON COTTON

Uniform, thorough spray coverage is necessary to achieve consistent weed control. Cheetah may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to LibertyLink cotton. Cheetah may be applied post-emergence to non-LibertyLink cotton varieties or cultivars by using equipment designed to minimize contact of the spray with the cotton foliage. See the Application Methods on Non LibertyLink Cotton section for selection of shielding equipment. Severe injury or death may result if Cheetah contacts the foliage or stems of cotton NOT labeled as LibertyLink.

APPLICATION RATE AND TIMING

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity and bright sunlight improve the performance of Cheetah. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Apply Cheetah to cotton from emergence up to the early bloom stage at 22 to 29 fl oz/A. Should environmental conditions prevent a timely herbicide application, a single application of up to 43 fl oz/A of Cheetah may be made to cotton. If more than 29 fl oz/A are used in any single application, the seasonal total may not exceed 72 fl oz/A including all application timings. See Restrictions to the Directions for use on Cotton below for additional information.

Refer to the Weed Control Table for Row Crops section of this label for selection of the proper rate dependent upon weed species present and size. In weed populations with mixed species, select the highest rate required to control all the species. Volunteer LibertyLink crop plants (corn, rice, cotton, soybeans, sugar beets) from the previous season will not be controlled by applications of Cheetah. A repeat application of Cheetah or tank mixes with a residual herbicide will be needed to control weeds that have not emerged at the time of application. See the Tank Mix Instructions for Use on Cotton to select suitable tank mix partners.

Use Pattern	1 st Application	2 nd Application	3 rd Application	Season Maximum
Option 1	22-29 fl oz/A	22-29 fl oz/A	22-29 fl oz/A	87 fl oz/A
Option 2	30-43 fl oz/A	22-29 fl oz/A	None	72 fl oz/A

Tank Mix or Sequential Applications with Liberty® 280 SL Herbicide

Cheetah may be used in tank mix or sequential applications with other herbicides containing glufosinate ammonium as the only active ingredient (such as Liberty® 280 SL). Cheetah at 29 fl. oz./A and Liberty® 280 SL at 29 fl.oz./A deliver 0.53 lbs. glufosinate ammonium/A. Tank mixtures are allowed such that the total amount of glufosinate ammonium from all sources does not exceed 0.78 lbs. a.i./A for a single application or 1.316 lb ai/A maximum for the season.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON COTTON

- DO NOT apply Cheetah to cotton in Florida, South of Tampa (Florida Route 60), or in Hawaii except for test plots or

- breeding nurseries.
- DO NOT apply Cheetah within 70 days prior to cotton harvest.
- Up to three applications of Cheetah may be made to cotton per season at a maximum application rate of 29 fl oz/A. DO NOT apply more than 87 fl oz (including all application timings) to cotton per season under this application scenario. Sequential applications should be at least 10 days apart.
- If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of Cheetah at up to 43 fl oz/A may be made to cotton. DO NOT apply more than 43 fl oz of Cheetah in a single application under this use scenario. If a single application greater than 29 fl oz is made, a subsequent application not to exceed 29 fl oz may be made to cotton. The seasonal total use rate under this scenario may not exceed 72 fl oz of Cheetah. Sequential applications should be at least 10 days apart.
- DO NOT apply Cheetah through any type of irrigation system.
- Refer to the Rotational Crop Restrictions section under the Information heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION METHODS TO LIBERTYLINK COTTON

Refer to the Weed Control Table for Row Crops to select the proper application rate based upon the weeds present and their size. Uniform and thorough spray coverage is required to achieve consistent weed control. For ground application, apply Cheetah to LibertyLink cotton as an over-the-top foliar spray or as a spray directed to the lower one third of the cotton stand.

APPLICATION METHODS TO NON-LIBERTYLINK COTTON

Application of Cheetah to cotton varieties not labeled as LibertyLink requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. A hooded sprayer directs the spray onto weeds while shielding the cotton stand from contact. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid exposure of the desirable vegetation to the spray.

With a hooded sprayer, the spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground. If the hoods are raised, spray particles may escape and come in to contact with the cotton causing damage or destruction of the crop.

Herbicide rates and spray volume instructions are presented as broadcast equivalents and must be reduced in proportion to the area actually treated. Use the following formulas to calculate the correct rate and volume per planted (field) acre.

Band width in inches	X	Broadcast RATE per acre	=	Amount of banded product needed per acre
Row width in inches				

Band width in inches	X	Broadcast spray VOLUME per acre	=	Banded spray volume needed per acre
Row width in inches				

POST HARVEST

Cheetah may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43 fl oz/A of Cheetah may be applied in a single application to control larger weeds growing in the crop at the time of harvest.

If more than 29 fl oz/A is used in a single application, the seasonal total may not exceed 72 fl oz/A including all application timings. Refer to the *Rotational Crop Restrictions* section of this label for appropriate rotational crop information.

COTTON TANK MIX INSTRUCTIONS

Certain tank mixes may aid in the performance of Cheetah. No additional surfactant is needed with any tank mix partner. Cheetah may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Cheetah cannot be mixed with any product containing a label prohibition against such mixing.

LibertyLink Cotton

The following products may be tank mixed with and applied over the top post emergence to enhance weed control and/or provide residual control.

Assure® II	metolachlor	clethodim
Poast Plus®	Fusilade® DX	Select Max®
Fusion®	Staple®	

All Cotton Types

The following herbicides may be mixed with Cheetah for hooded spray application to enhance weed control and/or provide residual weed control.

Aim®	Cotoran® DF	Dual Magnum®	Pendimax™ 3,3	Staple®
Caparol® 4L	Direx® 4L	Glyphosate	Prowl® 3.3EC	
Cotoran® 4L	Direx® 80DF	Karmex® DF	Select Max®	

APPLICATION DIRECTIONS FOR USE ON SOYBEANS

Apply Cheetah only to soybean designated as LibertyLink. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

APPLICATION RATE AND TIMING

For best results, apply to emerged, young actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Cheetah. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Adding ammonium sulfate with Cheetah may improve weed control if weeds are under stress. For optimal yield, early season weed removal is important.

Applications of Cheetah on soybeans may be made from emergence up to but not including the bloom growth stage.

Apply Cheetah to LibertyLink soybeans from emergence up to but not including the bloom growth stage at 22 to 29 fl oz/A. See weed chart to determine rate. Should environmental conditions prevent a timely herbicide application, a single application of up to 36 fl oz/A of Cheetah may be made to soybeans followed by one additional application at a maximum of 29 fl oz/A with a seasonal maximum of 65 fl oz/A. Cheetah may be applied alone or in a tank mix application with a residual herbicide to control weeds that have not yet emerged at the time of application.

Although timely post applications of Cheetah can provide complete weed control, residual herbicides at burndown, planting, or tank mixed with Cheetah help ensure optimal weed management, particularly if environmental conditions delay timely post applications. Residual herbicides can also reduce early season weed competition and are a key element of good weed resistance management practices.

Use Pattern Rate Ranges		
1 st Application	2 nd Application	Season Maximum
22-36 fl oz/A	22-29 fl oz/A	65 fl oz/A

RESTRICTIONS TO THE DIRECTIONS FOR USE ON SOYBEANS

- DO NOT apply Cheetah within 70 days of harvesting soybean seed.
- DO NOT apply more than 65 fl oz/A of Cheetah on soybeans per growing season.
- DO NOT apply more than 36 fl oz/A of Cheetah in a single application.
- DO NOT graze the treated crop or cut for hay

- DO NOT use nitrogen solutions as spray carriers. A silicone based antifoam agent may be added if needed.
- DO NOT apply Cheetah if soybeans show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply Cheetah through any type of irrigation system.
- Refer to the *Rotational Crop Restrictions* section under the Information heading of this label for the appropriate rotational crop plant back intervals.
- Sequential applications should be at least 5 days apart.

SOYBEAN TANK MIX INSTRUCTIONS

Certain herbicide tank mixes may complement Cheetah. No additional surfactant is needed with any tank mix partner. Cheetah may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the soybean to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Cheetah cannot be mixed with any product containing a label prohibition against such mixing.

TANK MIX PARTNERS FOR CHEETAH IN LIBERTYLINK SOYBEANS

Assure® II	Fusion®	Raptor®
Classic®, Curio®	Harmony®, GT, Treaty®	Reflex®
clethodim	Optill®	Resource®
Cobra®	metolachlor	Select Max®
Fierce®	Phoenix™	Sharpen®
FirstRate®	Poast Plus®	Synchrony® XP
Flexstar®	Prefix®	Ultra Blazer®
Fusillade® DX	Pursuit®	

APPLICATION DIRECTIONS FOR CANOLA, CORN, COTTON, AND SOYBEAN SEED PROPAGATION

Cheetah may be applied to select out susceptible segregates, i.e. canola, corn, cotton and soybean plants that are not tolerant to glufosinate ammonium during seed propagation.

- **Canola:** Cheetah may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry a gene that imparts tolerance to glufosinate ammonium and as such can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the glufosinate ammonium tolerance gene will be severely injured or killed if treated with this herbicide. See *Application Use Directions for Use on Canola* for use rates and application timing.
- **Corn:** Inbred lines, plants not possessing glufosinate ammonium tolerance, will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of tolerant corn segregates, Cheetah may be applied at 22 fl oz/A plus AMS at 3 lb/A (17 lb/100 gallons) when corn is in the V-3 to V-4 stage of growth, i.e. 3 to 4 developed collars. A second treatment of 22 fl oz/A plus AMS at 3 lbs/A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24 inches tall. Sequential applications should be at least 10 days apart. When temperatures exceed 85° F, the rate of AMS can be reduced to 1.5 lbs/A (8.5 lbs/100 gallons) to reduce potential leaf burn.
- **Cotton:** Cheetah may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry a gene that imparts tolerance to glufosinate ammonium and as such can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the glufosinate ammonium tolerance gene will be severely injured or killed if treated with this herbicide. See *Application Use Directions for Use on Cotton* for use rates and application timing.
- **Soybeans:** For the selection of tolerant soybean segregates, Cheetah may be applied at up to 22 to 36 fl oz/A when soybean is in the third trifoliolate stage. A second treatment of 22 to 29 fl oz/A may be applied up to but not including the bloom growth stage of soybean. Sequential applications should be at least 5 days apart.

APPLICATION DIRECTIONS FOR USE ON LISTED TREE, VINE AND BERRY CROPS

Apply Cheetah to the tree, vine and berry crops listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

REGISTERED CROPS

- Bushberries, blueberry, currant, elderberry, gooseberry and huckleberry
- Other Berries: Lingonberry[*], Juneberry and Salal[*]
- Citrus: lemon, orange, grapefruit, lime, mandarin, tangerine, tangelo, calamondin[*], kumquat, pummelo[*], citron, citrus hybrids, Tangor[*] and cultivars varieties and/or hybrids of these.
- Olives[*]
- Pome Fruit: Apple, pear[*], crabapple[*], loquat[*], mayhaw[*], quince[*], azarole[*], Medlar[*], Tejocote[*], cultivars, varieties and/or hybrids of these.
- Stone Fruit: Apricot[*], cherry[*], peach[*], nectarine[*], plum[*], capulin[*], jujube, Sloe[*] and cultivars varieties and/or hybrids of these
- Tree Nuts: almonds, filberts, hickory nuts macadamia nuts (bush nuts) pecans, pistachios and walnuts
- Vineyards: all grape varieties (table, wine and raisins)

[* Not for use in California]

APPLICATION RATE AND TIMING

For best results, apply to emerged, young actively growing weeds. Warm temperatures, high humidity and bright sunlight improve the performance of Cheetah. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Do not retreat these weeds with Cheetah until sufficient regrowth has occurred.

Apply Cheetah as a directed spray to control undesirable vegetation in tree, vine and berries listed on this label. Apply as a broadcast, banded or spot treatment application depending on the situation to control weeds listed under the heading Weeds Controlled in Tree, Vine and Berry crops. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate or environmental conditions. Repeat applications of Cheetah may be necessary to control plants generating from underground parts or seed.

Avoid contact of Cheetah solution, spray drift or mist with green bark, stems or foliage as injury may occur to trees, vines and berries. Only trunks with callused, mature brown bark should be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of Cheetah with parts of trees, vines or berries other than mature, brown bark can result in serious damage.

Application Methods for Broadcast Applications

Apply Cheetah at the rates listed below for broadcast applications based on weed size and stage of growth

Weed Size and Stage	Rate of this product
Weeds < 3 in height	48 fl oz/A
Weeds < 6 in height pre tiller grasses	56 fl oz/A
Weeds > 6 in height and/or grasses that have tillered	56-82 fl oz/A

Application of Methods for Banded Spray Applications

Banded applications may be used using the following formula to calculate the amount of herbicide needed for orchard or vineyard strip sprays

$$\begin{array}{l}
 \text{Band width in inches} \\
 \text{Row width in inches}
 \end{array}
 \times
 \begin{array}{l}
 \text{Rate per acre} \\
 \text{broadcast}
 \end{array}
 =
 \begin{array}{l}
 \text{Amount of herbicide} \\
 \text{needed for treatment}
 \end{array}$$

Application Methods for Spot or Directed Spray Applications

For spot or directed spray applications by backpack sprayers only (no mechanically pressured handgun applications allowed), mix Cheetah at 1.7 fl oz of product per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use. DO NOT make spot or directed spray applications to tree or vine trunk as injury may occur.

Weeds Controlled in Tree, Vine and Berry crops

Broadleaf Weeds

Alkali sida	Fleabane, annual	Morningglory, ivyleaf	Smartweed, Pennsylvania
Ammannia, purple	Goosefoot	Morningglory, pitted	Sowthistle, annual
Arrowhead, California	Gromwell, field	Mullein, turkey	Spurge, prostrate
Buckwheat, wild	Groundcherry, cutleaf	Mustard, wild	Starthistle, yellow
Buffalobur	Groundsel, common	Nettle	Sunflower, common
Burclover, California	Henbit	Nightshade, black	Sunflower, prairie
Carpetweed	Jimsonweed	Nightshade, eastern black	Sunflower, volunteer
Chickweed, common	Knotweed	Nightshade, hairy	Swinecress
Chinese thornapple	Kochia	Pennycress	Thistle Russian
Cocklebur, common	Lambsquarters, common	Pigweed, redroot	Turnip, wild
Copperleaf, Virginia	Lettuce, miners	Pineapple weed	Velvetleaf
Cudweed	Lettuce, prickly	Puncturevine	Vervain
Cutleaf eveningprimrose	London rocket	Purslane, common	Vetch
Dodder	Mallow, common	Ragweed, wild	Virginia copperleaf
Eclipta	Malva (little mallow)	Ragweed, common	Willowherb, panicle
Fiddleneck	Marestail	Ragweed, giant	
Filaree	Mayweed	Redmaids	
Filaree, redstem	Morningglory, entireleaf	Shepherd's Purse	

Grass Weeds

Barnyardgrass	Crabgrass, smooth	Junglerice	Shattercane
Bluegrass, annual	Cupgrass, woolly	Oat, wild	Sprangletop
Brome, ripgut	Foxtail, giant	Panicum, fall	Stinkgrass
Bromegrass, downy	Foxtail, green	Panicum, Texas	Wheat, volunteer
Canarygrass	Foxtail, yellow	Rush, toad**	Windgrass
Chess, soft	Goosegrass	Ryegrass, annual*	Witchgrass
Crabgrass, large	Johnsongrass, seedling	Sandbur, field	

Biennial and Perennial Weeds

Aster, white heath	Dallisgrass	Mustard, tansy	<i>Rubus</i> spp
Bindweed, field	Dandelion	Nutsedge, purple	Spurge, leafy
Bindweed, hedge	Dock, curly	Nutsedge, yellow	Thistle, bull
Bluegrass, Kentucky	dogbane (hemp)	Onion, wild	Thistle, musk
Bromegrass, smooth	Fescue	Orchardgrass	Torpedograss
Bulrush**	Goldenrod,	Paragrass	Vaseygrass
Burdock	Guineagrass	Plantain	Woodsorrel
Canada thistle	Horsetail	Poison ivy/oak	Yarrow, common
Clover, Alsike	Lovegrass	Quackgrass	
Clover, red	Mugwort	Rocket, yellow	
Clover, white	Mullein, common	Rose, wild	

* Apply to annual ryegrass prior to 3 inches in height

** Indicates suppression

RESTRICTIONS TO THE DIRECTIONS FOR USE ON TREE, VINE AND BERRY CROPS

- 1 **DO NOT** apply more than 164 fl oz of Cheetah per acre (3 lbs ai/A) to berry bushes and stone fruit in a 12 month period. **DO NOT** make more than 2 applications at a maximum rate of 82 fl oz per acre (1.5 lb ai/A) per application.
- 2 **DO NOT** apply more than 246 fl oz (4.5 lbs ai/A) of Cheetah per acre to tree, nuts, vines, pome fruit, citrus and olives in any calendar year. **DO NOT** make more than 3 applications at a maximum rate of 82 fl oz per acre (1.5 lb ai/A) per application.
- 3 **DO NOT** graze harvest and/or feed treated orchard cover crops to livestock.
- 4 **DO NOT** apply Cheetah through any type of irrigation system.
- 5 **DO NOT** apply Cheetah aerially to tree, berry or vine crops.
- 6 **DO NOT** apply Cheetah within 14 days of nut, fruit, berry or grape harvest.
- 7 Applications to citrus fruits, pome fruits and olives must be a minimum of 14 days apart.
- 8 Applications to stone fruit must be a minimum of 28 days apart.
- 9 **DO NOT** make spot spray applications to suckers, as tree injury may occur.

SUCKER CONTROL WITH CHEETAH

Cheetah will reduce or eliminate sucker growth when applied to suckers that are young, green and uncallused. For sucker control, apply a split application approximately 4 weeks apart at 56 fl oz of product/A. Coverage of all sucker foliage is necessary for optimum control. Suckers should not exceed 12 inches in length.

TANKMIX PARTNER INSTRUCTIONS

Cheetah does not provide residual weed control or control of unexposed plant parts. Certain herbicide tank mixes may aid in the performance of Cheetah or be added to provide residual herbicide activity. No additional surfactant is needed with any tank mix partner. Cheetah may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Cheetah cannot be mixed with any product containing a label prohibition against such mixing.

Chateau®	Princep® 4L	Sinbar®80W
Devinol® 50WP	Simazine 4L	Solicam® DF
Goal® 1 6E	Simazine 80W	Surflan® AS
Karmex® DF	Simazine 90	Tuscany™

APPLICATION DIRECTIONS FOR POTATO VINE DESICCATION

APPLICATION RATE AND TIMING

Apply Cheetah at the beginning of natural senescence of potato vines. Apply 21 fl oz/A. Do not split this application or apply more than one application per harvest. Potato varieties with heavy or dense vines may require an application of another desiccation product to complete vine desiccation.

Thorough coverage of the potato vines to be desiccated is essential. Use a sufficient volume of water (20 to 100 gpa) to obtain a thorough coverage of the potato vines. Vary the gallons of water per acre and the spray pressure as indicated by the density of the potato vines to assure thorough spray coverage. Increase the spray volume to at least 30 gallons of water per acre when the potato vine canopy is dense or under cool and dry conditions. Apply Cheetah with the spray boom as low as possible to achieve thorough coverage of the potato vines for best control and to minimize drift potential.

RESTRICTIONS TO THE DIRECTIONS FOR USE IN POTATO VINE DESICCATION

- 1 **DO NOT** apply more than 21 fl oz/A to potato vines per season.
- 2 **DO NOT** harvest potatoes until 9 days or more after application of Cheetah.
- 3 **DO NOT** apply to potatoes grown for seed
- 4 Canola, corn, cotton, rice, soybean and sugar beets may be planted at any time after the application of Cheetah as a potato vine desiccant.
- 5 **DO NOT** plant treated areas to wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale until 30 or more days after an application of Cheetah as a potato vine desiccant.
- 6 **DO NOT** plant treated areas to crops other than those listed in this use precautions section until 120 or more days after an application of Cheetah as a potato vine desiccant.

APPLICATION DIRECTIONS FOR USE ON RICE^[1]

THOROUGH SPRAY COVERAGE IS VERY IMPORTANT For best results, apply to emerged young actively growing weeds. Cheetah is a foliar active material with little or no soil residual activity. Weeds that emerge after application will not be controlled. Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. Cheetah is rainfast 4 hours after application to most weed species. Rainfall within 4 hours after application may necessitate retreatment or reduced weed control may result.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON RICE

- 1 **DO NOT** exceed 48 oz of Cheetah per growing season.
- 2 **DO NOT** apply Cheetah within 70 days of harvesting rice.
- 3 **DO NOT** plant rotation crops in a field treated with Cheetah within 120 days after the last application of Cheetah with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale which may be planted 70 days after the last application of Cheetah. The crops listed on this label may be planted at any time.
- 4 **DO NOT** apply Cheetah through any type of irrigation system.
- 5 **DO NOT** use paddy water from a rice field treated with Cheetah for irrigation or as a water source for livestock or for raising crayfish
- 6 **DO NOT** add surfactants or crop oils. A silicon based anti-foam agent may be added if needed.

[¹ – Not for use in California]

Application Timing for the Southern United States (Arkansas, Louisiana, Mississippi, Missouri and Texas)

Applications of Cheetah on rice may be made from the 1 leaf stage through the mid-tillering stage of development. Refer to the *Rate Tables for Weed Control in Rice* to select the proper rate to use to control the weed species present. Cheetah will have an effect on weeds that are larger than the recommended leaf stage, however, speed of activity and control may be reduced.

Rice fields should be as level as possible and free of large clods to obtain uniform germination of rice and grassy weeds and to ensure uniform flood levels. If necessary, fields may be flushed prior to treatment so that the rice and grass/broadleaf weeds are actively growing at the time of treatment. If the rice field is flushed, allow sufficient time for germination of the weed species to occur prior to treatment.

Apply Cheetah prior to the permanent flood when weeds are in the 1-5 leaf stage. A second application is recommended after a new flush of weeds emerge. A second application may be made from 10-14 days after the first application up to the mid-tillering growth stage of the rice. For optimum weed control, apply Cheetah before canopy closure to ensure thorough spray coverage of the weed species.

When applying Cheetah post flood, lower the water level so that 75% of the weed foliage is exposed. The water level may be brought back to normal level 48 hours after the herbicide application

APPLICATION TIMING FOR CALIFORNIA

1 Water Seeded Rice

Cheetah can be applied when the rice is in the 1 leaf stage to mid-tillering stage of development (but prior to panicle initiation). For optimum weed control, apply Cheetah when rice is in the 4 to 5 leaf stage. Lower the water in the field in order to expose small broadleaf weeds and sedges. The water level may be brought back to the normal level 24 hours after herbicide application. The water level must be controlled such that the rice is not completely covered. A second application is recommended at the 2 to 3 tiller stage of rice. For optimum weed control, apply Cheetah before canopy closure to ensure thorough spray coverage of the weed species.

- Minimum paddy depth of 8 inches
- Do not exceed 24 fl oz (0.44 lbs ai/A) per single application
- Maximum of two applications at 24 fl oz (0.44 lbs ai/A) with a minimum 10 day re-treatment interval
- Do not exceed 48 fl oz (0.89 lbs ai/A) per year
- Minimum 7 day holding period after last application

2 Drilled or Dry Seeded Rice

Rice fields should be as level as possible and free of large clods to obtain uniform germination of rice and grassy weeds and to ensure uniform flood levels. If necessary, fields may be flushed prior to treatment so that the rice and grass/broadleaf weeds are actively growing at the time of treatment. If the rice field is flushed, allow sufficient time for germination of the weed species to occur prior to treatment.

Apply Cheetah prior to the permanent flood when weeds are in the 1-5 leaf stage. A second application is recommended after a new flush of weeds emerge. A second application may be made from 10-14 days after the first application up to the mid tillering growth stage of the rice. For optimum weed control, apply Cheetah before canopy closure to ensure thorough spray coverage of the weed species.

- Do not exceed 48 fl oz (0.89 lbs ai/A) per single application
- 2 applications can be made at 24 fl oz (0.44 lbs ai/A) with a minimum 10 day re-treatment interval
- Do not exceed 48 fl oz (0.89 lbs ai/A) per year
- Minimum paddy depth of 4 inches
- Minimum 7 day holding period after flooding of the field

Rate Tables for Weed Control in Rice

Rates in ounces of formulated product per acre for the control of weeds are shown in the following tables. In weed populations with mixed species, apply the rates needed for all species present.

1 Southern United States (Arkansas, Louisiana, Mississippi, Missouri and Texas)

Grass Weeds Controlled with Cheetah in Rice Grown in the Southern United States

Weed Species	Maximum Weed Growth Stage (leaf/tiller)	
	20 fl oz/A	24 fl oz/A
Barnyardgrass	4 leaf	2 tiller
Crabgrass, large	4 leaf	2 tiller
Fall Panicum	4 leaf	2 tiller
Johnsongrass	4 leaf	2 tiller
Rice, red*	2 leaf	2 tiller
Signalgrass, broadleaf	4 leaf	2 tiller
Sprangletop	4 leaf	2 tiller
Watergrass	6 leaf	2 tiller

*For optimum red rice control, make two applications of Cheetah. The first application should be made when the red rice is in the 2-3 leaf stage. The second application should be made after the newly emerged red rice reaches the 2-3 leaf stage but before the white rice reaches the mid tillering stage of development.

Broadleaf Weeds Suppressed or Controlled with Cheetah in Rice Grown in the Southern United States

Weed Species	Maximum Weed Height or Diameter (Inches)	
	20 fl oz/A	24 fl oz/A
Ammania	2	4
California Arrowhead	**	4
Cocklebur, common	6	10
Curly Indigo	2	8
Dayflower	2	4
Eclipta	4	6
Morningglory, ivyleaf	4	8
Morningglory, pitted	4	8
Northern jointvetch	4	8
Pennsylvania smartweed	4	8
Sesbania, hemp	4	10

** indicates suppression

Cheetah applied at 24 fl oz/A may control or suppress the sedges shown in the following table. Control of sedges may be enhanced by using a second application or by a tank mix with other herbicides recommended on this label.

Sedges Suppressed with Cheetah in Rice Grown in the Southern United States

Sedges	24 fl oz/A
Bulrushes	**
Flatsedge	**
Nutsedge	**
Smallflower Umbrellaplant	**

** indicates suppression

2 California

Grass Weeds Controlled with Cheetah at 20 fl oz/A in Rice Grown in California

Weed Species	Maximum Weed Growth Stage
Barnyardgrass	4 leaf
Sprangletop	4 leaf
Watergrass	4 leaf

Broadleaf Weeds Suppressed or Controlled with Cheetah in Rice Grown in California

Weed Species	Maximum Weed Height (Inches)	
	20 fl oz/A	24 fl oz/A
Ammania	2	4
California Arrowhead	2	4
Ducksalad	2	4

Cheetah applied at 20 to 24 fl oz/A may control or suppress the sedges shown in the following table. Control of sedges may be enhanced by using a second application or tank mixes with other herbicides.

Sedges Suppressed or Controlled with Cheetah in Rice Grown in California

Weed Species	Maximum Weed Height (Inches)	
	20 fl oz/A	24 fl oz/A
Ricefield bullrush	**	4
Smallflower Umbrellaplant	**	4

** indicates suppression

TANK MIX INSTRUCTIONS FOR USE IN RICE

When using Cheetah in tank mix combinations, follow the precautions and directions of the most restrictive label for the appropriate timing rate and crop response information.

1 Southern United States (Arkansas, Louisiana, Mississippi, Missouri and Texas)

To enhance weed control and/or provide residual control in rice, Cheetah may be mixed with the following herbicides:

- Basagran® Herbicide
- Bolero EC® Herbicide
- Londax® Herbicide
- Prowl® 3 3EC Herbicide
- Propanil
- Stam® Herbicide
- Permit® Herbicide

2 California

To enhance weed control and/or provide residual control in rice, Cheetah may be mixed with the following herbicides:

- Londax® Herbicide
- Stam® Herbicide
- SuperWham® Herbicide

APPLICATION DIRECTIONS FOR USE IN RICE SEED PROPAGATION

Cheetah is to be applied as a foliar spray to selectively remove susceptible segregates, i.e. undesirable rice plants which are not tolerant to glufosinate ammonium and to control of a broad spectrum of emerged grass and broadleaf weeds in rice seed production fields. Inbred lines or breeding maternal not possessing the glufosinate ammonium tolerance gene will be severely injured or killed if treated with this herbicide. Apply Cheetah exclusively to rice seed propagation fields in which the desired plants are glufosinate ammonium tolerant.

THOROUGH SPRAY COVERAGE IS VERY IMPORTANT. Cheetah works best when weeds are small and the crops and weeds are actively growing. Visual effects and control of rice susceptible segregates from Cheetah applications occur within 2 to 4 days after application under good growing conditions. The ability of Cheetah to eliminate rice plants not tolerant to glufosinate ammonium may be reduced when heavy dew fog or mist/rain is present on the crop or when the crop is under stress due to drought, cool temperatures or extended periods of cloudiness.

Rice fields should be as level as possible and free of large clods to obtain uniform germination of rice and grassy weeds and to ensure uniform flood levels. If necessary, fields may be flushed prior to treatment. If fields are flushed prior to treatment, flush in sufficient time so that the rice and grass/broadleaf weeds are actively growing at time of treatment.

Do not allow spray to contact foliage or green tissue of desirable vegetation other than rice lines in which the desired plants are glufosinate ammonium tolerant. Cheetah will injure any other green vegetation contacted by the spray.

INSTRUCTIONS FOR SEED HANDLING STORAGE AND USE

Seed from treated plants must be held in secured storage until used for breeding of glufosinate ammonium tolerant rice seed or destroyed. Seed from treated plants must be labeled as follows: Do Not Use for Feed or Food Purposes Store Away from Feed and Food Stuffs. In addition, label the seed with the Seed Disposal statements found in the Storage and Disposal section of this label.

RESTRICTIONS TO THE DIRECTIONS FOR USE

- 1 DO NOT use rice, any rice processed commodities or rice straw treated with Cheetah for food or feed consumption.
- 2 DO NOT exceed 80 fl oz/A of Cheetah per growing season on rice being treated for segregate control in seed production fields.
- 3 DO NOT plant rotation crops in a field treated with Cheetah for 120 days after the last application of Cheetah with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale which may be planted 70 days after the last application of Cheetah.
- 4 DO NOT apply Cheetah through any type of irrigation system.

Rate Instructions and Timing for Seed Production

For the selection of susceptible rice segregates, Cheetah must be applied at 40 fl oz/A when rice is in the 1 to 3 leaf stage of growth. A second treatment of 40 fl oz/A must be applied 10 days later or up until the rice is in the mid-tillering state of growth.

- Do not exceed 80 fl oz (1.46 lbs ai/A) per single application.
- 2 applications can be made at 40 fl oz (0.73 lbs ai/A) with a minimum 10 day re-treatment interval.
- Do not exceed 80 fl oz (1.46 lbs ai/A) per year
- Minimum paddy depth of 4 inches
- If 1 application of 80 fl oz is made, the application must be made to a dry field. A minimum 7 day holding period after flooding of the field is required.
- If 2 applications are made, the first application must be made to a dry field.
- The second application may be made to a flooded field with a required 55 day holding period for a 4 inch paddy depth or a 30 day holding period for an 8 inch paddy depth.

WATER MANAGEMENT

A sufficient portion of the target grassy weed plant must be exposed to Cheetah for satisfactory control to be achieved. Therefore if necessary, lower or allow water to recede so that at least 75% of the weed foliage is exposed above the water level. Do not increase the water level for at least 48 hours following the application of Cheetah. The water level may be brought back to normal level following this period.

TANK MIX INSTRUCTIONS FOR CHEETAH USE IN RICE SEED PROPAGATION

When using Cheetah in tank mix combinations follow the precautions and directions of the most restrictive label for the appropriate timing, rate and crop response information.

1 Southern United States (Arkansas, Louisiana, Mississippi, Missouri and Texas)

To enhance weed control and/or provide residual control in rice, Cheetah may be mixed with the following herbicides:

- Basagran® Herbicide
- Bolero® SEC Herbicide
- Londax® Herbicide
- Prowl® 3.3 EC Herbicide
- Stam® Herbicide
- Permit® Herbicide

2 California

To enhance weed control and/or provide residual control in rice, Cheetah may be mixed with the following herbicides:

- Bolero® SEC Herbicide
- Londax® Herbicide
- Stam® Herbicide
- SuperWham® Herbicide

FALLOW FIELDS OR POST HARVEST

Cheetah may be used as a substitute for tillage in fallow fields to control or suppress weeds listed in the Weed Control for Row Crops section of this label. Applications may be made in fallow fields post-harvest, prior to planting or emergence of any crop listed on this label.

Apply Cheetah at 22 or 29 fl oz/A to fallow fields to control specific weeds. Cheetah must be applied with ammonium sulfate. Tank mixes with 2-4 D, glyphosate or atrazine are recommended with Cheetah to enhance total weed control. When using Cheetah in tank mix combinations, follow the precautions and directions of use of the most restrictive label. See the Application and Mixing Procedures section of this label for additional information on how to apply Cheetah. See the Information section of this label for rotational crop restrictions.

FARMSTEADS, RECREATIONAL, AND PUBLIC AREAS

When applied as listed, Cheetah controls undesirable plant vegetation in non-crop areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches or canals, schools, parking lots, tank farms pumping stations, parks other public areas and general nonselective farmstead weed control. Refer to the Application Directions for use on listed Tree, Vine and Berry Crops section of this label for appropriate application broadcast and spot spray application rates and lists of weeds controlled.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Do not use or store near heat or open flame. Keep container tightly closed and dry in a cool, well ventilated place. Storage temperature should not exceed 125° F. If storage temperature of this product is below 32° F, the material should not be pumped until its temperature exceeds 32° F. Protect against direct sunlight.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL [HANDLING]:

[Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Disposal (Container Handling) statements] **NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "No refillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size."

[Note to Reviewer: The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

[Non-refillable Containers 5 Gallons or Less:] Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. 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 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

[Non-refillable containers larger 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. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **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 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.

[Refillable containers larger than 5 gallons:] Refillable container. 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 a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

[Refillable Container:] Refill this container with pesticide only. Do not reuse this container for any other purpose. Close all openings and replace all caps. Contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

[Seed Disposal:] To dispose of out of date or otherwise unmarkable seed from plants which have been treated with this product, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial incineration or landfill disposal

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

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