



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

July 22, 2025

SENT BY EMAIL

Leah Strayer
leah@pyxisrc.com
LOVELAND PRODUCTS, INC.

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 - Minor Revisions to Label including Updates to Contact Information and Typographical Corrections
Product Name: CADENCE LA NXT HERBICIDE
Admin Number: 34704-1082
EPA Receipt Date: 06/12/2025
Action Case Number: 00660090

Dear Leah Strayer:

The U.S. Environmental Protection Agency is in receipt of your application for notification under Pesticide Registration Notice 98-10 for the above referenced product. The EPA has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

If you have questions, please contact Margaret Golembiewski via email at golembiewski.margaret@epa.gov.

Sincerely,

Kable Bo Davis

Kable Bo Davis, Senior Advisor
HB, RD
Office of Pesticide Programs

{Note to reviewer: [Text] in brackets denotes optional text. In instances where a word or phrase has multiple optional text options, at least one will be used to ensure that the entire statement is clear and understandable. {Text} in braces denotes where in the final label text will appear and notes to reviewer and will not be included on the final printed label.}

RESTRICTED USE PESTICIDE

Due to Ground and Surface Water Concerns

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. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.

NOTIFICATION

34704-1082

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

07/22/2025

ATRAZINE	GROUP	5	HERBICIDES
ACETOCHLOR	GROUP	15	HERBICIDES

Cadence® LA NXT Herbicide

A preemergence herbicide for control of annual grasses and broadleaf weeds in field corn, production seed corn, silage corn, sweet corn, popcorn, Miscanthus or other non-food perennial bioenergy crops.

Active Ingredients:

acetochlor: 2-chloro-- N-ethoxymethyl-N-(2-ethyl6-methylphenyl)acetamide	46.3%
atrazine: [2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine] and related triazines	18.3%
Other Ingredients:	35.4%
Total:	100.0%

Contains 516 grams/liter or 4.3 pounds/gallon of acetochlor and 204 grams/liter or 1.7 pounds/gallon atrazine and related compounds.

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

Keep Out of Reach of ChildrenKEEP OUT OF REACH OF CHILDREN

CAUTION

See [Below] [Inside] [This] [Label] [Booklet] [For] [Additional] [Precautionary Statements][;] [additional] [First Aid][/] [Spanish First Aid][;] [and] [Environmental Hazards][;] [and] [Directions for Use] [(including] [Mitigations for Endangered Species)][,] [and] [Storage and Disposal] [Instructions] [;] [and] [Other] [Required] [Spanish] [Labeling] [and] [Other] [Use Information] [.]

FIRST AID	
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED	• Move person to fresh air • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565/800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

FOR A MEDICAL EMERGENCY OR HELP WITH ANY SPILL, LEAK, FIRE OR EXPOSURE INVOLVING THIS MATERIAL, CALL DAY OR NIGHT CHEMTREC 1-800-424-9300.

EPA Reg. No. 34704-1082
EPA Est. No.
NET CONTENTS: __ GAL (__L)

FORMULATED FOR
LOVELAND PRODUCTS, INC.®
P.O. BOX 1286, GREELEY, [CO]COLORADO 80632-1286 USA

[NOTIF V1 0625]

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if swallowed. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear long-sleeved shirt and long pants, socks and shoes.

Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are listed below.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves except when mixed with oil use Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber and Viton gloves
- Shoes plus socks
- A chemical-resistant apron when mixing/loading, cleaning up spills, or cleaning equipment, or otherwise exposed to the concentrate
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

See Engineering Controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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.

IMPORTANT: When reduced PPE is worn because an enclosed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, 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.

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 cleaning equipment or 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.

SURFACE WATER ADVISORY: This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several weeks after application.

A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of acetochlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

GROUNDWATER ADVISORY: Acetochlor is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Non-Target Organism Advisory: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION 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 accessed through www.atrazine-watershed.info or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return 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, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in 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
- Waterproof gloves except when mixed with oil use Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, and Viton gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

RESISTANCE MANAGEMENT

For resistance management, **CADENCE LA NXT Herbicide** contains a Group 5 and Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to **CADENCE LA NXT Herbicide** and other Group 5 and Group 15 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of **CADENCE LA NXT Herbicide** or other Group 5 and Group 15 herbicides
- within a growing season sequence or among growing seasons with different herbicide groups
- that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where
- information on resistance in target weed species is available use the less resistance-prone
- partner at a rate that will control the target weeds equally as well as the more resistance-prone
- partner. Consult your local extension service or certified crop advisor if you are unsure as to
- which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and
- uses historical information related to herbicide use and crop rotation and that considers tillage
- or other mechanical control methods, cultural, biological and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance
- development. Indicators of possible herbicide resistance include:
 - Failure to control a weed species normally controlled by the herbicide at the dose applied,
 - especially if control is achieved on adjacent weeds.
 - A spreading patch of non-controlled plants of a particular weed species.
 - Surviving plants mixed with controlled individuals of the same species.

If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- If a weed pest population continues to progress after treatment with this product, discontinue
- use of this product and switch to another management strategy or herbicide with a different
- mode of action, if available.

- Contact your local extension specialist or certified crop advisors for additional pesticide
- resistance-management and/or integrated weed-management recommendations for specific
- crops and weed biotypes.
- For further information or to report suspected resistance contact Loveland Products, Inc.
- retailer, representative or call 1-888-574-2878.

Product Information

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

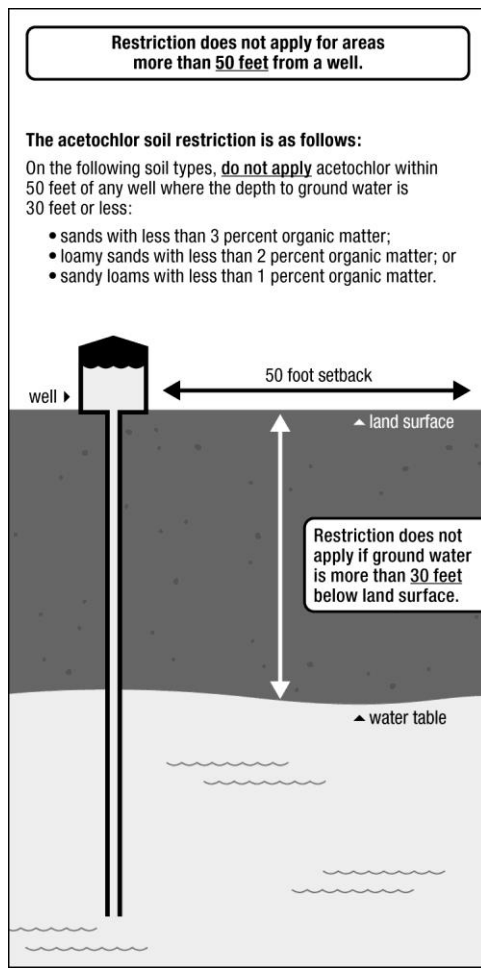
Cadence® LA NXT herbicide may be applied to the surface or incorporated into the top 1-2 inch layer of soil. It may be used for control alone, or in tank mix combinations, for the weeds listed in the "Target Weeds" section of these use directions. Cadence LA NXT Herbicide controls weeds by interfering with normal germination and seedling development. Cadence LA NXT Herbicide does not control emerged weeds present at application.

Endangered Species

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <http://www.epa.gov/espp/>, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

Use Restrictions

- **Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.**
- Do not use Cadence LA NXT Herbicide on any crop other than field corn, production seed corn, silage corn, popcorn.
- Do not apply by mechanically pressurized handgun to sweet corn.
- Do not apply Cadence LA NXT Herbicide before pre-irrigation in irrigated areas.
- Do not allow Cadence LA NXT Herbicide to contaminate feed or food.
- On the following soil types, do not apply this product within 50 feet of any well where the depth to groundwater is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1 percent organic matter. See the figure for additional clarification.



- This product must not be mixed or loaded within 50 ft. of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product must 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**

To ensure protection of surface water from runoff through standpipes with tile-outlets in fields, one of the following restrictions must be used in applying this product to tile-outletted fields containing standpipes:

1. Do not apply this product within 66 feet of standpipes in tile-outletted fields.
 2. Apply this product to the entire tile-outletted 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 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.
- Do not apply Cadence LA NXT Herbicide postemergence to sweet corn.
 - **Chemigation:** Do not apply this product through any type of irrigation system unless otherwise directed by approved supplemental labeling in possession of the user at the time of application.
 - 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-target 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 1/2 inch of rainfall has occurred between application and the first irrigation.
 - **Aerial Application:** Do not apply this product using aerial application equipment unless otherwise directed by approved supplemental labeling in possession of the user at the time of application,
 - 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.
 - Flush sprayer with clean water after use.

Maximum Atrazine Application Rates Per Calendar Year:

Maximum annual atrazine broadcast application rates for corn must be as follows:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2.0 pounds active ingredient (contained in 4.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) per acre. 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. Note: One quart per acre Cadence LA NXT Herbicide delivers 0.425 pound active ingredient atrazine per acre.
- Apply a maximum of 2.0 pounds active ingredient (contained in 4.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) 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 (contained in 3.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) 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 (contained in 4.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) per acre if only applied postemergence.
- **Maximum Acetochlor Application Rates Per Calendar Year:**
Maximum annual acetochlor broadcast application rates for corn must not exceed 3.0 pounds active ingredient (2.7 quarts Cadence LA NXT Herbicide) per acre. Note: One quart per acre Cadence LA NXT Herbicide delivers 1.075 pound active ingredient acetochlor per acre.
- **Preharvest Interval:** Do not apply Cadence LA NXT Herbicide within 60 days of harvest for field corn forage uses or 45 days for sweet corn forage uses.
- Postemergence applications of Cadence LA NXT Herbicide to corn must be made before the crop reaches 11 inches in height.

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 triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide.
- Cadence LA NXT Herbicide 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.
- Cadence LA NXT Herbicide should not be stored near seeds, fertilizers, or foodstuffs.
- All containers of Cadence LA NXT Herbicide should be kept tightly closed when not in use.
- Applied according to directions and under normal growing conditions, Cadence LA NXT Herbicide 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 LA NXT Herbicide used under these abnormal conditions could result in crop injury.

Rotational Crop Restrictions:

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

Rotational Crop (1)	Timing or Interval
corn (2)	Immediately – 0 months after application
corn, cotton, sorghum, soybeans (3) (4) (6)	Spring/next season following application
alfalfa, barley, dry beans (adzuki, kidney, lima, navy, or pinto), lupin (grain, white, or white sweet), millet (pearl or proso), oats, peas (blackeyed, chick, cow, Crowder, field, pigeon, or Southern), potatoes, rye, sugar beets, sunflower, tobacco, triticale, wheat, wild rice	15 months after application (5)

Numbers within parentheses (-) in the table refer to specific rotational crop requirements below:

- (1) Do not plant dry beans or peas, potatoes, small grains or small-seeded legumes, sugar beets, sunflower, or tobacco during the 15 months following application, or injury from atrazine may occur.
- (2) If crop treated with Cadence LA NXT Herbicide is lost, field corn, seed corn, silage corn, popcorn, or sweet corn may be replanted immediately. Do not exceed a total of 3.0 pounds ~~a-~~active ingredient per acre of acetochlor (2.7 quarts Cadence LA NXT Herbicide) if additional product is applied. If applied after June 10, do not rotate to crops other than corn or sorghum the next year or crop injury from atrazine may occur.
- (3) Injury may occur to soybeans planted the year following application on soils having a calcareous subsurface layer and relatively high pH. In eastern parts of the Dakotas, Kansas, western Minnesota and Nebraska, do not rotate to soybeans if the rate applied was more than 2.0 pounds active ingredient equivalent of atrazine or soybean injury may occur.
- (4) In the High Plains and Intermountain regions of the West where rainfall is sparse and erratic or irrigation is required, use only where corn or sorghum is to follow corn.
- (5) Approved rotation crops list does not include any species of succulent beans or peas.
- (6) Do not apply atrazine and propazine to the same sorghum acre.

Rotation to Non-food Winter Cover Crops

Following harvest of food crops treated with Cadence LA NXT Herbicide, only non-food or non-feed winter cover crops (with the exception of wheat) may be planted. Do not graze or harvest rotational cover crops for food or animal feed for 18 months following the last application of Cadence LA NXT Herbicide. This prohibition does not apply to wheat, which may be planted 4 months following the last application of Cadence LA NXT Herbicide, or to nongrass animal feeds, which may be planted 9 months after the last application of Cadence LA NXT Herbicide.

Weed Resistance Management

For resistance management, Cadence ATZ NXT Herbicide is a Group 15 and Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to Cadence ATZ NXT Herbicide and other Group 15 and Group 5 herbicides. The resistant biotypes may eventually dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of Cadence ATZ NXT Herbicide or other Group 15 and Group 5 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of

action, if available.

- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes or to find out if suspected resistant weeds have been found in their region.
- For further information or to report suspected resistance contact Loveland Products, Inc. retailer, representative or call 1-888-574-2878. You can also contact your pesticide distributor or university extension specialist to report resistance.

Best Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using full labeled rates and following directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

General principles of herbicide resistance management:

1. Apply integrated weed management practices. Use multiple herbicide modes-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.
2. Use the full specified herbicide rate and proper application timing for the hardest to control weed species present in the field.
3. Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
4. Monitor site and clean equipment between sites.

For annual cropping situations also consider the following:

- Start with a clean field and control weeds early by using a burndown herbicide treatment or tillage in combination with a soil-applied residual herbicide as appropriate.
- Use cultural practices such as cultivation and crop rotation, where appropriate.
- Use good agronomic principles that enhance crop competitiveness.
- Use new commercial seed that is as free of weed seed as possible.

MANDATORY SPRAY DRIFT

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a Coarse or coarser droplet size (ASABE S572).
- If the windspeed is 10 miles per hour or less, applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use $\frac{3}{4}$ swath displacement upwind at the downwind edge of the field.
- User must maintain a 150 foot (46 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- Do not apply when wind speeds exceed 10 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- Applicators are required to use a Coarse or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use a Coarse or coarser droplet size (ASABE S572) for all applications.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Boomless Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

Take precautions to minimize spray drift.

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 LA NXT Herbicide is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

Dry Bulk Fertilizer: Cadence LA NXT Herbicide may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread. See Appendix II for directions and restrictions including which fertilizers are compatible.

Adding to Spray Tank

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

Used Alone: When Cadence LA NXT Herbicide 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. 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 LA NXT Herbicide next.
- Add ammonium sulfate then Makaze®, Salvo herbicide (not for use on production seed corn, or silage corn), and a nonionic surfactant last, if needed.
- Complete filling the sprayer tank and continue agitation.
- Batches should be mixed and applied the same day.

Note: For all tank mixtures, maintain agitation during mixing and throughout application to ensure spray mixture remains uniformly suspended. If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

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 directions and restrictions.

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 LA NXT Herbicide should occur as close as possible to planting. Preemergence applications should occur as close as possible to planting, but prior to weed emergence; this product will not control emerged weeds present at application..

Early Preplant Surface: On medium and fine textured soils (see Table 1), Cadence LA NXT Herbicide may be applied up to 45 days prior to planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the specified broadcast rate applied initially and the remaining 40 percent applied at planting. Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are present at the time of application, apply this product in a tank mixture with an appropriate contact herbicide. Observe directions for use, precautions, and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

Preplant Incorporation: Cadence LA NXT Herbicide and certain tank mixes 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. Do not mix Cadence LA NXT Herbicide deeper than 2 inches into the soil and avoid moving or shaping soil after incorporation, as weed control may be reduced.

Preemergence Surface: Cadence LA NXT Herbicide 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 LA NXT Herbicide 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 corn seed. Do not remove Cadence LA NXT Herbicide from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Postplant-Preemergence: Cadence LA NXT Herbicide may be applied immediately after 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 shallowly incorporate the herbicide. The device used should be run at a shallow depth to prevent disturbing the corn seed. Do not remove Cadence LA NXT Herbicide from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Banding-Preemergence: Cadence LA NXT Herbicide may be applied in a 10 to 14 inch band after corn 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. The device used should be run at a shallow depth to prevent disturbing the corn seed. Do not remove Cadence LA NXT Herbicide from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Early Postemergence: Cadence LA NXT Herbicide 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 with a herbicide that controls the emerged weeds. Read and follow restrictions and directions on tank mix product labels.

Note: Do not make postemergence applications using sprayable liquid fertilizer as the carrier because severe crop injury may occur.

Note: Do not apply Cadence LA NXT Herbicide postemergence to sweet corn.

Sprinkler Irrigation: Do not apply Cadence LA NXT Herbicide through sprinkler irrigation systems unless otherwise directed by approved supplemental labeling in possession of the user at the time of application. A sprinkler system may be used to incorporate Cadence LA NXT Herbicide after application. After Cadence LA NXT Herbicide 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 LA NXT Herbicide.

Planting

Planting should be done as close to the time of application of Cadence LA NXT Herbicide as possible. This allows Cadence LA NXT Herbicide 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. If weeds emerge, a shallow cultivation or rotary hoeing will generally result in improved weed control. If Cadence LA NXT Herbicide 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

The use rate of Cadence LA NXT Herbicide is determined by soil texture 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 LA NXT Herbicide Use Rate Selection.

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

Use Rates for Conventional Tillage Systems

Table 2: Cadence LA NXT Herbicide Use Rates by Soil Texture Content in Conventional Tillage Systems.

The following use rates are for preplant incorporated, preemergence, and early postemergence applications (see Application Timing and Methods). Apply this product before weeds reach the 2-leaf stage and the corn is no more than 11 inches in height. Consult Table 3 if reduced- or no-till applications are made or the product is applied more than 14 days prior to planting under conventional tillage.

Soil Texture	Broadcast Rate Per Acre (Quarts)*
Coarse	1.8
Medium	1.8 – 2.3
Fine	2.0 – 2.3

*Use the higher rate in the rate range in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations, use up to 2.7 quarts per acre on medium- and fine-textured soils.

Use Rates for Reduced Tillage Systems or Early Preplant Applications in Conventional Tillage Systems

Cadence LA NXT Herbicide may be used in reduced and no-till systems and in early preplant applications in conventional tillage systems. Single applications may be made up to 30 days prior to planting or after planting but before crop emergence. Optimal weed control will be obtained when applications are made as close to planting as possible but before crop emergence. If weeds are emerged at time of application, apply a labeled burndown herbicide such as Makaze, Gramoxone, or Salvo (not for use on production seed corn, or silage corn) with Cadence LA NXT Herbicide.

Table 3: Cadence LA NXT Herbicide Use Rates* (quarts/acre) by Soil Texture in Reduced and No-till Systems or Table 3: Cadence LA NXT Herbicide Use Rates by Soil Texture in Reduced and No-till Systems or Conventional Tillage Systems when Applications are made more than 14 days Prior to Planting

Soil Texture	Broadcast Rate Per Acre (Quarts)*
Coarse**	1.8
Medium	2.3
Fine	2.3

*In areas of heavy weed infestation, use up to 2.7 quarts per acre on medium- and fine-textured soils. Rates are for single applications. Split applications may be used; apply 60% of the recommended rate up to 45 days before planting and the remaining 40% at or immediately following planting but before crop emergence.

**Do not apply more than 14 days prior to planting on coarse textured soils.

Band Applications

For band applications, use row and bandwidth measurements (inches) to calculate the amount of Cadence LA NXT Herbicide to be applied per acre as follows:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Rate per acre for a broadcast treatment} = \text{Amount of Cadence LA NXT Herbicide to apply per acre}$$

Weeds Controlled

Cadence LA NXT Herbicide applied as directed in this label will provide control or partial 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 directions. Always consult the tank mix product labels for specific use rates and directions. Always follow the most restrictive label when tank mixing Cadence LA NXT Herbicide with another product. Cadence LA NXT Herbicide may be tank mixed with any other registered corn product as long as compatibility is verified and it is not prohibited by the label of the tank mix product. Note: This product contains atrazine and thus may not control weeds that are known or suspected to be triazine resistant.

Table 4: Weeds Controlled or Partially Controlled by Cadence LA NXT Herbicide at Specified Use Rates.

Grasses and Sedges	C = Control PC = Partial Control	Broadleaves	C = Control PC = Partial Control
barnyardgrass	C	beggarweed, Florida	C
crabgrass spp.	C	carpetweed	C
crowfootgrass	C	cocklebur (3)	C
cupgrass, southwestern	C	galinsoga	C
cupgrass, woolly (1)	C	groundcherry, annual	C
foxtail, giant	C	groundcherry, cutleaf	C
foxtail, green	C	henbit	C
foxtail, robust (purple, white)	C	jimsonweed	C
foxtail, yellow	C	kochia	C
goosegrass	C	lambsquarters, common	C
johnsongrass, seedling	PC	morningglory spp. (3)	C
millet, foxtail	C	mustard spp.	C
millet, wild proso	PC	nightshade, black	C
nutsedge, yellow (2,3)	C	nightshade, hairy	C
oat, wild	C	pigweed spp.	C
panicum, browntop	C	purslane, common	C
panicum, fall	C	pusley, Florida	C
panicum, Texas (4)	C	ragweed, common	C
rice, red	C	ragweed, giant	PC
sandbur, field	PC	sicklepod	C
shattercane	PC	sida, prickly	C
signalgrass, broadleaf (4)	C	smartweed spp.	C
sprangletop, red	C	sunflower, common	PC
wheat, volunteer	C	velvetleaf (3)	C
witchgrass	C	waterhemp, tall	C

- (1) Apply 2.7 quarts of Cadence LA NXT Herbicide per acre to control this weed; control can be erratic, especially under dry conditions. Control escaped weeds with cultivation or application of an appropriate registered postemergence herbicide.
- (2) Preplant incorporate for improved control.
- (3) Use the higher rate in the recommended application rate range. Activity may be reduced under dry conditions or following early (more than 14 days) preplant applications. Additional atrazine and/or sequential herbicides may be needed for complete control.

- (4) Best control is achieved when Cadence LA NXT Herbicide 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, shallow 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 application may be needed.

Tank Mix Combinations

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

For all applications, do not exceed the maximum rate of acetochlor as specified in the Maximum Acetochlor Application Rates Per Calendar Year section of this label.

Use of Spray Adjuvants

Cadence LA NXT Herbicide is a preemergence herbicide for which spray adjuvants have little or no effect on performance. However, several herbicides used in tank mixtures with Cadence LA NXT Herbicide require use of adjuvants to aid in the burndown of emerged weeds. Use only those adjuvants specified 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 LA NXT Herbicide is applied postemergence to corn as severe injury may result. The addition of liquid fertilizers used as adjuvants with Cadence LA NXT Herbicide tank mixes 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 LA NXT Herbicide unless otherwise specified in the tank mix product label.

Cadence NXT may be tank-mixed with Aim® EC, atrazine, Balance® Pro, Balance Flexx, Callisto®, Callisto Xtra, Distinct®, Hornet® WDG, Linex® 4L, Lorox® DF, Makaze®, Marksman®, Princep®, Python® WDG, Resource®, Rifle®, Salvo (not for use on production seed corn, or silage corn), Stealth® (not for use on silage corn) or Strut® for preemergence use in corn. Ensure that specific product being used in the tank mixture is registered for preemergence application to corn. Read and follow label directions of all products in the tank mixture; the most restrictive label directions apply. **When tank mixing Cadence LA NXT Herbicide 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 LA NXT Herbicide Plus):

Tank Mix Herbicide †	Comments
Atrazine 4L	• 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 • Longer growing season areas • High rainfall areas • Heavy broadleaf weed pressure
Balance Pro	• Not labeled in all states; refer to the Balance Pro label for precautionary statements, use directions, and geographic and other restrictions • For use in field corn only • Refer to the use rates section of the Cadence LA NXT Herbicide label for minimum use rates

Hornet WDG	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.
Princep 4L	Provides improved crabgrass or fall panicum control.
Python WDG	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.
Cadence NXT Herbicide	Tank mix 1 pt/acre for enhanced grass and nutsedge control

† 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-Tillage Corn (Cadence LA NXT Herbicide Plus):

Tank Mix Herbicide †	Comments
Atrazine 4L	- Longer growing season areas. - High rainfall areas. - Heavy broadleaf weed pressure. - If emerged weeds are greater than 1.5" inches tall at the time of application, add an appropriate postemergence herbicide.
Banvel®/Strut Marksman	- Apply preplant or preemergence in reduced/ no-till systems for burndown of existing weeds. - Preemergence on all soils; medium and fine textured with >2% OM.
Makaze, Roundup WeatherMAX®, Touchdown	Burndown existing weeds.
Gramoxone® Inteon	Control annuals, suppress perennials.
Pendimax® / Stealth	Preemergence to early postemergence (up to 3" tall corn) but before weeds are more than 1" tall.
Princep 4L	Provides improved crabgrass or fall panicum control.
Cadence NXT Herbicide	Enhanced grass and nutsedge control.
Salvo	Burndown existing weeds.

† Formulations that are not listed may be used: Perform compatibility test and check the product label for directions and precautions.

Cadence LA NXT Herbicide plus Burndown Herbicide Tank Mixtures

In reduced or no-tillage corn, Makaze, Roundup WeatherMAX, Gramoxone Inteon, Touchdown, and/or Salvo (not for use on production seed corn, or silage corn) can be tank mixed with Cadence LA NXT Herbicide 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 LA NXT Herbicide may be applied before, with, or following the use of one or more of the following herbicides for postemergence use in corn: Accent®, Aim EC, atrazine, Balance Flexx, Basis®, Basis Gold®, Beacon®, Buctril®, Buctril/atrazine, Callisto, Callisto Xtra, Capreno®, Distinct, Hornet WDG, Impact®, Laudis®, Liberty®, Lightning®, Linex 4L, Lorox DF, Marksman, Peak®, Permit®, Princep, Pendimax, Pursuit®, Resource, Rifle, Salvo (not for use on production seed corn, or silage corn), Spirit®, Status®, Steadfast®, Stealth (not for use on silage corn), or Strut. Refer to the tank mix product label(s) regarding use directions, precautions and restrictions, and the list of weeds controlled. Cadence LA NXT Herbicide may be tank mixed with any product approved for use on corn unless it is prohibited on the tank mix product label. Ensure that specific product being used in the tank mixture is registered for postemergence application to corn. Read and follow label directions of all products in the tank mixture;

the most restrictive label directions apply. **Note:** DO NOT use liquid fertilizer as the carrier when Cadence LA NXT Herbicide is applied postemergence to corn as severe injury may result. The addition of liquid fertilizers used as adjuvants with Cadence LA NXT Herbicide tank mixes 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.

When tank mixing, refer to the tank mix product label and follow the additional use directions given in the following table. Cadence LA NXT Herbicide can be applied to corn up to 11" tall.

Postemergence Tank Mixes (Cadence LA NXT Herbicide Plus):

Tank Mix Herbicide	Rate	Comments
Hornet WDG	2.0-5.0 oz/acre	Always add <u>a</u> NIS at 0.25% v/v or COC at 1% v/v.
Aim herbicide	0.3 oz/acre	Always add a NIS at 0.25% v/v.
Rifle Strut Marksman	0.5 - 1.0 pt/acre 0.5 - 1.0 pt/acre 2 - 3.5 pt/acre	Early postemergence up to 8" tall corn on all soils. If grasses are more than 2- leaf stage, combine with another herbicide to control these weeds.
Buctril Buctril/atrazine Shotgun herbicide	1.5 pt/acre 2.0 pt/acre 2.0 – 3.0 pt/acre	- Refer to product label for use directions. - Refer to label for Shotgun herbicide for timing and use directions.
Atrazine	0.5 - 2.0 lb ai/acre	Preplant surface, preplant incorporated, preemergence 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	- Always add a NIS at 0.25% v/v and 1.25% UAN. - Can be applied up to 10-inch corn.
Liberty	16.0 – 28.0 oz/acre	For use on liberty tolerant corn only. Apply to grass and broadleaves up to 6" tall. 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 - 2 qt per acre or ammonium sulfate at 2.5 lb per acre.
Pendimax / Stealth	1.8 - 3.6 pt/acre	Preemergence to early postemergence (up to 3" tall corn) but before weeds are more than 1" tall.
Pursuit 2.5L Pursuit 70DG	4.0 fl oz/acre 1.4 fl oz/acre	- Use only on Clearfield varieties. - Apply preplant surface, preplant incorporated, preemergence or early postemergence (up to 3" tall weeds).
Resource	4.0 - 6.0 oz/acre	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.
Spirit	1.0 oz/acre	- Always add crop oil concentrate at 1% v/v. - See label for geographic restrictions.

Salvo Ester	See Label	• Apply preplant surface or preemergence to control emerged broadleaf weeds in corn.
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 LA NXT Herbicide use rates (qts/acre): <u>Soil</u> Coarse 1.8 Medium 1.8 Fine 2.0 • Always add NIS at .25% (v/v); and in addition if applied in dry conditions, add 4% (v/v) clear liquid fertilizer. • Banvel, Strut, 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	• Minimum Cadence LA NXT Herbicide use rates (qts/acre): <u>Soil</u> Coarse 1.8 Medium 1.8 Fine 2.0 • 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. • Banvel, Strut, Marksman, Buctril, or Tough herbicide may be added to this mixture to provide burndown and residual control of broadleaf weeds.

Appendix I

Procedure for Testing the Compatibility of Cadence LA NXT Herbicide and Tank Mixes with Fluid Fertilizers.

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

Materials Needed:

- Cadence LA NXT Herbicide 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 LA NXT Herbicide 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 LA NXT Herbicide 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.

3. Add 1/2 teaspoon (2 ml) adjuvant to one of the jars, label it as "with", and mix. The rate of 1/2 teaspoon per pint is equal to 3 pints of adjuvant per 100 gallons of fluid fertilizer.
4. 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 340 tons of bulk fertilizer can be impregnated per worker per day. 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.

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 LA NXT Herbicide or Cadence LA NXT Herbicide plus atrazine.

Dry bulk fertilizers (Table 5) may be impregnated with this product or the tank mixtures of this product plus atrazine on corn. This product and these tank mixtures must be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 14 days prior to planting. On medium- and fine-textured soils in areas where incorporation is not planned (i.e., reduced tillage situations or in some conventional tillage situations), applications can be made up to 30 days before planting to allow moisture to move the herbicide-fertilizer mixture into the soil. On coarse-textured soils, applications can be made up to 14 days prior to planting. When applying Cadence LA NXT Herbicide 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 type, application methods and rotational restrictions. Refer to the table for broadcast rate per acre to determine the application rate per acre for the herbicide treatment to be applied.

Table 5: Approved Dry Fertilizer Ingredients for Use with Cadence LA NXT Herbicide.

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
Potassium Sulfate	0	0	52
Urea [†]	45	0	0

[†] 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 LA NXT Herbicide 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 LA NXT Herbicide may also be impregnated on the go and applied with pneumatic applicators.

The following table provides a reference to determine the amount of Cadence LA NXT Herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide and fertilizer rates per acre.

Table 6. Cadence LA NXT Herbicide Fertilizer Impregnation Rate Conversions.

Fertilizer Rate (lbs/acre)	Acres Covered (per ton)	Quarts of Cadence LA NXT Herbicide per Ton of Fertilizer to Deliver:		
		1.5 qts/acre	1.8 qts/acre	2.3 qts/acre
200	10.0	15.0	18.0	23.0
250	8.0	12.0	14.4	18.4
300	6.7	10.1	12.1	15.4
350	5.7	8.6	10.3	13.1
400	5.0	7.5	9.0	11.5
450	4.5	6.8	8.1	10.4

To determine the amount of Cadence LA NXT Herbicide needed for other fertilizer rates, use the following formula:

$$\frac{\text{Cadence LA NXT Herbicide rate (quarts/acre)} \times 2000}{\text{Pounds of fertilizer/acre}} = \text{Quarts of Cadence LA NXT Herbicide per ton of fertilizer}$$

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, Filtration & 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 LA NXT Herbicide 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 the Cadence LA NXT Herbicide will not be absorbed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature should not exceed 125°F. If storage temperature for bulk 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: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

CONTAINER HANDLING:

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. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.agrecycling.org. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned,

stay out of smoke. 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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 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 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 final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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, LOVELAND 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 AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED 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 AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH 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 WARRANTY 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 CONSISTENT WITH 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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[Makaze, Rifle, Salvo, Shotgun Stealth and Strut are registered trademarks of Loveland Products, Inc.]

[Micro-cel is a registered trademark of Imerys Minerals California Inc.]

[Permit is a registered trademark of Nissan Chemical Industries Ltd.]

[Resource is a registered trademark of Valent U.S.A. Corporation]

[Roundup WeatherMAX is a registered trademark of Monsanto Technology LLC]

[Tough is a registered trademark of Nova]

[OPTIONAL MARKETING CLAIMS, LOGOS AND GRAPHICS]

{Note to Reviewer: These logos and graphics or their respective components may be used throughout this label. The optional claims next to the logo are [HERBICIDE] [CROP PROTECTION]. The logo may be used by with one or more of the optional claims, or it may be used by itself.}



[HERBICIDE] [CROP PROTECTION]

{Note to Reviewer: The below graphic(s) may appear anywhere on the label. Further, the below graphic may appear in various color or black/white; not to impact legibility.}



{Note to reviewer: [Text] in brackets denotes optional text. In instances where a word or phrase has multiple optional text options, at least one will be used to ensure that the entire statement is clear and understandable. {Text} in braces denotes where in the final label text will appear and notes to reviewer and will not be included on the final printed label.}

RESTRICTED USE PESTICIDE
Due to Ground and Surface Water Concerns

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. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.

NOTIFICATION

34704-1082

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

07/22/2025

ATRAZINE	GROUP	5	HERBICIDES
ACETOCHLOR	GROUP	15	HERBICIDES

Cadence® LA NXT Herbicide

A preemergence herbicide for control of annual grasses and broadleaf weeds in field corn, production seed corn, silage corn, sweet corn, popcorn, Miscanthus or other non-food perennial bioenergy crops.

Active Ingredients:

acetochlor: 2-chloro-- N-ethoxymethyl-N-(2-ethyl6-methylphenyl)acetamide	46.3%
atrazine: [2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine] and related triazines	18.3%
Other Ingredients:	35.4%
Total:	100.0%

Contains 516 grams/liter or 4.3 pounds/gallon of acetochlor and 204 grams/liter or 1.7 pounds/gallon atrazine and related compounds.

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

Keep Out of Reach of ChildrenKEEP OUT OF REACH OF CHILDREN

CAUTION

See [Below] [Inside] [This] [Label] [Booklet] [For] [Additional] [Precautionary Statements][;] [additional] [First Aid][/] [Spanish First Aid][;] [and] [Environmental Hazards][;] [and] [Directions for Use] [(including] [Mitigations for Endangered Species)][,][and] [Storage and Disposal] [Instructions)] [;] [and] [Other] [Required] [Spanish] [Labeling] [and] [Other] [Use Information] [.]

FIRST AID	
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED	• Move person to fresh air • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

FOR A MEDICAL EMERGENCY OR HELP WITH ANY SPILL, LEAK, FIRE OR EXPOSURE INVOLVING THIS MATERIAL, CALL DAY OR NIGHT CHEMTREC 1-800-424-9300.

EPA Reg. No. 34704-1082
EPA Est. No.
NET CONTENTS: __ GAL (__ L)

FORMULATED FOR
LOVELAND PRODUCTS, INC.®
P.O. BOX 1286, GREELEY, [CO]COLORADO 80632-1286 USA

[NOTIF V1 0625]

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if swallowed. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear long-sleeved shirt and long pants, socks and shoes.

Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are listed below.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves except when mixed with oil use Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber and Viton gloves
- Shoes plus socks
- A chemical-resistant apron when mixing/loading, cleaning up spills, or cleaning equipment, or otherwise exposed to the concentrate
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

See Engineering Controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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.

IMPORTANT: When reduced PPE is worn because an enclosed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, 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.

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 cleaning equipment or 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.

SURFACE WATER ADVISORY: This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several weeks after application.

A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of acetochlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

GROUNDWATER ADVISORY: Acetochlor is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Non-Target Organism Advisory: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION 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 accessed through www.atrazine-watershed.info or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return 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, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in 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
- Waterproof gloves except when mixed with oil use Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, and Viton gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

RESISTANCE MANAGEMENT

For resistance management, **CADENCE LA NXT Herbicide** contains a Group 5 and Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to **CADENCE LA NXT Herbicide** and other Group 5 and Group 15 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of **CADENCE LA NXT Herbicide** or other Group 5 and Group 15 herbicides
- within a growing season sequence or among growing seasons with different herbicide groups
- that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where
- information on resistance in target weed species is available use the less resistance-prone
- partner at a rate that will control the target weeds equally as well as the more resistance-prone
- partner. Consult your local extension service or certified crop advisor if you are unsure as to
- which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and
- uses historical information related to herbicide use and crop rotation and that considers tillage
- or other mechanical control methods, cultural, biological and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance
- development. Indicators of possible herbicide resistance include:
 - Failure to control a weed species normally controlled by the herbicide at the dose applied,
 - especially if control is achieved on adjacent weeds.
 - A spreading patch of non-controlled plants of a particular weed species.
 - Surviving plants mixed with controlled individuals of the same species.

If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- If a weed pest population continues to progress after treatment with this product, discontinue
- use of this product and switch to another management strategy or herbicide with a different
- mode of action, if available.

- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Loveland Products, Inc. retailer, representative or call 1-888-574-2878.

Product Information

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

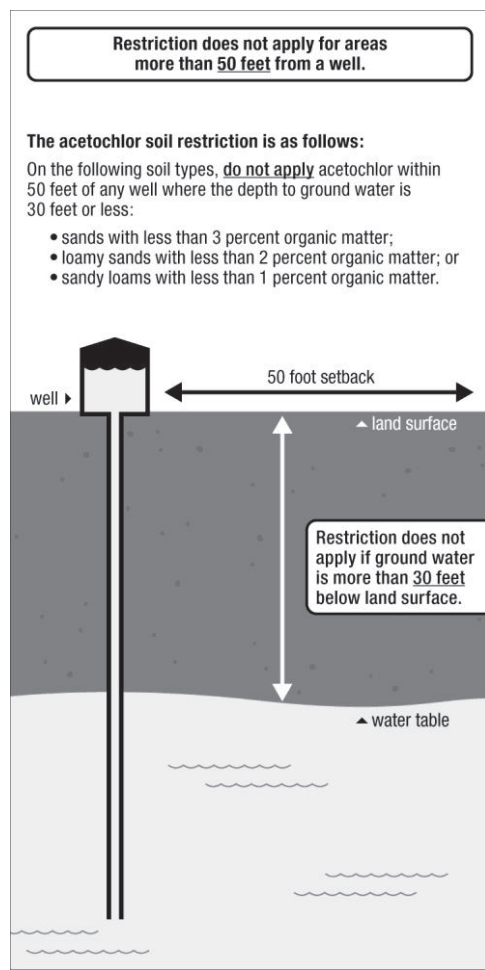
Cadence® LA NXT herbicide may be applied to the surface or incorporated into the top 1-2 inch layer of soil. It may be used for control alone, or in tank mix combinations, for the weeds listed in the "Target Weeds" section of these use directions. Cadence LA NXT Herbicide controls weeds by interfering with normal germination and seedling development. Cadence LA NXT Herbicide does not control emerged weeds present at application.

Endangered Species

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <http://www.epa.gov/espp/>, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

Use Restrictions

- **Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.**
- Do not use Cadence LA NXT Herbicide on any crop other than field corn, production seed corn, silage corn, popcorn.
- Do not apply by mechanically pressurized handgun to sweet corn.
- Do not apply Cadence LA NXT Herbicide before pre-irrigation in irrigated areas.
- Do not allow Cadence LA NXT Herbicide to contaminate feed or food.
- On the following soil types, do not apply this product within 50 feet of any well where the depth to groundwater is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1 percent organic matter. See the figure for additional clarification.



- This product must not be mixed or loaded within 50 ft. of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product must 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**

To ensure protection of surface water from runoff through standpipes with tile-outlets in fields, one of the following restrictions must be used in applying this product to tile-outletted fields containing standpipes:

1. Do not apply this product within 66 feet of standpipes in tile-outletted fields.
 2. Apply this product to the entire tile-outletted 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 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.
- Do not apply Cadence LA NXT Herbicide postemergence to sweet corn.
 - **Chemigation:** Do not apply this product through any type of irrigation system unless otherwise directed by approved supplemental labeling in possession of the user at the time of application.
 - 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-target 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 1/2 inch of rainfall has occurred between application and the first irrigation.
 - **Aerial Application:** Do not apply this product using aerial application equipment unless otherwise directed by approved supplemental labeling in possession of the user at the time of application,
 - 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.
 - Flush sprayer with clean water after use.

Maximum Atrazine Application Rates Per Calendar Year:

Maximum annual atrazine broadcast application rates for corn must be as follows:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2.0 pounds active ingredient (contained in 4.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) per acre. 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. Note: One quart per acre Cadence LA NXT Herbicide delivers 0.425 pound active ingredient atrazine per acre.
- Apply a maximum of 2.0 pounds active ingredient (contained in 4.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) 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 (contained in 3.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) 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 (contained in 4.7 quarts Cadence LA NXT Herbicide; however do not apply more than 2.7 quarts Cadence LA NXT Herbicide, per maximum acetochlor rate restrictions below) per acre if only applied postemergence.
- **Maximum Acetochlor Application Rates Per Calendar Year:**
Maximum annual acetochlor broadcast application rates for corn must not exceed 3.0 pounds active ingredient (2.7 quarts Cadence LA NXT Herbicide) per acre. Note: One quart per acre Cadence LA NXT Herbicide delivers 1.075 pound active ingredient acetochlor per acre.
- **Preharvest Interval:** Do not apply Cadence LA NXT Herbicide within 60 days of harvest for field corn forage uses or 45 days for sweet corn forage uses.
- Postemergence applications of Cadence LA NXT Herbicide to corn must be made before the crop reaches 11 inches in height.

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 triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide.
- Cadence LA NXT Herbicide 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.
- Cadence LA NXT Herbicide should not be stored near seeds, fertilizers, or foodstuffs.
- All containers of Cadence LA NXT Herbicide should be kept tightly closed when not in use.
- Applied according to directions and under normal growing conditions, Cadence LA NXT Herbicide 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 LA NXT Herbicide used under these abnormal conditions could result in crop injury.

Rotational Crop Restrictions:

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

Rotational Crop (1)	Timing or Interval
corn (2)	Immediately – 0 months after application
corn, cotton, sorghum, soybeans (3) (4) (6)	Spring/next season following application
alfalfa, barley, dry beans (adzuki, kidney, lima, navy, or pinto), lupin (grain, white, or white sweet), millet (pearl or proso), oats, peas (blackeyed, chick, cow, Crowder, field, pigeon, or Southern), potatoes, rye, sugar beets, sunflower, tobacco, triticale, wheat, wild rice	15 months after application (5)

Numbers within parentheses (-) in the table refer to specific rotational crop requirements below:

- (1) Do not plant dry beans or peas, potatoes, small grains or small-seeded legumes, sugar beets, sunflower, or tobacco during the 15 months following application, or injury from atrazine may occur.
- (2) If crop treated with Cadence LA NXT Herbicide is lost, field corn, seed corn, silage corn, popcorn, or sweet corn may be replanted immediately. Do not exceed a total of 3.0 pounds ~~at~~active ingredient per acre of acetochlor (2.7 quarts Cadence LA NXT Herbicide) if additional product is applied. If applied after June 10, do not rotate to crops other than corn or sorghum the next year or crop injury from atrazine may occur.
- (3) Injury may occur to soybeans planted the year following application on soils having a calcareous subsurface layer and relatively high pH. In eastern parts of the Dakotas, Kansas, western Minnesota and Nebraska, do not rotate to soybeans if the rate applied was more than 2.0 pounds active ingredient equivalent of atrazine or soybean injury may occur.
- (4) In the High Plains and Intermountain regions of the West where rainfall is sparse and erratic or irrigation is required, use only where corn or sorghum is to follow corn.
- (5) Approved rotation crops list does not include any species of succulent beans or peas.
- (6) Do not apply atrazine and propazine to the same sorghum acre.

Rotation to Non-food Winter Cover Crops

Following harvest of food crops treated with Cadence LA NXT Herbicide, only non-food or non-feed winter cover crops (with the exception of wheat) may be planted. Do not graze or harvest rotational cover crops for food or animal feed for 18 months following the last application of Cadence LA NXT Herbicide. This prohibition does not apply to wheat, which may be planted 4 months following the last application of Cadence LA NXT Herbicide, or to nongrass animal feeds, which may be planted 9 months after the last application of Cadence LA NXT Herbicide.

Weed Resistance Management

For resistance management, Cadence ATZ NXT Herbicide is a Group 15 and Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to Cadence ATZ NXT Herbicide and other Group 15 and Group 5 herbicides. The resistant biotypes may eventually dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of Cadence ATZ NXT Herbicide or other Group 15 and Group 5 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of

action, if available.

- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes or to find out if suspected resistant weeds have been found in their region.
- For further information or to report suspected resistance contact Loveland Products, Inc. retailer, representative or call 1-888-574-2878. You can also contact your pesticide distributor or university extension specialist to report resistance.

Best Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using full labeled rates and following directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

General principles of herbicide resistance management:

1. Apply integrated weed management practices. Use multiple herbicide modes-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.
2. Use the full specified herbicide rate and proper application timing for the hardest to control weed species present in the field.
3. Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
4. Monitor site and clean equipment between sites.

For annual cropping situations also consider the following:

- Start with a clean field and control weeds early by using a burndown herbicide treatment or tillage in combination with a soil-applied residual herbicide as appropriate.
- Use cultural practices such as cultivation and crop rotation, where appropriate.
- Use good agronomic principles that enhance crop competitiveness.
- Use new commercial seed that is as free of weed seed as possible.

MANDATORY SPRAY DRIFT

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a Coarse or coarser droplet size (ASABE S572).
- If the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- User must maintain a 150 foot (46 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- Do not apply when wind speeds exceed 10 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- Applicators are required to use a Coarse or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use a Coarse or coarser droplet size (ASABE S572) for all applications.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Boomless Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

Take precautions to minimize spray drift.

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 LA NXT Herbicide is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

Dry Bulk Fertilizer: Cadence LA NXT Herbicide may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread. See Appendix II for directions and restrictions including which fertilizers are compatible.

Adding to Spray Tank

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

Used Alone: When Cadence LA NXT Herbicide 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. 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 LA NXT Herbicide next.
- Add ammonium sulfate then Makaze®, Salvo herbicide (not for use on production seed corn, or silage corn), and a nonionic surfactant last, if needed.
- Complete filling the sprayer tank and continue agitation.
- Batches should be mixed and applied the same day.

Note: For all tank mixtures, maintain agitation during mixing and throughout application to ensure spray mixture remains uniformly suspended. If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

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 directions and restrictions.

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 LA NXT Herbicide should occur as close as possible to planting. Preemergence applications should occur as close as possible to planting, but prior to weed emergence; this product will not control emerged weeds present at application..

Early Preplant Surface: On medium and fine textured soils (see Table 1), Cadence LA NXT Herbicide may be applied up to 45 days prior to planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the specified broadcast rate applied initially and the remaining 40 percent applied at planting. Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are present at the time of application, apply this product in a tank mixture with an appropriate contact herbicide. Observe directions for use, precautions, and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

Preplant Incorporation: Cadence LA NXT Herbicide and certain tank mixes 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. Do not mix Cadence LA NXT Herbicide deeper than 2 inches into the soil and avoid moving or shaping soil after incorporation, as weed control may be reduced.

Preemergence Surface: Cadence LA NXT Herbicide 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 LA NXT Herbicide 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 corn seed. Do not remove Cadence LA NXT Herbicide from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Postplant-Preemergence: Cadence LA NXT Herbicide may be applied immediately after 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 shallowly incorporate the herbicide. The device used should be run at a shallow depth to prevent disturbing the corn seed. Do not remove Cadence LA NXT Herbicide from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Banding-Preemergence: Cadence LA NXT Herbicide may be applied in a 10 to 14 inch band after corn 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. The device used should be run at a shallow depth to prevent disturbing the corn seed. Do not remove Cadence LA NXT Herbicide from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Early Postemergence: Cadence LA NXT Herbicide 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 with a herbicide that controls the emerged weeds. Read and follow restrictions and directions on tank mix product labels.

Note: Do not make postemergence applications using sprayable liquid fertilizer as the carrier because severe crop injury may occur.

Note: Do not apply Cadence LA NXT Herbicide postemergence to sweet corn.

Sprinkler Irrigation: Do not apply Cadence LA NXT Herbicide through sprinkler irrigation systems unless otherwise directed by approved supplemental labeling in possession of the user at the time of application. A sprinkler system may be used to incorporate Cadence LA NXT Herbicide after application. After Cadence LA NXT Herbicide 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 LA NXT Herbicide.

Planting

Planting should be done as close to the time of application of Cadence LA NXT Herbicide as possible. This allows Cadence LA NXT Herbicide 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. If weeds emerge, a shallow cultivation or rotary hoeing will generally result in improved weed control. If Cadence LA NXT Herbicide 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

The use rate of Cadence LA NXT Herbicide is determined by soil texture 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 LA NXT Herbicide Use Rate Selection.

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

Use Rates for Conventional Tillage Systems

Table 2: Cadence LA NXT Herbicide Use Rates by Soil Texture Content in Conventional Tillage Systems.

The following use rates are for preplant incorporated, preemergence, and early postemergence applications (see Application Timing and Methods). Apply this product before weeds reach the 2-leaf stage and the corn is no more than 11 inches in height. Consult Table 3 if reduced- or no-till applications are made or the product is applied more than 14 days prior to planting under conventional tillage.

Soil Texture	Broadcast Rate Per Acre (Quarts)*
Coarse	1.8
Medium	1.8 – 2.3
Fine	2.0 – 2.3

*Use the higher rate in the rate range in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations, use up to 2.7 quarts per acre on medium- and fine-textured soils.

Use Rates for Reduced Tillage Systems or Early Preplant Applications in Conventional Tillage Systems

Cadence LA NXT Herbicide may be used in reduced and no-till systems and in early preplant applications in conventional tillage systems. Single applications may be made up to 30 days prior to planting or after planting but before crop emergence. Optimal weed control will be obtained when applications are made as close to planting as possible but before crop emergence. If weeds are emerged at time of application, apply a labeled burndown herbicide such as Makaze, Gramoxone, or Salvo (not for use on production seed corn, or silage corn) with Cadence LA NXT Herbicide.

Table 3: Cadence LA NXT Herbicide Use Rates* (quarts/acre) by Soil Texture in Reduced and No-till Systems or Table 3: Cadence LA NXT Herbicide Use Rates by Soil Texture in Reduced and No-till Systems or Conventional Tillage Systems when Applications are made more than 14 days Prior to Planting

Soil Texture	Broadcast Rate Per Acre (Quarts)*
Coarse**	1.8
Medium	2.3
Fine	2.3

*In areas of heavy weed infestation, use up to 2.7 quarts per acre on medium- and fine-textured soils. Rates are for single applications. Split applications may be used; apply 60% of the recommended rate up to 45 days before planting and the remaining 40% at or immediately following planting but before crop emergence.

**Do not apply more than 14 days prior to planting on coarse textured soils.

Band Applications

For band applications, use row and bandwidth measurements (inches) to calculate the amount of Cadence LA NXT Herbicide to be applied per acre as follows:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Rate per acre for a broadcast treatment} = \text{Amount of Cadence LA NXT Herbicide to apply per acre}$$

Weeds Controlled

Cadence LA NXT Herbicide applied as directed in this label will provide control or partial 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 directions. Always consult the tank mix product labels for specific use rates and directions. Always follow the most restrictive label when tank mixing Cadence LA NXT Herbicide with another product. Cadence LA NXT Herbicide may be tank mixed with any other registered corn product as long as compatibility is verified and it is not prohibited by the label of the tank mix product. Note: This product contains atrazine and thus may not control weeds that are known or suspected to be triazine resistant.

Table 4: Weeds Controlled or Partially Controlled by Cadence LA NXT Herbicide at Specified Use Rates.

Grasses and Sedges	C = Control PC = Partial Control	Broadleaves	C = Control PC = Partial Control
barnyardgrass	C	beggarweed, Florida	C
crabgrass spp.	C	carpetweed	C
crowfootgrass	C	cocklebur (3)	C
cupgrass, southwestern	C	galinsoga	C
cupgrass, woolly (1)	C	groundcherry, annual	C
foxtail, giant	C	groundcherry, cutleaf	C
foxtail, green	C	henbit	C
foxtail, robust (purple, white)	C	jimsonweed	C
foxtail, yellow	C	kochia	C
goosegrass	C	lambsquarters, common	C
johnsongrass, seedling	PC	morningglory spp. (3)	C
millet, foxtail	C	mustard spp.	C
millet, wild proso	PC	nightshade, black	C
nutsedge, yellow (2,3)	C	nightshade, hairy	C
oat, wild	C	pigweed spp.	C
panicum, browntop	C	purslane, common	C
panicum, fall	C	pusley, Florida	C
panicum, Texas (4)	C	ragweed, common	C
rice, red	C	ragweed, giant	PC
sandbur, field	PC	sicklepod	C
shattercane	PC	sida, prickly	C
signalgrass, broadleaf (4)	C	smartweed spp.	C
sprangletop, red	C	sunflower, common	PC
wheat, volunteer	C	velvetleaf (3)	C
witchgrass	C	waterhemp, tall	C

- (1) Apply 2.7 quarts of Cadence LA NXT Herbicide per acre to control this weed; control can be erratic, especially under dry conditions. Control escaped weeds with cultivation or application of an appropriate registered postemergence herbicide.
- (2) Preplant incorporate for improved control.
- (3) Use the higher rate in the recommended application rate range. Activity may be reduced under dry conditions or following early (more than 14 days) preplant applications. Additional atrazine and/or sequential herbicides may be needed for complete control.

- (4) Best control is achieved when Cadence LA NXT Herbicide 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, shallow 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 application may be needed.

Tank Mix Combinations

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

For all applications, do not exceed the maximum rate of acetochlor as specified in the Maximum Acetochlor Application Rates Per Calendar Year section of this label.

Use of Spray Adjuvants

Cadence LA NXT Herbicide is a preemergence herbicide for which spray adjuvants have little or no effect on performance. However, several herbicides used in tank mixtures with Cadence LA NXT Herbicide require use of adjuvants to aid in the burndown of emerged weeds. Use only those adjuvants specified 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 LA NXT Herbicide is applied postemergence to corn as severe injury may result. The addition of liquid fertilizers used as adjuvants with Cadence LA NXT Herbicide tank mixes 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 LA NXT Herbicide unless otherwise specified in the tank mix product label.

Cadence NXT may be tank-mixed with Aim® EC, atrazine, Balance® Pro, Balance Flexx, Callisto®, Callisto Xtra, Distinct®, Hornet® WDG, Linex® 4L, Lorox® DF, Makaze®, Marksman®, Princep®, Python® WDG, Resource®, Rifle®, Salvo (not for use on production seed corn, or silage corn), Stealth® (not for use on silage corn) or Strut® for preemergence use in corn. Ensure that specific product being used in the tank mixture is registered for preemergence application to corn. Read and follow label directions of all products in the tank mixture; the most restrictive label directions apply. **When tank mixing Cadence LA NXT Herbicide 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 LA NXT Herbicide Plus):

Tank Mix Herbicide †	Comments
Atrazine 4L	• 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 • Longer growing season areas • High rainfall areas • Heavy broadleaf weed pressure
Balance Pro	• Not labeled in all states; refer to the Balance Pro label for precautionary statements, use directions, and geographic and other restrictions • For use in field corn only • Refer to the use rates section of the Cadence LA NXT Herbicide label for minimum use rates

Hornet WDG	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.
Princep 4L	Provides improved crabgrass or fall panicum control.
Python WDG	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.
Cadence NXT Herbicide	Tank mix 1 pt/acre for enhanced grass and nutsedge control

† 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-Tillage Corn (Cadence LA NXT Herbicide Plus):

Tank Mix Herbicide †	Comments
Atrazine 4L	- Longer growing season areas. - High rainfall areas. - Heavy broadleaf weed pressure. - If emerged weeds are greater than 1.5" inches tall at the time of application, add an appropriate postemergence herbicide.
Banvel®/Strut Marksman	- Apply preplant or preemergence in reduced/ no-till systems for burndown of existing weeds. - Preemergence on all soils; medium and fine textured with >2% OM.
Makaze, Roundup WeatherMAX®, Touchdown	Burndown existing weeds.
Gramoxone® Inteon	Control annuals, suppress perennials.
Pendimax® / Stealth	Preemergence to early postemergence (up to 3" tall corn) but before weeds are more than 1" tall.
Princep 4L	Provides improved crabgrass or fall panicum control.
Cadence NXT Herbicide	Enhanced grass and nutsedge control.
Salvo	Burndown existing weeds.

† Formulations that are not listed may be used: Perform compatibility test and check the product label for directions and precautions.

Cadence LA NXT Herbicide plus Burndown Herbicide Tank Mixtures

In reduced or no-tillage corn, Makaze, Roundup WeatherMAX, Gramoxone Inteon, Touchdown, and/or Salvo (not for use on production seed corn, or silage corn) can be tank mixed with Cadence LA NXT Herbicide 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 LA NXT Herbicide may be applied before, with, or following the use of one or more of the following herbicides for postemergence use in corn: Accent®, Aim EC, atrazine, Balance Flexx, Basis®, Basis Gold®, Beacon®, Buctril®, Buctril/atrazine, Callisto, Callisto Xtra, Capreno®, Distinct, Hornet WDG, Impact®, Laudis®, Liberty®, Lightning®, Linex 4L, Lorox DF, Marksman, Peak®, Permit®, Princep, Pendimax, Pursuit®, Resource, Rifle, Salvo (not for use on production seed corn, or silage corn), Spirit®, Status®, Steadfast®, Stealth (not for use on silage corn), or Strut. Refer to the tank mix product label(s) regarding use directions, precautions and restrictions, and the list of weeds controlled. Cadence LA NXT Herbicide may be tank mixed with any product approved for use on corn unless it is prohibited on the tank mix product label. Ensure that specific product being used in the tank mixture is registered for postemergence application to corn. Read and follow label directions of all products in the tank mixture;

the most restrictive label directions apply. **Note:** DO NOT use liquid fertilizer as the carrier when Cadence LA NXT Herbicide is applied postemergence to corn as severe injury may result. The addition of liquid fertilizers used as adjuvants with Cadence LA NXT Herbicide tank mixes 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.

When tank mixing, refer to the tank mix product label and follow the additional use directions given in the following table. Cadence LA NXT Herbicide can be applied to corn up to 11" tall.

Postemergence Tank Mixes (Cadence LA NXT Herbicide Plus):

Tank Mix Herbicide	Rate	Comments
Hornet WDG	2.0-5.0 oz/acre	Always add <u>a</u> NIS at 0.25% v/v or COC at 1% v/v.
Aim herbicide	0.3 oz/acre	Always add a NIS at 0.25% v/v.
Rifle Strut Marksman	0.5 - 1.0 pt/acre 0.5 - 1.0 pt/acre 2 - 3.5 pt/acre	Early postemergence up to 8" tall corn on all soils. If grasses are more than 2- leaf stage, combine with another herbicide to control these weeds.
Buctril Buctril/atrazine Shotgun herbicide	1.5 pt/acre 2.0 pt/acre 2.0 – 3.0 pt/acre	- Refer to product label for use directions. - Refer to label for Shotgun herbicide for timing and use directions.
Atrazine	0.5 - 2.0 lb ai/acre	Preplant surface, preplant incorporated, preemergence 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	- Always add a NIS at 0.25% v/v and 1.25% UAN. - Can be applied up to 10-inch corn.
Liberty	16.0 – 28.0 oz/acre	For use on liberty tolerant corn only. Apply to grass and broadleaves up to 6" tall. 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 - 2 qt per acre or ammonium sulfate at 2.5 lb per acre.
Pendimax / Stealth	1.8 - 3.6 pt/acre	Preemergence to early postemergence (up to 3" tall corn) but before weeds are more than 1" tall.
Pursuit 2.5L Pursuit 70DG	4.0 fl oz/acre 1.4 fl oz/acre	- Use only on Clearfield varieties. - Apply preplant surface, preplant incorporated, preemergence or early postemergence (up to 3" tall weeds).
Resource	4.0 - 6.0 oz/acre	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.
Spirit	1.0 oz/acre	- Always add crop oil concentrate at 1% v/v. - See label for geographic restrictions.

Salvo Ester	See Label	• Apply preplant surface or preemergence to control emerged broadleaf weeds in corn.
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 LA NXT Herbicide use rates (qts/acre): <u>Soil</u> Coarse 1.8 Medium 1.8 Fine 2.0 • Always add NIS at .25% (v/v); and in addition if applied in dry conditions, add 4% (v/v) clear liquid fertilizer. • Banvel, Strut, 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	• Minimum Cadence LA NXT Herbicide use rates (qts/acre): <u>Soil</u> Coarse 1.8 Medium 1.8 Fine 2.0 • 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. • Banvel, Strut, Marksman, Buctril, or Tough herbicide may be added to this mixture to provide burndown and residual control of broadleaf weeds.

Appendix I

Procedure for Testing the Compatibility of Cadence LA NXT Herbicide and Tank Mixes with Fluid Fertilizers.

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

Materials Needed:

- Cadence LA NXT Herbicide 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 LA NXT Herbicide 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 LA NXT Herbicide 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.

3. Add 1/2 teaspoon (2 ml) adjuvant to one of the jars, label it as "with", and mix. The rate of 1/2 teaspoon per pint is equal to 3 pints of adjuvant per 100 gallons of fluid fertilizer.
4. 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 340 tons of bulk fertilizer can be impregnated per worker per day. 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.

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 LA NXT Herbicide or Cadence LA NXT Herbicide plus atrazine.

Dry bulk fertilizers (Table 5) may be impregnated with this product or the tank mixtures of this product plus atrazine on corn. This product and these tank mixtures must be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 14 days prior to planting. On medium- and fine-textured soils in areas where incorporation is not planned (i.e., reduced tillage situations or in some conventional tillage situations), applications can be made up to 30 days before planting to allow moisture to move the herbicide-fertilizer mixture into the soil. On coarse-textured soils, applications can be made up to 14 days prior to planting. When applying Cadence LA NXT Herbicide 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 type, application methods and rotational restrictions. Refer to the table for broadcast rate per acre to determine the application rate per acre for the herbicide treatment to be applied.

Table 5: Approved Dry Fertilizer Ingredients for Use with Cadence LA NXT Herbicide.

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
Potassium Sulfate	0	0	52
Urea [†]	45	0	0

[†] 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 LA NXT Herbicide 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 LA NXT Herbicide may also be impregnated on the go and applied with pneumatic applicators.

The following table provides a reference to determine the amount of Cadence LA NXT Herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide and fertilizer rates per acre.

Table 6. Cadence LA NXT Herbicide Fertilizer Impregnation Rate Conversions.

Fertilizer Rate (lbs/acre)	Acres Covered (per ton)	Quarts of Cadence LA NXT Herbicide per Ton of Fertilizer to Deliver:		
		1.5 qts/acre	1.8 qts/acre	2.3 qts/acre
200	10.0	15.0	18.0	23.0
250	8.0	12.0	14.4	18.4
300	6.7	10.1	12.1	15.4
350	5.7	8.6	10.3	13.1
400	5.0	7.5	9.0	11.5
450	4.5	6.8	8.1	10.4

To determine the amount of Cadence LA NXT Herbicide needed for other fertilizer rates, use the following formula:

$$\frac{\text{Cadence LA NXT Herbicide rate (quarts/acre)} \times 2000}{\text{Pounds of fertilizer/acre}} = \text{Quarts of Cadence LA NXT Herbicide per ton of fertilizer}$$

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, Filtration & 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 LA NXT Herbicide 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 the Cadence LA NXT Herbicide will not be absorbed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature should not exceed 125°F. If storage temperature for bulk 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: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

CONTAINER HANDLING:

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. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.agrecycling.org. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned,

stay out of smoke. 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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 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 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 final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

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