34704-950

-10-2008

UNITED STATE

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

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

JUL 10 2008

Ms. Kristie Raymond Loveland Products, Inc P. O. Box 1286 Greeley, CO 80632-1286

Dear Ms. Raymond:

Subject: Cadence Atz Herbicide (Add Sweet Corn and Update Rotational Crops) EPA Registration No. 34704-950 Application Dated April 17, 2008

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable provided you make the following changes before you release the product for shipment.

1. Move the first two paragraphs under "Use Restrictions" to the end of the Environmental Hazards section.

2. On page 2, under Tile-Outletted Fields Containing Standpipes, revise the first sentence to read "To ensure protection of surface water from runoff through standpipes with tile-outletted terraced fields, one of the following restrictions must be used in applying this product to tile-outletted fields containing standpipes:..."

3. On page 3, under Adding to Spray Tank, Used Alone, revise the first sentence to read similar to "When Cadence Atz is used alone, add the **specified** amount to the spray tank when the tank is half-filled with carrier, then add the rest of the water or fluid fertilizer." The Agency no longer allows use of the word "recommended" when referring to application rates. Keep this in mind for future submissions.

Submit one (1) copy of your final printed labeling incorporating the above change before you release the product for shipment. Amended labeling supersedes all previously approved ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

Vickie KWalters for James A. Tompkins

Product Manager 25 Herbicide Branch Registration Division (7505P)

# RESTRICTED USE PESTICIDE Due to Ground and Surface Water Concerns and Oncogenicity For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification. This product is a restricted use herbicide due to ground and surface water concerns and oncogenicity concerns. Users must read and fo'l(v) all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water. ACCEPTED 13 with COMMENTS JUL 10 2008 00.000 nce\*A Under the Federal Inspecticul Fungleide, and Redontielde Act. as amound, for the posticide registered under MPA Rey, No. 34704-95-0

EXP04/08

# A preemergence herbicide for control of annual grass and broadleaf weeds in field corn, production seed corn, silage corn, and popcorn.

### ACTIVE INGREDIENTS:

acetochlor: 2-chloro-2'-methyl-6'-ethyl-N-		
ethoxymethylacetanilide		32.6%
atrazine: [2-chloro-4-(ethylamino)-6-(isopropylamino)-s	-triazine]	
and related triazines		24.4%
OTHER INGREDIENTS:		43.0%
•	TOTAL	100.0%

Contains 3.0 pounds acetochlor and 2.25 pounds atrazine active ingredient per gallon.

®Trademark of Dow AgroSciences LLC

# 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 defalle. (If you do not understand the label, find someone to explain it to you in detail.)

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies at end of label booklet. If terms are not acceptable, return at once unopened.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

## EPA REG. NO. 34704-950

# EPA EST. NO. 34704-MS-1

NET CONTENTS 1 GAL. (3.78 L)

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# WARNING

Causes Substantial But Temporary Eye Injury • Harmful If Swallowed

Do not get in eyes or on clothing. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

## Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are polyethylene and polyvinylchloride. If you want more options, follow instructions for category A on an EPA chemical-resistance selection chart.

- Mixers, loaders, applicators and other handlers must wear:
- Coveralls over long-sleeved shirt and long pants,
  Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Protective eyewear,
- · Chemical-resistant headgear (if overhead exposure),
- Chemical-resistant apron when mixing/loading, cleaning up spills, or cleaning equipment, or otherwise exposed to the concentrate.

### See Engineering Controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contarninated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Engineering Controls: When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# USER SAFETY RECOMMENDATIONS

#### Users should: • Wash hands before eating, drinking, chewing gurn, using tobacco or using the toilet

 Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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

#### FIRST AID

- · · · · · · · · · · · · · · · · · · ·	
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
'	Remove contact lenses, if present, after the first 5 minutes, then
	continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If swallowed:	Call a poison control center or doctor immediately for treatment advice.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by a poison control</li> </ul>
	center or doctor.
	<ul> <li>Do not give anything by mouth to a unconscious person.</li> </ul>
If on skin	<ul> <li>Take off contaminated clothing.</li> </ul>
or clothing:	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Have the produ	uct container or label with you when calling a poison control center or
	g for treatment.
	CAL EMERGENCY INVOLVING THIS PRODUCT CALL:
1-800-301-797	
NOTE TO PHY	SICIAN: Probable mucosal damage may contraindicate the use of
dastric lavage.	

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. 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 apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

Do not apply to the following soils if groundwater depth is 30 feet or less: sand with less than 3% organic matter; loamy sand with less than 2% organic matter; or sandy loam with less than 1% organic matter.

#### PHYSICAL AND CHEMICAL HAZARDS Do not use or store near heat or open flame.

## DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying.

# CADENCE\* ATZ HERBICIDE EPA REG. NO. 34704-950

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIO-LATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be assessed through [www.atrazine-watershed info] or [1-866-365-3014]. If use of this product is prohibited in your watershed, you may relum unopened product to your point of purchase or contact Loveland Products, Inc. for a refund.

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

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, noti fication, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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.

## **GENERAL INFORMATION**

For use only on field corn, production seed corn, silage corn, sweet corn and popcorn. Corn in this label refers to all: field corn, production seed corn, silage corn, sweet corn and popcorn.

Cadence\* Atz herbicide is a unique combination of the herbicides acetochlor and atrazine plus the antidote or safener, dichlormid. While the acetochlor and atrazine provide weed control, the dichlormid safens corn against herbicide injury. Cadence\* Atz may be applied to the surface or incorporated into the top 1-2 inch layer of soil. It is recommended for control alone, or in tank mix combinations, for the weeds listed in the "Target Weeds" section of these use directions. Cadence\* Atz controls weeds by interfering with normal germination and seedling development. Cadence\* Atz does not control established or germinated weeds present at application.

## USE RESTRICTIONS

- This product may not be mixed or loaded within 50 ft. of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied by ground within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or setback from runoff entry points must be planted to crop, seeded with grass or other suitable crop.
- . This product must not be mixed or loaded, or used within 50 feet of all wells, including abandoned wells, drainage wells, and sinks holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

## Tile-Outletted Fields Containing Standpipes

- One of the following restrictions must be used in applying this product to tile-outletted fields containing standpipes:
- Do not apply this product within 66 feet of standpipes in tile-outletted fields.
   Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire field.

- 3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when high crop residue management practices are used. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during or after crop harvest.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not use flood irrigation to apply or incorporate this product.
- Product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.
- Do not apply under conditions that favor runoff or wind erosion of soil containing this product to non-larget areas. To prevent off-site movement due to runoff or wind erosion:
- Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
- Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered soils.
- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least ½ inch of rainfall has occurred between application and the first irrigation.
- Aerial Application: Do not apply this product using aerial application equipment.
- Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:
- Use low-pressure application equipment capable of producing a large droplet spray.
- Do not use nozzles that produce a fine droplet spray.
  Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
- Keep ground-driven spray boom as low as possible above the target surface.
- Make application when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when gusts approach 15 mph.
- Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

#### Maximum Application Rates:

Maximum broadcast application rates for corn must be as follows:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds active ingredient per acre per calendar year.
- 2.5 pounds active ingredient per acre per calendar year.
  Apply a maximum of 2.0 pounds active ingredient per acre if a single preemergence application is made on soils that are not highly erodible or on highly erodible soil if at least 30% of the soil is covered with plant residues, or
- Apply a maximum of 1.6 pounds active ingredient per acre as a single preemergence application on highly erodible soils if less than 30% of the soil is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.
- Preharvest Interval: Do not apply Cadence\* Atz within 60 days of harvest of field corn for forage uses.
- Postemergence applications of atrazine to corn must be made before the crop reaches 12 inches in height.

## **GENERAL USE PRECAUTIONS**

- Failure to strictly follow label directions may result in exceeding the maximum annual atrazine use rates as stipulated by the Environmental Protection Agency.
- Note: This product contains atrazine and thus may not control weeds that are known or suspected to be triazine resistant. Following many years of continuous use of atrazine and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by atrazine and related herbicides. Where this is known or suspected and weeds controlled by atrazine are expected to be present along with resistant biotypes, it is recommended that atrazine be used in combinations or in sequence with other registered herbicides which are not triazine. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide.
- Do not use Cadence\* Atz on any crop other than field corn, production seed corn, silage corn, sweet corn and popcorn.
- Cadence\* Atz should not be used on corn seed stock such as Breeders, Foundation, or Increase.
- Do not contaminate irrigation water used for crops other than corn or water used for domestic purposes.
- Do not apply Cadence\* Atz before pre-irrigation in irrigated areas.
- Do not allow Cadence\* Atz to contaminate feed or food.
- Cadence\* Atz should not be stored near seeds, fertilizers, or foodstuffs.
- All containers of Cadence\* Atz should be kept tightly closed when not in use.
- Applied according to directions and under normal growing conditions, Cadence\* Atz will not harm the treated crop. During germination and early stages of growth, extended periods of unusually cold and wet or hot and dry weather, insect or plant disease attack, carryover pesticide residues, the use of certain soil applied systemic insecticides, improperly placed fertilizers or soil insecticides may create abnormal conditions that weaken crop seedlings. Cadence\* Atz used under these abnormal conditions could result in crop injury.

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#### **Rotational Crop Restrictions**

When tank mixing with other herbicides, follow the most restrictive crop rotation guidelines on the label of each product used. The following rotational crops may be planted as indicated:

Rotational Crop	Timing or Interval
<u>co</u> m (1)	0 months after application
sorghum, soybeans (2)	Spring following application
alfaifa, barley, dry beans (3), lupin (4),	15 months after application (5)
millet, pearl or proso, oats, pea (6),	
potatoes, rye, sugar beets, sunflower,	
tobacco (7), triticale, wheat, wild rice	
Numbers within narentheses (-) in the table	refer to Specific Botational Crop

Requirements below.

- (1) If crop treated with Cadence\* Atz is lost, corn may be replanted immediately. Do not make a second application of Cadence\* Atz. Do not apply Cadence\* Atz after June 10, unless only corn will be planted the following year.
- (2) Due to the risk of atrazine carryover, injury may occur to soybeans the year following corn when planted in north central and northwest lowa, south central and southwest Minnesota, northern Nebraska and southeast South Dakota on soils having a calcareous surface layer and relatively high plH
- (3) Dry beans includes: adzuki, kidney, lima, navy, pinto
- (4) Lupin includes: grain, white, white sweet
- (5) Approved rotation crops list does not include any species of succulent beans and peas.
- (6) Pea includes: blackeyed, chick, cow, Crowder, field, pigeon, Southern
- (7) Because of atrazine carryover, injury may occur to tobacco.

# **APPLICATION DIRECTIONS - CORN**

Carriers

Liquids: Either water or liquid fertilizers such as solutions, slurries or suspensions may be used as liquid carriers. If fluid fertilizers are used, a physical compatibility test with these must be done **before combining** in the spray tank. See Appendix I for details of the compatibility testing procedure. Even if Cadence\* Atz is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

Dry Bulk Fertilizer: Cadence<sup>+</sup> Atz may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread. See Appendix II for details including which fertilizers are compatible.

#### ADDING TO SPRAY TANK

The spray tank must be clean, thoroughly rinsed and decontaminated before adding either Cadence\* Atz alone or with tank mix combinations. If water is used as the carrier, use clean water.

Used Alone: When Cadence\* Atz is used alone, add the recommended amount to the spray tank when the tank is half filled with carrier, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Tank Mixed: If a tank mixture is used, it is recommended that a compatibility test be done before actual tank mixing. See Appendix I for details on the procedure for such a test.

Once compatibility is confirmed for the tank mix, fill the tank half full of carrier. Start and continue agitation throughout mixing. All return lines to the spray tank must discharge below the liquid level. Add components in the following order of formulation:

- If a wettable powder or dry flowable formulation is used, make a slurry with water and add it slowly through the screen into the tank. Agitate during the procedure.
- If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when the flowable is diluted with water before adding to the tank.

· Add Cadence\* Atz next.

- Add ammonium sulfate then Glyphomax Plus herbicide, 2,4-D herbicide, and a non ionic surfactant last, if needed.
- · Complete filling the sprayer tank and continue agitation.
- Batches should be mixed and applied the same day.

#### VOLUME

Liquid: Use a minimum of 10 gallons per acre in broadcast boom equipment for ground applications.

Dry Bulk Fertilizer: Use a minimum of 200 pounds of dry bulk fertilizer per acre. See Appendix II for more details.

## PRESSURE

If liquid carriers are used, the pressure at the nozzle should be 15 to 40 psi to ensure good distribution in the spray pattern. Use appropriate nozzles and 50-mesh or coarser screens, if needed. Maintain sufficient agitation to ensure the mixture is suspended in the spray tank.

# APPLICATION TIMING AND METHODS

For the optimum period of effective weed control during the time most critical to corn production, preplant applications of Cadence' Atz Herbicide should occur as close as possible to planting. Preemergence applications should occur as close as possible to planting, but prior to weed emergence.

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Note: Do not apply Cac. Atz Herbicide to sweet corn as an early postemergene application.

Early Preplant: On medium and fine textured soils (Table 1), Cadence\* Atz may be applied up to 30 days prior to planting.

Preplant Incorporation: Cadence\* Atz may be mechanically incorporated in the top 2 inches of the soil with field cultivators, discs, or spring tooth harrows at any time within 14 days prior to planting. Improper incorporation, excessive crop residues, or poor soil tilth may result in erratic, streaked or otherwise unsatisfactory weed control. Avoid moving or shaping soil after incorporation.

Preemergence Surface: Cadence\* Atz and certain tank mixes may be applied to the soil surface as a broadcast or banded application. Precipitation or sprinkler irrigation of at least 0.25 inch is required to bring Cadence\* Atz into contact with germinating seeds. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe, or similar device, to incorporate the herbicide. The device used should be run at a shallow depth to prevent disturbing the com seed. Do not remove Cadence\* Atz from the weed control zone or dilute it with untreated soil.

Postplant-Preemergence: Cadence\* Atz may be applied immediately after planting but prior to com emergence. If rain or sprinkler irrigation does not occur within 7 days, after application, weed control may be improved by using a rotary hoe, or similar device, to shallowly incorporate the herbicide. Do not disturb the germinating corn. Do not remove Cadence\* Atz from the weed control zone or dilute it with untreated soil.

Banding-Preemergence: Cadence' Atz may be applied in a 10 to 14 inch band after com planting but prior to corn emergence. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe or similar device to incorporate the herbicide. Do not disturb the germinating corn. Do not remove Cadence' Atz from the weed control zone or dilute it with untreated soil.

Early Postemergence: Cadence\* Atz may be applied early postemergence to corn up to 11\* tall. Applications must be made prior to weed seedling emergence or in a tank mixture that controls the emerged weeds. Read and follow restrictions and directions on tank mix product labels.

Sprinkler Irrigation: Do not apply Cadence\* Atz through sprinkler Irrigation systems. Use a sprinkler system only to incorporate Cadence\* Atz after application. After Cadence\* Atz has been applied, a sprinkler irrigation system set to deliver 0.25 to 0.75 inch of water per acre may be used to incorporate the product. Using more than 0.75 inch of water could result in reduced performance. On sandy soils low in organic matter, use no more than 0.5 inch of water. Do not use flood irrigation to apply or incorporate Cadence\* Atz.

#### PLANTING

Planting should be done as close to the time of application of Cadence\* Atz as possible. This allows Cadence\* Atz to provide effective weed control during the time it is most critical in the production of corn.

#### CULTIVATION

Cultivation should be delayed as long as possible. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in improved weed control. If Cadence\* Atz was incorporated, cultivate to a depth of less than half the depth of incorporation.

If cultivation is necessary due to soil crusting, compaction, or escaped weeds, adjust equipment to run shallow and minimize soil movement. This will decrease the possibility of diluting or moving the herbicide from the weed control zone.

# SOIL TEXTURE AND ORGANIC MATTER

The use rate of Cadence\* Atz Herbicide is determined by a combination of two factors, soil texture and organic matter, which must be determined prior to application. Soils are grouped into three textural classes (coarse, medium and fine), as outlined in Table 1.

Table 1: Soil Texture Groupings for Cadence\* Atz. Use Rate Selection.

Coarse	Medium	Fine
Sand	Loam	Silty Clay Loam
Loamy Sand	Silt	Sandy Clay Loam
Sandy Loam	Silt Loam	Sandy Clay
		Silty Clay
		Clay Loam
	1	Clay

# **USE RATES IN CONVENTIONAL TILLAGE SYSTEMS**

Table 2: Cadence\* Atz Use Rates (qt/acre) by Soil Texture and Organic Matter Content in Conventional Tillage Systems.

The following use rates are for preplant incorporated, preemergence, and early postemergence applications (see Application Timing and Methods). Consult Table 3 if no-till applications are made or application is made more than 14 days prior to planting under conventional tillage.

Soil Organic Matter Content			
Soil Texture	Less than 3%	3% or Greater	
Coarse	2.2 - 2.4	2.4 - 2.6	
Medium	2.4 - 2.8	2.6 - 2.8	
Fine	26-301	26-34	

On highly erodible soils with less than 30% plant residue, do not apply more than 2.8 quarts/acre.

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Organic Matter: If the organic matter content of the soil is at the lower end of the range, use the lower rates in the rate range provided in Table 2. If the organic matter content is at the upper end of the range, use the higher rates.

Weed Infestation: If the weed infestation is lighter, use a rate at the lower end of the rate range for the soil texture and organic matter content. If the weed infestation is heavier, use the higher rates in the rate range for the soil conditions.

# USE RATES FOR REDUCED TILLAGE SYSTEMS

Cadence\* Atz may be used in reduced or no-tillage systems. Applications may be made from up to 30 days prior to planting or after planting but before the corn emerges. Optimal weed control will be obtained when applications are made as close to planting as possible but before the corn emerges. It is recommended that a burndown herbicide such as Glyphomax Plus or 2,4-D be tank mixed with Cadence\* Atz in reduced or no-tillage systems to control emerged weeds.

Table 3: Cadence\* Atz Use Rates <sup>1</sup> (qt/acre) by Soil Texture in Reduced or No-Tillage Systems

	Time Of Ap	ng	
Soil Texture	Greater Than14 Days Before Planting	Less Than 14 Days Before Planting or After Planting But Prior to Corn Emergence	After Planting and/or Corn Emergence
Coarse	Do not apply more than 14 days before planting on coarse textured soils	2.2 - 2.6	2.2 - 2.6
Medium	2.4 - 3.4	2.4 - 2.8	2.4 - 2.8
Fine	2.8 - 3.4	2.6 - 3.4	2.6 - 3.4

<sup>†</sup> Rates are for single applications. Split applications of Cadence<sup>\*</sup> Atz may be used; apply at least 60% of the recommended rate up to 30 days before planting and the remaining balance, up to 40%, at planting.

## **BAND APPLICATIONS**

For band applications, use row and band width measurements (inches) to calculate the amount of Cadence\* Atz to be applied per acre as follows:

Band width in inches	х	Rate per acre for a	=	Amount of Cadence* Atz
Row width in inches		broadcast treatment		to apply per acre

# WEEDS CONTROLLED

Cadence\* Atz applied as directed in this label will control or partially control the weeds listed in Table 4. Additional weeds may be controlled with tank mixes. See the "Tank Mix Combinations" section of this label for tank mix recommendations. Always consult the tank mix product labels for specific use rates and directions. Always follow the most restrictive label when tank mixing Cadence\* Atz with another product. Cadence\* Atz may be tank mixed with any other registered corn product as long as compatibility is verified and tank mixing is not prohibited by the tank mix product label. Note: This product contains atrazine and may not control weeds that are known or suspected to be triazine resistant.

Table 4: Weeds Controlled or Partially Controlled by Cadence\* Atz at Recommended Use Rates.

	C = Control PC = Partial		C = Control PC = Partial
Grasses and Sedges	Control	Broadleaves	Control
barnyardorass	C	beogarweed, Florida	C
Craborass spp.	С	carpetweed	С
crowfootgrass	С	cocklebur (2)	PC
Cupgrass, southwestern	С	galinsoga	С
Cupgrass, woolly	PC	jimsonweed	С
foxtail, giant	C	kochia	PC
foxtail, green	C	lambsquarters, common	С
foxtail, robust (purple, white)	· C.	morningglory spp.	С
foxtail, yellow	С	nightshade, black	C.
goosegrass	C	nightshade, hairy	С
johnsongrass, seedling	PC	pigweed, redroot	С
millet, foxtail	C	purslane, common	C.
millet, wild proso	PC ·	pusley, Florida	C ·
nutsedge, yellow (1,2)	С	ragweed, common	C
panicum, browntop	C	ragweed, giant	PC
panicum, fall	С	sicklepod	С
panicum, Texas	C (3)	sida, prickly	C
rice, red	C	smartweed spp.	С
sandbur, field	PC	velvetleaf (2)	PC
shattercane	PC	waterhemp, tall	С
signalgrass, broadleaf	C (3)		
sprangletop, red	C		·
witchgrass	C		

 Yellow nutsedge requires a minimum of 2.7 quarts. Incorporation will improve control.

(2) Activity may be reduced under dry conditions or following early (more than 14 days) preplant applications. Sequential herbicides or additional atrazine may be needed for complete control.

4

(3) Best control is achiev hen Cadence\* Atz is applied within 5 days of planting and rainfall occurs shortly after application or mechanical incorporation is used to activate the herbicide. If rainfall does not occur within 7 days after application, shal low cultivation will enhance activity. Excessive rainfall after application may reduce control. Under adverse weather conditions and/or heavy infestations, a cultivation or follow-up herbicide may be needed.

# CADENCE\* ATZ TANK MIX COMBINATIONS

When tank mixing or sequentially applying atrazine or products containing atrazine to corn, the total pounds of atrazine applied (Ib ai/A) must not exceed 2.5 pounds of active ingredient per year.

# **USE OF SPRAY ADJUVANTS**

Cadence\* Atz is a preemergence herbicide for which spray adjuvants have little or no effect on performance. However, several herbicides used in tank mixtures with Cadence\* Atz require use of adjuvants to aid in the burndown of emerged weeds. Use only those adjuvants recommended on tank mix product labels and approved for agricultural crop use. Adjuvants and/or low rate liquid fertilizers (28%, 30% or 32% UAN) or ammonium sulfate (AMS) may be used with tank mixes applied preplant or preemergence to the crop. Note: Do not use liquid fertilizer as the carrier when Cadence\* Atz is applied postemergence to corn as severe injury may result. The addition of liquid fertilizers used as adjuvants with Cadence\* Atz may result mise applied postemergence to corn under environmental stress conditions may result in significant crop injury and should be avoided if the risk of crop injury is unacceptable.

# PREEMERGENCE TANK MIX COMBINATIONS

Tank mix combinations may be used in either conventional, reduced or no-till systems and be applied by the same methods and at the same timings as Cadence\* Atz unless otherwise specified in the tank mix product label.

When tank mixing Cadence\* Atz with atrazine, do not exceed the maximum allowable rate of atrazine in your county or state. In some atrazine management areas, atrazine is more restricted. Consult your county extension office or state university for further information.

Conventional Tillage Corn (Cadence\* Atz Plus):

Tank Mix	
Herbicide †	Comments
Atrazine 4L	<ul> <li>Preplant surface, preplant incorporated, preemergence. If emerged weeds are greater than 1.5 inches tall at the time of application, add an appropriate postemergence herbicide</li> <li>Longer growing season areas</li> <li>High rainfall areas</li> <li>Heavy broadleaf weed pressure</li> </ul>
Balance Pro	<ul> <li>Not labeled in all states; please refer to the Balance Pro label for precautionary statements, directions for use, geographic and other restrictions</li> <li>Field corn only</li> <li>Refer to the use rates section for Cadence* Atz for minimum use rates</li> </ul>
Hornet WDG	<ul> <li>Tank mixing 3.0 - 4.0 oz/acre Hornet® WDG herbicide provides consistent control of velvetleaf, lambsquarters, pigweed species, waterhemp and triazine resistant varieties of these species. Will also provide improved control of cocklebur, common ragweed, giant ragweed, common sunflower and jimsonweed.</li> </ul>
Princep 4L	<ul> <li>Improve crabgrass or fall panicum control.</li> </ul>
Python WDG	<ul> <li>Tank mixing 0.8 - 1.0 oz/acre Python® WDG herbicide provides consistent control of velvetleaf, lambsquarters, pigweed species, waterhemp and triazine resistant varieties of these species.</li> </ul>
Surpass EC	<ul> <li>Tank mix 1 pt/acre for enhanced grass and nutsedge control</li> </ul>

<sup>t</sup> Formulations that are not listed may be used: Perform a compatibility test and check the label of the tank mix product label for application rates, applicable use directions, precautions and limitations.

Reduced or No	p-Tillage Corn (Cadence* Atz Plus):
Tank Mix	
Herbicide †	Comments
Atrazine 4L	Longer growing season areas
	High rainfall areas
	Heavy broadleaf weed pressure
	<ul> <li>If emerged weeds are greater than 1.5 inches tall at the time of</li> </ul>
	application, add an appropriate postemergence herbicide
Balance Pro	<ul> <li>Not labeled in all states; refer to the label for Balance Pro label for</li> </ul>
	precautionary statements, directions for use, geographic and other
	use restrictions
	Field corn only
· · ·	Refer to use rate section for Cadence* Atz_for minimum use rates
Banvel/Clarity	<ul> <li>Apply preplant or preemergence in reduced/ no-till systems for</li> </ul>
Marksman	burndown of existing weeds
	<ul> <li>Preemergence on all soils; medium and fine textured with &gt;2% OM</li> </ul>
Glyphomax	Burndown existing weeds
Plus, Roundup	· ·
UltraMax,	
Touchdown	
Gramoxone	Control annuals, suppress perennials
Max	
Pendimax®	<ul> <li>Preemergence to early postemergence (up to 3" tall corn) but</li> </ul>
/ Prowl	before weeds are more than 1" tall.
Princep 4L	Improved crabgrass or fall panicum control
Surpass EC	Enhanced grass and nutsedge control
2,4-D	Burndown existing weeds
	,

# CADENCE\* AT ... IERBICIDE EPA REG. NO. 34704-950

<sup>†</sup> Formulations that are not listed may be used: Perform a compatibility test and check the product label for application rates, applicable use directions, precautions and limitations.

## Cadence\* Atz and Glyphomax Plus, 2,4-D

In reduced or no-tillage corn, Glyphomax Plus, Roundup Ultra Max, Gramoxone Max, Touchdown, and/or 2,4-D can be used to burn down existing weeds. Burndown herbicides should be applied to emerged weeds when they are small; weeds less than 6 inches in height are easiest to control. Consult the burndown product labels for further information on weeds controlled.

# POSTEMERGENCE TANK MIX COMBINATIONS

Cadence\* Atz may be applied before, with, or following the use of one or more of the following herbicides: Accent, Aim, atrazine, Banvel, Basis, Basis Gold, Beacon, Buctril, Buctril/atrazine, Clarity, Distinct, Exceed, Hornet WDG, Liberty, Lightning, Marksman, Peak, Permit, Princep, Prowl, Pendimax, Pursuit, Shotgun, Spirit, and Steadfast. Refer to the tank mix product label(s) regarding use directions, precaulions and restrictions, and the list of weeds controlled. Cadence\* Atz may be tank mixed with any product approved for use on corn unless it is prohibited on the tank mix product label. Note: Do not use liquid fertilizer as the carrier when Cadence\* Atz is applied postemergence to corn as severe injury may result. The addition of liquid fertilizers used as adjuvants with Cadence\* Atz tank mixes applied postemergence to corn under environmental stress conditions may result.

When tank mixing, refer to the tank mix product label and follow the additional use directions given in this table. Cadence\* Atz can be applied to corn up to 11" tail.

Tank Mix	ank Mixes (Caden	ice Alz Flus).
Herbicide	Bate	Commente
Hornet WDG	2-5 oz/acre	Aways add NIS at 0.25% v/v or COC at 1% v/v.
Aim herbicide	0.3 oz/acre	<ul> <li>Always add NIS at 0.25% v/vil COC at 1% v/v.</li> <li>Always add a NIS at 0.25% v/v.</li> </ul>
Banvel	0.5 - 1.0 pt/acre	
Clarity		Early postemergence up to 8" tall corn on all
	0.5 - 1.0 pt/acre	soils. If grasses are more than 2- leaf stage,
Marksman	2 - 3.5 pt/acre	combine with another herbicide to control
		these weeds.
		The maximum atrazine application rate for
		corn is 2.5 pounds active ingredient per
		calendar year or 2.0 pounds atrazine active
		ingredient for postemergence application if no
Durati	1.5	atrazine was applied preemergence.
Buctril	1.5 pt/acre	Refer to product label for use directions.
Buctril/atrazine	2.0 pt/acre	Refer to label for Shotgun herbicide for timing
Shotgun herbicide	2 - 3 pt/acre	and use directions.
Atrazine	0.5 - 2.0 lb ai/acre	<ul> <li>Preplant surface, preplant incorporated, pre</li> </ul>
		emergence or early postemergence (up to 8"
		tall corn). If emerged weeds are greater than
		1.5 inches tall at the time of application, add
		an appropriate postemergence herbicide.
		Note: The maximum atrazine application rate
		for corn is 2.5 pounds atrazine active
		ingredient per acre per calendar year.
Distinct	4.0 - 6.0 oz/acre	<ul> <li>Always add a NIS at 0.25% v/v and 1.25% UAN.</li> </ul>
	· · ·	<ul> <li>Can be applied up to 10-inch corn.</li> </ul>
Exceed	1.0 oz/acre	<ul> <li>Always add crop oil concentrate at 1% v/v.</li> </ul>
		<ul> <li>See label for geographic restrictions.</li> </ul>
Liberty	16 - 28 oz/acre	<ul> <li>For use on liberty tolerant corn only</li> </ul>
1		<ul> <li>Apply to grass and broadleaves up to 6" tall.</li> </ul>
		Do not add additional surfactant.
Lightning	1.28 oz/acre	· For use on Clearfield corn only. Use a NIS
		at 25%v/v and a liquid nitrogen fertilizer at 1 -
1		2 qt per acre or ammonium sulfate at 2.5 lb
		per acre.
Pendimax	1.8 - 3.6 pt/acre	Preemergence to early postemergence (up to
/ Prowi		3" tall corn) but before weeds are more than
		1" tall.
Princep	1.0 - 3.0 lb ai/acre	· Preplant surface, preplant incorporated, pre-
<u> </u>		emergence to corn.
Pursuit 2.5L	4.0 fl oz/acre	<ul> <li>Use only on Clearfield varieties.</li> </ul>
Pursuit 70DG	1.4 fl oz/acre	<ul> <li>Apply preplant surface, preplant incorporated,</li> </ul>
		preemergence or early postemergence (up to
		3" tall weeds).
Resource	4.0 - 6.0 oz/acre	3" tall weeds). • Apply to weeds less than 5" tall. Add a crop
Resource	4.0 - 6.0 oz/acre	<ul> <li>3" tall weeds).</li> <li>Apply to weeds less than 5" tall. Add a crop oil concentrate at 1 - 2 pt/acre and either 28%</li> </ul>
Resource	4.0 - 6.0 oz/acre	<ul> <li>3" tall weeds).</li> <li>Apply to weeds less than 5" tall. Add a crop oil concentrate at 1 - 2 pt/acre and either 28%</li> </ul>
Resource	4.0 - 6.0 oz/acre	<ul> <li>3" tall weeds).</li> <li>Apply to weeds less than 5" tall. Add a crop oil concentrate at 1 - 2 pt/acre and either 28% nitrogen at 2% v/v or ammonium sulfate at 2.5</li> </ul>
Resource	4.0 - 6.0 oz/acre	<ul> <li>3" tall weeds).</li> <li>Apply to weeds less than 5" tall. Add a crop oil concentrate at 1 - 2 pt/acre and either 28% nitrogen at 2% v/v or ammonium sulfate at 2.5 Ib/acre. May cause some burn or spotting to</li> </ul>
	4.0 - 6.0 oz/acre	<ul> <li>3" tall weeds).</li> <li>Apply to weeds less than 5" tall. Add a crop oil concentrate at 1 - 2 pt/acre and either 28% nitrogen at 2% v/v or ammonium sulfate at 2.5 Ib/acre. May cause some burn or spotting to com leaves.</li> </ul>
Resource Spirit		<ul> <li>3" tall weeds).</li> <li>Apply to weeds less than 5" tall. Add a crop oil concentrate at 1 - 2 pt/acre and either 28% nitrogen at 2% v/v or ammonium sulfate at 2.5 lb/acre. May cause some burn or spotting to corn leaves.</li> <li>Always add crop oil concentrate at 1% v/v.</li> </ul>
		<ul> <li>3" tall weeds).</li> <li>Apply to weeds less than 5" tall. Add a crop oil concentrate at 1 - 2 pt/acre and either 28% nitrogen at 2% v/v or ammonium sulfate at 2.5 Ib/acre. May cause some burn or spotting to com leaves.</li> </ul>

Tank Mix	<u>`</u>	· ·
Herbicide	Rate	Comments
Accent 75WDG Beacon 75WDG Basis Steadfast	1/4 - 2/3 oz/acre 0.76 oz/acre 1/4 - 2/3 oz/acre 0.75 oz/acre	Minimum Cadence <sup>+</sup> Atz use rates (qt/acre): <u>Soil</u> < <u>3%OM</u> <u>3-7%OM</u> > <u>7%OM</u> Coarse 1.8 1.8 2.4 Medium 1.8 1.8-2.4 2.6 - 2.8 Fine 1.8 1.8-2.4 2.8 Always add NIS at 0.25% (v/v); and in addition if applied in dry condi-
tions, add 4% (v/v)		liquid fertilizer. • Banvel, Clarity, Marksman, Buctril, Buctril/ atrazine may be added to this mixture to provide burndown and residual control of broadleaf weeds.
Basis Gold	14.0 oz/acre	<ul> <li>Minimum Cadence' Atz use rates (qt/acre): Soil &lt;3%OM 3-7%OM &gt;7%OM Coarse 1.8 1.8 2.4</li> <li>Medium 1.8 1.8 - 2.4 2.6 - 2.8 Fine 1.8 1.8-2.4 2.6 - 2.8</li> <li>Always add crop oil concentrate at 1.0% v/v or under dry arid conditions, 2.0% v/v and 28% liquid nitrogen at 2 qt/acre or ammonium sulfate at 2 lb/acre.</li> <li>Banvel, Clarity, Marksman, Buctril, or Tough herbicide may be added to this mixture to provide burndown and residual control of broadleaf weeds.</li> <li>The maximum atrazine application rate for corn is 2.5 pounds active ingredient per calendar year or 2.0 pounds atrazine active ingredient for postemergence application if no atrazine was applied preemergence.</li> </ul>

#### APPENDIX I

Procedure for Testing the Compatibility of Cadence\* Atz and Tank Mixes with Fluid Fertilizers.

Since fluid fertilizers vary, the following procedure is suggested for determining whether Cadence\* Atz may be combined with a specific fluid fertilizer for spray tank application.

### Materials Needed:

- · Cadence\* Atz and any tank mix products.
- · Fluid fertilizer to be used.
- Adjuvant for fertilizer tank mix: Use any adjuvant cleared for use on growing crops under 40 CFR 180.1001 to improve the compatibility of Cadence\* Atz with fluid fertilizers. The adjuvant that provides the best emulsification depends on the specific fertilizer under consideration.
- Two 1 quart, wide mouth glass jars with lid or stopper.
  - Measuring spoons (a 25-ml pipette or graduated cylinder provides more accurate measurement).
  - Measuring cup, 8 ounces (257 ml).

#### Procedure:

- 1. Pour a pint (about 473 ml) of the fluid fertilizer into each of the quart jars.
- 2. Add Cadence\* Atz and any tank mix combination to the jars. The order of addition is wettable powders first with mixing, followed by flowables with mixing and the EC's last. The rate of wettable powders and dry flowables is 1½ teaspoon per pound of product per acre to be applied. EC's should be added at the rate of ½ teaspoon for each pint per acre to be applied. Premixing the wettable powders in 1 ounce of water before adding to the pint of fluid fertilizer will improve the compatibility of the final mixture.
- Add ½ teaspoon (2 ml) adjuvant to one of the jars, label it as "with", and mix. The rate of ½ teaspoon per pint is equal to 3 pints of adjuvant per 100 gallons of fluid fertilizer.
- Close both jars with lids or stoppers and mix the contents by turning the jars upside down ten times.
- 5. Inspect the surface and body of the mixtures:
  - (a) Immediately after completing the jar inversions
  - (b) After allowing the jars to stand quietly for 30 minutes
  - (c) And then again after turning the jars upside down 10 times after the 30 minute inspection

#### Evaluation:

If either mixture remains uniform for 30 minutes, the combination may be used. Should either mixture separate after 30 minutes, but readily remix uniformly with 10 jar inversions, the mixture can be used if adequate agitation is maintained in the tank. If the mixture with adjuvant is satisfactory but the mixture without adjuvant is not, be sure to use the adjuvant in the spray tank. Add the adjuvant first at a rate of 3 pints per 100 gallons of fluid fertilizer. Foaming may be minimized by using only moderate agitation. If non-dispersible oil, sludge, or clumps of solids form in the mixtures, the combination should not be used.

#### APPENDIX II Dry Bulk Fertilizer Impregnation

Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 500 tons of bulk fertilizer can be impregnated per day. No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.

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The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the user (applicator) of the dry bulk fertilizer that: • Applicator must wear long-sleeved shirt, long pants, shoes, and socks

The restricted entry interval is 12 hours.

All individual state regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the Cadence\* Atz.

When applying Cadence\* Atz alone or in tank mixes with dry bulk fertilizers, follow all directions for use and precautions on the respective tank mix product labels regarding rates, soil texture, application methods and rotational restrictions. Use a minimum of 200 pounds dry fertilizer per acre.

Table 5: Approved Dry Fertilizer Ingredients for Use with Cadence\* Atz .

Fertilizer	N	P	K	•
Ammonium Phosphate-Sulfate	16	20	0	
Ammonium Sulfate	21	0	0	
Diammonium Phosphate	18	. 46	0	
Monoammonium Phosphate	11	56	0	
Potassium Chloride	0	0	60	10.0
Potassium Sulfate	0	0	52	
Urea	45	0	0	

<sup>t</sup> Some ureas may be phytotoxic when high rates are applied to corn. Use only urea rates known to be safe for corn application.

For impregnating the pesticides on dry fertilizers, use an appropriate mixer equipped with suitable spraying equipment. The spray nozzles should be positioned inside the mixer to provide uniform spray coverage of the tumbling fertilizer. The Cadence' Atz should be sprayed uniformly onto the fertilizer using a fine spray pattern. Tank mix components may be applied as separate ingredients with powders and dry flowables added first or they may be mixed in a slurry in the proper ratio and added jointly. Cadence' Atz may also be impregnated on the go and applied with pneumatic applicators.

The following table provides a reference to determine the amount of Cadence\* Atz to be mixed per ton of dry bulk fertilizer for a range of herbicide rates.

Fertilizer Rate Acres		Cadence* Atz Fertilizer Impregnation Hate Conversion Table Quarts of Cadence* Atz per Ton of Fertilizer to Deliver:			
(lbs per acre)	per Ton	2.2 qt/acre	2.7 qt/acre	3.2 qt/acre	
200	10	22.0	27.0	32.0	
250	8	17.6	21.6	25.6	
300	6.7	14.7	18.0	21.3	
350	5.7	12.6	15.4	18.3	
400	5	11.0	13.5	16.0	
450	4.5	9.8	12.0	14.2	

To determine the amount of Cadence\* Atz needed for other fertilizer rates, use the following formula:

Cadence* Atz (quarts/acre)	X 2000	= Quarts of Cadence* Atz	
Pounds of fertilizer/acre	per ton of fertilizer		

If the herbicide/fertilizer mixture is too wet, use of a drying agent is required to provide a dry, free-flowing mixture. For mixtures to be used in spinning-disc applicators, Micro-Cel E calcium silicate powder (Manville, Fiitration & Minerals) is recommended for use as a drying agent. Mixtures to be used in pneumatic applicators should use Micro-Cel E or Agsorb 16/30 RVM-MS granular clay (Oil-Dri Corporation). The drying agents should be added separately and uniformly to the prepared pesticide/fertilizer mixture, in a quantity that is sufficient to provide a suitable free-flowing mixture. Generally, less than 2% Micro-Cel E or 5% Agsorb 16/30 RVM-MS by weight is required.

**Precaution:** To avoid potential for explosion, do not impregnate Cadence\* Atz on ammonium sorbate nitrate, potassium nitrate, or sodium nitrate fertilizer or fertilizer blends. Do not impregnate on single (0-20-0) or triple (0-46-0) super phosphate. Do not impregnate on agricultural limestone because Cadence\* Atz will not be absorbed.

# STORAGE AND DISPOSAL

Prohibitions: Do not contaminate water, food; or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Storage: Keep container tightly closed when not in use. Do not store near seeds, fertilizers, or foodstuffs. Can be stored at temperatures as low as minus  $30^\circ$ F.

**Pesticide Disposal:** Rinse spray equipment. Pesticide wastes are acutely hazardous. 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: Nonrefillable container**. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Conce cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To

## Storage & Disposal com d.:

find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **For packages up to 5 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **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.

For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll 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. 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 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.

For packages greater than 56 gallons: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

For refillable containers: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC, and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, EOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL, THIS PRODUCT IS SOLD AS IS TO THE EXTENT ALLOWED BY APPLICABLE LAW. LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMIT-ED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL, BUYER OR USER MUST SEND, TO THE EXTENT REQUIRED BY APPLICABLE LAW, WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, 7251 WEST 4TH STREET, GREELEY, CO 80634.

TO THE EXTENT ALLOWED BY APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WAR-RANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT ALLOWED BY APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

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