



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

91234-251

Date of Issuance:

10/4/21

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

A381.05

Name and Address of Registrant (include ZIP Code):

Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Emily Schmid, Product Manager 25
Herbicide Branch, Registration Division (7505P)

Date:

10/4/21

2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 91234-251.”
3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 04/16/2021
- Alternate CSF 1 dated 04/16/2021

The alternate brand name “VENTAS” is noted for the product record.

If you have any questions, please contact Theresa Gerber at 703-347-8583 or by email at gerber.theresa@epa.gov.

Enclosure

ACCEPTED

10/4/2021

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 91234-251

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}
{Note to reviewer: {Text} in braces denotes where in the final label text will appear}
{BOOKLET FRONT PANEL LANGUAGE}

ACETOCHLOR GROUP 15 HERBICIDE

A381.05 [™]

[Alternate Brand Name: Ventas]

Contains acetochlor, the active ingredient used in [Harness® Herbicide].

[A381.05 is an emulsifiable herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn, Sweet Corn, Popcorn, Miscanthus and other non-food perennial bioenergy]

ACTIVE INGREDIENT:	(% by weight)
*Acetochlor.....	75.9%
OTHER INGREDIENTS:	<u>24.1%</u>
TOTAL	100.0%

*contains 839 gram/liter or 7.0 pounds/gallon of 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide.

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

See [below] [inside label booklet] for [additional] [First Aid,] [and] [Precautionary Statements] [and] [Directions for Use].

[A381.05] is not manufactured, or distributed by Bayer CropScience, seller of [Harness® Herbicide].

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

{LANGUAGE INSIDE BOOKLET}

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO

Causes substantial but temporary eye injury. Causes skin irritation. Harmful if swallowed or inhaled. Do not get in eyes, on skin or on clothing. Wear protective eyewear. Wear coveralls worn over short-sleeved shirt and short pants, socks, chemical-resistant footwear, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID	
If in eyes:	<ul style="list-style-type: none">• 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:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">• 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:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

**For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, and Viton \geq 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

- Chemical-resistant apron when cleaning equipment, mixing, or loading.

Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N*, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N*, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

Applicators and other handlers must wear: Coveralls over short-sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical resistant apron when cleaning equipment, mixing, or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no instructions for washable exist, use detergent and hot water. Keep and wash PPE Separately from other laundry.

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)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/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 product is toxic to fish. **DO NOT** apply directly to water, or to areas where surface water is present or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters.

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.

PHYSICAL OR CHEMICAL HAZARDS:

Do not mix or allow this product to come in contact with an oxidizing agent. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

it is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with **Directions for Use** on this label or in separately published Atticus Supplemental Labeling.

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

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

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, are: coveralls over short-sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material, chemical-resistant footwear plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure.

PRODUCT INFORMATION

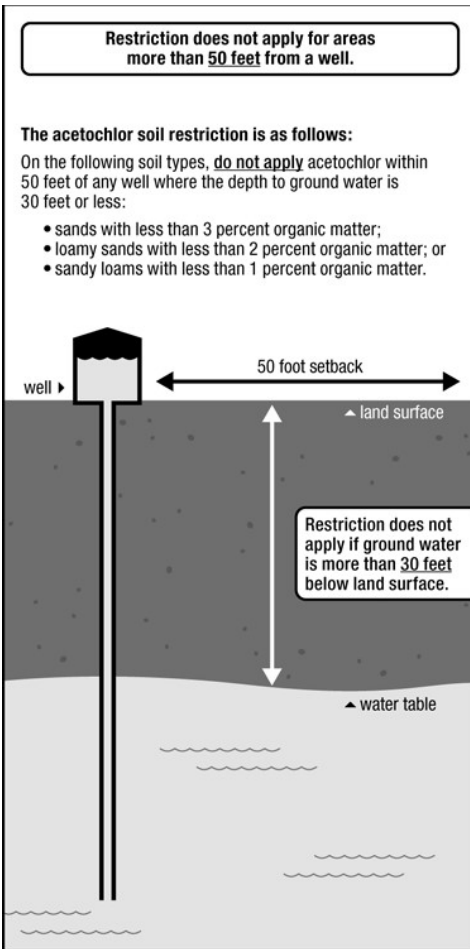
This product is for control of yellow nutsedge, and the annual grasses and broadleaf weeds listed in the **WEEDS CONTROLLED** section of this label. This product alone will not control emerged seedlings. This product may be applied either as a surface application before or after planting, or after crop emergence. This product may also be shallowly incorporated prior to planting to blend the herbicide treatment into the upper 1 to 2 inches of soil. Except for minimum or conservation tillage system, the seedbed should be fine, firm and free of clods and trash.

Read and carefully observe precautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments. Use according to the most restrictive label directions in the mixture.

Use Restrictions:

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

This Chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination. On the following soil types, **DO NOT** apply this product within 50 feet of any well where the depth to ground water is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter; or sandy loams with less than 1 percent organic matter. See the figure for additional clarification.



This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

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 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 a minimum of 110 percent of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a rood of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100 percent 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. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

DO NOT flood irrigate to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning into wells, spills or improper disposal excess

pesticide, spray mixtures or rinsates.

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.

Disposal of excess pesticide, spray mixtures or rinsate should be according to label use instructions or according to the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office.

DO NOT apply under conditions which 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:

DO NOT treat powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.

DO NOT apply to imperious 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 or rainfall has occurred between application and first irrigation.

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:

MANDATORY SPRAY DRIFT MANAGEMENT

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.
- Applicators are required to select a nozzle and pressure combination that delivers medium or coarser droplets (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 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.

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

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. Avoid applications during temperature inversions.

WIND

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

ROTATIONAL CROPS:

- 1) If a crop treated with this product is lost, field corn, seed corn, silage corn, popcorn sweet corn or milo (sorghum) may be replanted immediately. When planting milo (sorghum), only use seed properly treated with seed protectant or safener. **DO NOT** exceed a total of 3.0 pounds per acre of active ingredient if additional product is applied.
- 2) Nongrass animal feeds such as alfalfa, clover, kudzu, lespedeza, lupin, sanfoin, trefoil and *vetch* spp. May be planted 9 months after application. Wheat may be planted 4 months after application.
- 3) Rotate the next season to the following crops: soybeans, corn (all types), cotton, milo (sorghum), tobacco, sugar beets, sunflowers, potatoes, barley, buckwheat, millet (pearly and proso), oats, rye, teosinte, triticale, wild rice, dried shelled bean group *Lupinus* spp. (including grain lupin, sweet lupin and white lupin); *phaseolius* spp. (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean, bean); *Vigna* spp. (includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea and urd bean); broad bean (dry) chickpea, guar, lablab bean, lentil, pea (*pisum* spp., includes field pea); pigeon pea.

ROTATION TO NON-FOOD WINTER COVER CROPS

Following harvest of food crops treated with **A381.05**, 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 **A381.05**. This prohibition does not apply to wheat, which may be planted 4 months following the last application of **A381.05**, or to nongrass animal feeds, which may be planted 9 months after the last application of **A381.05**.

WEED RESISTANCE MANAGEMENT

ACETOCHLOR	GROUP	15	HERBICIDE
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For resistance management, **A381.05** is a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to **A381.05** and other 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 **A381.05** or other 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 Atticus at 984-465-4800.

Soil Texture

Applicators should evaluate soil conditions carefully to assure that they choose the correct label rate. The specified use rates of this product and the other herbicides labeled for use in tank mixtures with this product vary with soil texture. Unless soil texture is specifically named, rate tables throughout this label refer to only three soil textural groups: coarse, medium and fine. The following is a complete listing of soil textures included in each of these three soil textural groups:

SOIL TEXTURAL GROUP	SOIL TEXTURE
COARSE	Sand, loamy sand, sandy loam
MEDIUM	Loam, silt loam, silt, sandy clay loam
FINE	Silty clay loam, clay loam, sandy clay, silty clay, clay

Refer to the above table to determine the corresponding soil textural group for the soil to be treated.

Mixing, Spraying And Handling Instructions

NOTE: Direct contact or exposure to this product or spray mixtures of this product should be minimized. The following instructions for transfer, mixing, cleaning or repairing equipment should be followed in order to minimize this exposure. Review the protective clothing requirements as listed in the **PRECAUTIONARY STATEMENTS** section of this label and **DO NOT** use this product until you have the necessary protective clothing.

2.5 Gallon Containers

Open pouring from these containers can result in exposure from splashing or spilling. Special care in lifting and pouring is strongly recommended.

Bulk Containers

Open pouring from these containers can result in exposure from splashing or spilling and is not recommended. This product should be transferred from these containers to the mix or spray tank using pumps or transfer probes. The probe or pump should not be removed from the container or disconnected until the container is emptied or rinsed. Use the pump or probe system to rinse the empty container and transfer the rinsate directly to the mix or spray tank.

Equipment Cleaning and Repair

Cleaning and repair of transfer systems and application equipment is a source of exposure to this product. Care should be taken to minimize exposure during cleaning and repair to transfer systems application equipment. Whenever possible, these systems or equipment should be rinsed before being cleaned or repaired.

When repairs must be made during transfer or application, the equipment should be shut down, and special care taken to avoid contact with the pesticide.

Sprayer Compatibility

Always predetermine the compatibility of this product or labeled mixtures of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the **STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST** section in this label to determine the compatibility of this product and the labeled tank mixtures specified for use with sprayable fluid fertilizer carrier.

Mix this product or labeled tank mixture of this product with the appropriate carrier as follows:

1. Place a 20- to 35-mesh screen or wetting basket over filling port.
2. Through the screen, fill the sprayer tank one-half full with appropriate carrier.
3. If a compatibility agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only compatibility agents cleared by FDA for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent label. Check for adequate agitation.
4. If a wettable powder or dry flowable formulation is used, make slurry with water, and add it slowly through the screen into the tank. Continue agitation.
5. If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when flowable is premixed one part flowable with one part water and added slowly to the tank in diluted form.
6. Add this product slowly through the screen into the tank. Mixing and compatibility may be improved when this product is prediluted with two parts of water and added to the tank in diluted form.
7. Complete filling the sprayer tank with carrier. If a glyphosate herbicide is used, add the required amount near the end of the filling process. Remove hose from tank immediately after filling to avoid siphoning back into the water source.

Maintain good agitation at all times until the contents of the tank are sprayed.

NOTE: If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50-mesh. Carefully select proper nozzle to avoid spraying a fine mist. Check for even distribution of spray droplets. For best results with ground application, use flat-fan or whirl-chamber nozzle. To reduce loss of chemical due to drift of a fine mist, apply at pressures less than 40 psi.

Standard Sprayable Fluid Fertilizer Compatibility Test

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential.

The test follows:

A. Materials Required For A Compatibility Test

1. Two one-quart jars with lid or stopper (marked "with" and "without").
2. teaspoons (for a more exacting test, a five to ten milliliters (ml) pipette or graduated cylinder is desirable).
3. Sprayable fluid fertilizer to be tested.
4. The herbicide chemicals to be mixed.
5. A compatibility agent (the purpose of the adjuvant is to help keep the fertilizer and crop protection chemical in suspension, if this assistance is needed).

B. Procedure

1. Add one pint of the sprayable fluid fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

Add One Pint Liquid Fertilizer to Two Quart Jars.	
WITH	WITHOUT

2. To the jar marked "with", add 1/4 Teaspoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 Teaspoon in one pint is the equivalent of two pints per 100 gallons of liquid fertilizer.)

To Jar Marked "WITH" Add Compatibility Agent And Shake To Mix.	
WITH	WITHOUT

3. To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

Add Herbicide(s) To Both Jars And Shake to Mix	
WITH	WITHOUT

HERBICIDE	RATE/ACRE		Amount to be Added per Pint of Sprayable Fluid Fertilizer in level teaspoons (Assuming Volume is 25 Gallons/Acre)
Wettable	1 lb	=	1.5
Powders	2 lb	=	3.0
Or	3 lb	=	4.5
Dry Flowables	4 lb	=	6.0
	5 lb	=	7.5

HERBICIDE	RATE/ACRE		LEVEL TEASPOONS	MILLILITERS
Emulsifiable	1 pint	=	0.5	or 2.4
Concentrates or	1 quart	=	1.0	or 4.7
Flowables or	2 quarts	=	2.0	or 9.5
Liquids or	3 quarts	=	3.0	or 14.2
Solutions	1 gallon	=	4.0	or 19.0
	5 quarts	=	5.0	or 23.8

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume" or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 Teaspoon or 1.2 milliliters, three pints = 3/8 Teaspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer.

C. Observations and Decisions

1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
2. If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge, gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent, the herbicide(s) should be premixed with water before adding to the spray tank.

APPLICATION SYSTEMS

Ground Broadcast Treatment

Apply this product and the labeled tank mixtures in 10 or more gallons of solution per acre using broadcast boom equipment. The carrier may be either water or sprayable fluid fertilizer as specified for the crop to be treated in the "DIRECTIONS FOR USE" section of this label. **DO NOT** apply during periods of gusty winds, when winds are in excess of 15 miles per hour or when other conditions favoring drift exist.

Ground Band Treatment

Apply a broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast Rate per acre} = \text{Band Rate per acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast Volume per acre} = \text{Band Rate per acre}$$

CORN

Application With Dry Bulk Fertilizer

The herbicide-fertilizer impregnation process must be completed only by commercial fertilizer or chemical dealerships properly equipped for this procedure. Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product. 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 soil 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. The herbicide must be applied as specified in this label for the crop, weed and soil type treated. Refer to the table for broadcast rate per acre to determine the application rate per acre for the herbicide treatment to be applied.

The following table provides a reference to determine the amount of LIQUID herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide recommendations for fertilizer rates per acre:

Quarts of Liquid Herbicide/Acre

Fertilizer Rate (pounds/acre)	Acres Covered (per ton)	(Pints of Herbicide/Ton Dry Bulk Fertilizer)		
		2.0 Pints	2.25 Pints	2.75 Pints
200	10.0	20.0	22.5	27.5
250	8.0	16.0	18.0	22.0
300	6.7	13.4	15.0	18.4
350	5.7	11.4	12.8	15.7
400	5.0	10.0	11.3	13.8
450	4.5	9.0	10.1	12.4

To determine the amount of herbicide needed for rates not included in the preceding table, use the following formula:

Herbicide Rate

$$\frac{\text{Pints/Acre} \times 2000}{\text{Pounds Fertilizer/ Acre}} = \text{Pints of Herbicide per Ton of Dry Bulk Fertilizer}$$

Mix and blend the dry fertilizer and herbicide mixture in a closed rotary drum-type mixture allowing sufficient time to ensure uniform coverage. Use at least one ton of dry fertilizer per mixing operation. Inject the herbicide into the drum over a minimum of a 2-minute period and allow at least 2 additional minutes mixing time to ensure uniformity. The nozzle used to spray the herbicide treatment must be placed inside the mixer to provide uniform spray coverage of the tumbling fertilizer.

If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb or Micro-Cel, to provide a free-flowing mixture.

The following table provides a partial list of dry fertilizers which may be impregnated with this product or tank mixtures of this product with other herbicides.

FERTILIZER	A381.05
Ammonium sulfate (21-0-0)	Yes
Ammonium phosphate-sulfate (16-20-0)	Yes
Diammonium phosphate (18-46-0)	Yes
Potassium chloride (0-0-60)	Yes
Potassium sulfate (0-0-52)	Yes
Single super-phosphate (0-20-0)	Yes
Treble super-phosphate (0-46-0)	Yes
*Urea (46-0-0)	Yes

*Some ureas may be phytotoxic when applied on corn. Use only ureas known to be safe to corn.

NOTE: DO NOT impregnate this product or tank mixtures of this product with other herbicides or fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate.

Spread the herbicide-dry fertilizer mixture uniformly with a properly calibrated applicator: dribble, pneumatic (air flow) or spin. When using spin applicators, fertilizers impregnated with this product or tank mixtures of this product with other herbicides must be spread at half-rate and overlapped 100 percent to obtain full rate and uniform distribution. Non-uniform spreading of the fertilizer-herbicide mixture may result in unsatisfactory weed control or crop injury.

Pneumatic (Compressed Air) Application (this product alone)

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause herbicide fertilizer mixture to build up or plug the distributor head, air tubes, or deflector plates. To minimize buildup, premix this product with Exxon Aromatic 200 at a rate of 1 to 4 pints per gallon of this product.

Aromatic 200. may be used in either fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

NOTES: Mixtures of this product and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications. When

impregnating this product in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb or a drying agent of 6/30 particle size are recommended.

APPLICATION TIMING AND METHODS

Early Preplant Surface Application

This product and some labeled tank mixtures of this product may be applied in no-till and other conservation tillage systems before weeds emerge and up to 45 days before 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 Application

This product and many of the labeled tank mixtures may be mixed into the soil using shallow incorporation equipment any time within 14 days prior to planting. Apply the specified treatment rate to the soil surface as a broadcast application. Either existing soil moisture or subsequent precipitation or irrigation is required to bring incorporated herbicide treatments into contact with germinating weed seedlings. If weeds emerge after treatment, rotary hoe or shallowly cultivate immediately to improve performance.

Shallowly incorporate the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designed speed for incorporation to ensure adequate mixing and distribution of the herbicide treatment in the soil. Equipment design including any drag attachments must be adequate to avoid soil ridging which may result in streaked or reduced weed control. Equipment should be set to work the soil NO DEEPER THAN 4 INCHES. Soil conditions, including moisture content and crop residue levels, must be suitable to allow thorough and uniform mixing.

Preemergence Surface Application

This product and all labeled tank mixtures may be applied to the soil surface after planting and prior to either crop or weed emergence. Apply within 5 days of last preplant tillage. If weeds emerge after treatment, or if treatment is applied more than 5 days after last preplant tillage, rotary hoe or shallowly cultivate immediately to improve performance. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone. The amount of precipitation or overhead sprinkler irrigation required depends on existing soil mixture, soil type and percent organic matter content, but 1/4 to 3/4 inch is normally adequate. Performance is improved when moisture is received within 7 days after application and prior to weed emergence. High intensity or excessive rainfall or excessive irrigation after application may reduce control.

Postemergence Surface Application

This product and certain tank mixtures may be applied postemergence until corn reaches 11 inches in height. Application must be made prior to weed seedling emergence or in a tank-mixture that controls emerged weeds. Read and follow all restrictions and directions on tank-mix product labels. Refer to the specific treatment intended in the **DIRECTIONS FOR USE** section of the label to determine if postemergence applications to corn are recommended and determine the proper weed and corn growth stage limitations. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone to control unemerged weeds. The amount of precipitation or irrigation required depends on existing soil moisture, soil type and percent organic matter content, but 1/4 to 3/4 inch is normally adequate. If weeds emerge after treatment, rotary hoe or shallowly cultivate to improve performance.

Restrictions:**DO NOT** apply postemergence to sweet corn.**DO NOT** make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.**DO NOT** apply more than 3.4 pints (3.0 lbs ai) per acre per year.**Cultivation Information**

Delay cultivation after application for as long as possible unless weeds or grasses emerge. Shallowly cultivate or rotary hoe immediately if weeds or grasses emerge. If cultivation is necessary because of soil crusting or compaction, set equipment shallow and minimize lateral soil movement to avoid dilution or displacement of the herbicide treatment. If a band application is used and weeds have emerged in the treated band, set cultivator to throw soil into the row covering the band.

WEEDS CONTROLLED

When applied as directed under conditions described, this product alone will CONTROL the following weeds:

Annual Grasses

When applied as directed under conditions described, this product and tank mixtures of this product will control or reduce competition from the weeds listed.

NOTE: C = Control R = Reduced Competition

	A381.05 Plus			
	A381.05	Banvel or Clarity	Princep	Pursuit
Banyardgrass <i>Echinochloa crus-galli</i>	C	C	C	C
Crabgrass <i>Digitaria ischaemum</i> <i>Digitaria sanguinalis</i>	C	C	C	C
Crowfootgrass <i>Dactyloctenium aegyptium</i>	C	C	C	C
Cupgrass, prairie <i>Eriochloa contracta</i>	C	C	C	C
Cupgrass, woolly¹ <i>Eriochloa villosa</i>	C	C	C	C
Foxtail, giant <i>Setaria faberi</i>	C	C	C	C
Foxtail: green, robust purple, robust white <i>Setaria viridis</i>	C	C	C	C
Foxtail, yellow <i>Setaria lutescens</i>	C	C	C	C
Goosegrass <i>Eleusine Indica</i>	C	C	C	C
Johnsongrass, seedling <i>Sorghum halepense</i>	R	R	R	C
Millet, foxtail <i>Setaria italica</i>	R	R	R	R
Millet, proso²	R	R	R	R

<i>Panicum miliaceum</i>				
Oats, wild <i>Avena fatua</i>	R	R	C	R
Panicum, browntop <i>Panicum fasciculatum</i>	C	C	C	C
Panicum, fall <i>Panicum dichotomiflorum</i>				
Panicum, Texas <i>Panicum texanum</i>	R	R	R	R
Rice, red <i>Oryza sativa</i>	C	•	C	C
Sandbur; Grassbur <i>Cenchrus incertus</i>	R	•	R	R
Shattercane; Wild cane² <i>Sorghum bicolor</i>	R	•	R	R
Signalgrass, broadleaf <i>Brachiaria platyphylla</i>	C	C	C	C
Sprangletop, red <i>Leptochloa filiformis</i>	C	C	C	C
Wheat, volunteer <i>Triticum aestivum</i>	R	R	C	R
Witchgrass <i>Panicum capillare</i>	C	C	C	C

¹Use 3 to 3.4 pints (2.63-2.98 lb ai) per acre of this product applied alone or in tank-mix combinations for best results. Control can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide. Contact your local Atticus, LLC representative for details regarding a complete woolly cupgrass management program.

²Use 3 to 3.4 pints (2.63-2.98 lb ai) per acre of this product to reduce competition from this weed.

Annual Broadleaves

NOTE: C = Control R = Reduced Competition

	A381.05	A381.05 Plus		
		Banvel or Clarity	Princep	Pursuit
Beggarweed, Florida <i>Desmodium tortuosum</i>	R	•	•	R
Carpetweed <i>Mollugo verticillate</i>	C	C	C	C
Cocklebur <i>Xanthium strumarium</i>	•	C	R	R
Galinsoga <i>Galinsoga spp.</i>	C	C	C	C
Groundcherry, annual <i>Physalis spp.</i>	•	•	•	•
Groundcherry, cutleaf <i>Physalis angulate</i>	R	C	C	R
Henbit <i>Lamium amplexicaule</i>	C	C	C	C

Jimsonweed⁵ <i>Datura stramonium</i>	R	•	R	C
Kochia¹ <i>Kochia scoparia</i>	R	•	C	C
Lambsquarters² <i>Chenopodium album</i>	C	C	C	C
Morningglory: Tall <i>Ipomoea purpurea</i> Pitted <i>Ipomoea lacunosa</i> Ivyleaf <i>Ipomoea hederacea</i> Entireleaf <i>Ipomoea hederacea</i> <i>var. integrifolia</i> Smallflower <i>Jacquemontia tamnifolia</i>	•	R	C	R
Mustard <i>Brassica spp.</i>	•	C	C	C
Nightshade, Black <i>Solanum nigrum</i> Hairy <i>Solanum sarrachoides</i>	C	C	C	C
Pigweed; Carelessweed³ <i>Amaranthus spp.</i>	C	C	C	C
Purslane <i>Portulaca oleracea</i>	C	C	C	C
Pusley, Florida <i>Richardia scabra</i>	C	C	C	C
Ragweed, common² <i>Ambrosia artemisiifolia</i>	C	C	C	C
Ragweed, giant <i>Ambrosia trifida</i>	•	C	C	R
Sicklepod <i>Cassia obtusifolia</i>	•	•	R	•
Sida, prickly; Teaweed <i>Sida spinosa</i>	R	•	C	C
Smartweed <i>Polygonum pensylvanicum</i> <i>Polygonum persicaria</i>	R	C	C	C
Starbur, bristly <i>Acathospermum hispidum</i>	R	•	R	•
Sunflower, common⁴ <i>Helianthus annuus</i>	•	R	R	C
Velvetleaf; Buttonweed⁴ <i>Abutilon theophrasti</i>	R	C	R	C
Waterhemp <i>Amaranthus tuberculatus</i>	C	C	C	C
SEDGE				
Nutsedge, yellow³ <i>Cyperus esculentus</i>	C	•	C	C

¹ If triazine-resistant biotypes are suspected, tank mixtures with triazine herbicides may require a post sequential application of a non-triazine herbicide for control.

² Use the higher rate in the application rate range for **A381.05** herbicide alone and in tank mixtures with triazine herbicides if triazine-resistant biotypes are suspected.

³ Use 2.5 to 3.4 pints per acre of this product applied alone or in tank mixtures and apply preplant incorporated only for control on medium and fine-textured soils.

⁴ When using a tank mixture of **A381.05** plus Pursuit, these weeds are more consistently controlled by preplant incorporated treatments.

⁵Use 3 - 3.4 pints (2.63-2.98 lb ai) per acre of **A381.05** to reduce competition from this weed.

CONSERVATION OR MINIMUM TILLAGE SYSTEMS

NOTE: Each section of this label provides treatment rates for this product and tank mixtures including this product. Applications, which are not consistent with recommendations in this label, may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the application rate ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. **DO NOT** apply when conditions favor drift.

Detailed information regarding **APPLICATION SYSTEMS** and **APPLICATION TIMING AND METHODS** should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the **PRODUCT INFORMATION**, the specific information should control.

The tank-mix recommendations in the **CONVENTIONAL TILLAGE** section of this label may also be followed when using **CONSERVATION OR MINIMUM TILLAGE SYSTEMS**. Follow all label precautions; directions and restrictions of tank-mix partners.

At-Planting Applications

When applied as directed under the conditions described, the specified tank mixtures control many emerged annual weeds, suppress many emerged perennial weeds and give preemergence control of many annual grasses and weeds when corn will be planted directly into a cover crop, established sod or in previous crop residues. These tank mixtures will not control regrowth from perennial weeds.

Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures. For mixing instructions, see the "MIXING SPRAYING, AND HANDLING INSTRUCTIONS" section of this label.

This product and tank mixtures with Princep, Pursuit can be tank mixed with Roundup agricultural herbicides, Gramoxone brand herbicides and/or 2,4-D.

Apply these tank mixtures with a Roundup agricultural herbicide or 2,4-D (amine or low volatile ester) in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre, or these tank mixtures with a Gramoxone brand herbicide in 20 to 60 gallons of water or clear liquid fertilizer per acre immediately before, during or after planting, but **BEFORE CROP EMERGENCE**. As density of stubble, crop residue or weeds increase, spray gallonage and rate should be increased within the application rate ranges to ensure complete coverage. In the absence of emerged vegetation, delete the Roundup agricultural herbicide, Gramoxone brand herbicide or 2,4-D portion of these tank mixtures.

Approved Application Systems

Ground: Broadcast boom

Control or Suppression of Emerged Weeds

ATTENTION: AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THESE TANK MIXTURES TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS. DO NOT allow spray mist to drift since even minute quantities of spray

can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended. **DO NOT** apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

Roundup Agricultural Herbicides

Annual Weeds

Apply Roundup agricultural herbicides, in these tank mixtures at the proper rate for the weed per the label instructions.

Perennial Weeds

At normal application rates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. Use of full labeled rates of Roundup agricultural herbicides, in the mixtures above and under these conditions will provide top kill and reduce competition from emerged perennial grasses and broadleaf weeds.

DO NOT USE THIS MIXTURE FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL.

Ammonium Sulfate

The addition of ammonium sulfate in the spray solution may increase the performance of Roundup agricultural herbicide tank mixtures on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 2 percent dry ammonium sulfate by weight or 17 pounds per 100 gallons of water. Ammonium sulfate should be added to the water in the spray tank and completely dissolved prior to adding the herbicide or surfactant. **DO NOT** mix ammonium sulfate in fluid fertilizer solutions. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. Nozzle tip plugging may result from the use of low quality ammonium sulfate.

To determine quality, perform a jar test by adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for one minute. If undissolved sediment is observed, pre-dissolve the ammonium sulfate in water and filter prior to adding to the spray tank.

Surfactants

Nonionic surfactants that are labeled for use with herbicides may be used with some Roundup agricultural herbicides. Check specific label for restrictions. **DO NOT** reduce rates of Roundup agricultural herbicides when adding surfactant. Use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 50 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 50 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

Gramoxone Brand Herbicides

When used as directed, Gramoxone brand herbicides in a labeled tank mixture controls many emerged annual weeds and suppresses many emerged perennial weeds.

Broadcast Treatment

Apply Gramoxone brand herbicides in the specified tank mixtures immediately before, during or after planting but **BEFORE CROP EMERGENCE**. Use the application rates and timing of application listed in the specific product label. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the application rate range for complete coverage. Add a nonionic spreader surfactant (approved for use on crops) containing at least 75 percent surfactant active agent at 8 ounces per 100 gallons of diluted spray. **REFER TO THE SPECIFIC GRAMOXONE BRAND HERBICIDE LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.**

2,4-D

When used as directed, 2,4-D in labeled tank mixtures controls many emerged annual and perennial broadleaf weeds. For emerged weeds controlled, see the **WEEDS CONTROLLED** section of the label for 2,4-D.

Broadcast Treatment

Apply 1 to 2 pints of 2,4-D (amine or low volatile ester) in the specified tank mixtures. Applications should be made 7 to 14 days before planting or 3 to 5 days after planting but **BEFORE CORN EMERGES**. As density of stubble, crop residue or weeds increase, spray gallonage should be increased within the application rate range for complete coverage.

DO NOT use 2,4-D on light, sandy soils, or where soil moisture is inadequate for normal weed growth. Observe all precautions and limitations on the 2,4-D label booklet.

Early Preplant Application

If emerged weeds are present at the time of treatment, a Roundup agricultural herbicide, Gramoxone brand herbicide or 2,4-D should be added to this product according to the directions for use on their respective product labels. If unsatisfactory weed control occurs (due to excessively dry or excessively wet conditions) following the earlier application, a postemergence application of an appropriate labeled grass and/or broadleaf weed herbicide may be used. If a postemergence treatment includes the herbicide used early preplant, **DO NOT** exceed the labeled rate for corn on a given soil texture. Observe all precautions and limitations on the labels for **A381.05**, Roundup agricultural herbicides, Gramoxone brand herbicide, 2,4-D and other postemergence herbicides before use of these products.

DO NOT apply tank mixtures containing a Roundup agricultural herbicide, Gramoxone brand herbicide or other contact herbicides by air.

A381.05

This product, when applied in a single application or split application will provide preemergence control or reduced competition of the annual grasses and broadleaf weeds listed in the **WEEDS CONTROLLED** section of this label. If weeds are emerged at time of application, apply a labeled contact herbicide with this product. Observe the directions for use, precautions and restrictions on the label of the contact herbicide.

Approved Application Systems

Ground: Broadcast boom
Dry Bulk Fertilizer Impregnation

Approved Application Methods

Single application

Application of this product should be made less than 30 days before planting but prior to weed emergence.

NOTE: Application on coarse soils should not be made more than two weeks prior to planting.

Split Application

Apply 60 percent of the application rate as a split application prior to weed emergence and no more than 45 days prior to planting and the remaining 40 percent at or immediately following planting but before crop emergence. See the following table for specified broadcast rates per acre for single and split applications.

Application Rates

SOIL TEXTURAL GROUP	Broadcast Rate Per Acre	
	A381.05 (pints)	A381.05 (lb ai)
Coarse	1.50 to 2.00	1.31-1.75
Medium	2.25 to 2.75	1.97-2.41

Fine	2.75 to 3.00	2.41-2.63
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In order to provide broad-spectrum weed control, both single and split applications of this product must be followed with a planned postemergence application of a labeled broadleaf and/or grass herbicide. Observe the directions for use, precautions and restrictions on the label of the postemergence herbicide before use of these products.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

CONVENTIONAL TILLAGE

NOTE: Each section of this label provides specified treatment rates for this product and tank mixtures including this product. Applications that are not consistent with recommendations in this label may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the application rate ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. **DO NOT** apply when conditions favor drift.

Detailed information regarding **APPLICATION SYSTEMS** and **APPLICATION TIMINGS AND METHODS** should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the **PRODUCT INFORMATION**, the specific information should control.

A381.05

Apply this product in water or sprayable fluid fertilizer solution.

Approved Application Systems

Ground: Broadcast boom; banded
Dry Bulk Fertilizer Impregnation

Approved Application Methods

Preplant Incorporated; Preemergence Surface

Postemergence Surface

Apply this product prior to weed emergence and before corn reaches 11 inches in height. **DO NOT** exceed 3.4 pints per acre. Weeds emerged at the time of application are not controlled by this product. If weeds are emerged at application, shallowly cultivate or rotary hoe to improve performance. **DO NOT** make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE (pints)*	
	Less than 3% organic matter	3% or more organic matter**
Coarse	1.25 to 1.75 (1.09 – 1.53 lb ai)	1.75 (1.53 lb ai)
Medium	1.75 to 2.25 (1.53 – 1.97 lb ai)	1.75 to 2.25 (1.53 – 1.97 lb ai)
Fine	1.75 to 2.25 (1.53 – 1.97 lb ai)	2.25 to 2.75 (1.97 – 2.41 lb ai)

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

** On soils with 6 to 10 percent organic matter use 2.5 to 3.4 pints (2.19 - 2.98 lb ai)/acre. On soils with more than 10 percent organic matter, use 3.4 pints per acre.

A381.05 plus Roundup Agricultural Herbicides on Corn Containing Roundup Ready 2 Technology including Roundup Ready Corn 2

This program may be used preemergence and postemergence to corn containing Roundup Ready 2 Technology including Roundup Ready Corn 2 from seedling emergence until the corn reaches 11 inches in height. Refer to the Roundup agricultural herbicide labels for specific weeds controlled postemergence.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS TANK-MIX TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH **DO NOT** CONTAIN A GLYPHOSATE TOLERANCE GENE.

Approved Application Systems

Ground: Broadcast boom

Approved Application Methods

Preemergence Surface

Sequential Program

This product may be applied preemergence to corn containing Roundup Ready 2 Technology including Roundup Ready Corn 2 at the ROUNDUP READY RATE of 1.5 pints per acre in a planned preemergence followed by Roundup agricultural herbicide postemergence sequential program.

Postemergence Surface

This product may be applied postemergence to corn containing Roundup Ready 2 Technology including Roundup Ready Corn 2 from seedling emergence until the corn is 11 inches in height. The ROUNDUP READY RATE for this product is 1.5 pints per acre. Labeled use rates for this tank-mix are defined in the table below. Use the higher rate on larger weeds and where heavy weed infestations exist. This tank mix should be applied when weeds are 2 to 4 inches in height and before the weed height and/or density become competitive with the crop.

For difficult to control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass and Pennsylvania smartweed use the higher rate of Roundup Agricultural herbicides labeled rates.

ROUNDUP READY RATE - A381.05 at 1.5 pints per acre.

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE		
	A381.05 (pints)	+	Roundup Agricultural Herbicides
Coarse	1.0 to 1.75		Per Labeled Rate
Medium	1.0 to 2.25		Per Labeled Rate
Fine	1.0 to 2.75		Per Labeled Rate

A381.05 Tank-Mixtures for Preemergence Use in Corn

This product may be tank-mixed with the following products for preemergence use in corn. Ensure that the specific product being used in the tank mixture is registered for application preemergence to corn. Read and follow label directions of all products in the tank mixture. The most restrictive label directions apply.

[Insert active ingredient(s) or brand name of product(s) containing the following active ingredient(s) that, at the time of printing, are registered for use preemergence in corn:]

- [Aim EC (Carfentrazone-ethyl, 279-3241)]
- [Antik EC (Carfentrazone-ethyl, 91234-XX)]
- [Balance FLEXX Herbicide (isoxalutole, 264-1067)]
- [Doleac DMA (Dicamba, 91234-148)]
- [Atticus Cavallo 4 SC (Mesotrione, 91234-75)]
- [Dolerity DGA (Dicamba, 91234-193)]
- [Distinct (Dicamba + Diflufenzopyr, 7969-150)]
- [Hornet (Clopyralid + Flumetsulam, 62719-253)]
- [Cicada WDG (Clopyralid + Flumetsulam, 91234-115)]
- [Linex (Linuron, 61842-23)]
- [Lorox (Linuron, 61842-23)]
- [Prowl H2O Herbicide (pendimethalin, 241-418)]
- [Python Herbicide (flumetsulam, 5481-677)]
- [JaRaka WDG (flumetsulam, 91234-116)]
- Resource (Flumiclorac, 59639-82)
- [Shark (Carfentrazone-ethyl, 279-3241)]
- [Tetris SG (rimsulfuron, 91234-85)]
- [Quinark EW (Carfentrazone-ethyl, 91234-XX)]
- [2,4-D]
- [Carfentrazone-ethyl]
- [Clopyralid]
- [Dicamba]
- [Diflufenzopyr]
- [Flumetsulam]
- [Flumiclorac pentyl ester]
- [Glyphosate]
- [Isoxaflutole]
- [Linuron]
- [Mesotrione]
- [Metribuzin]
- [Pendimethalin]
- [Rimsulfuron]

A381.05 Tank-Mixtures for Postemergence Use in Corn

This product may be tank-mixed with the following products for postemergence use in corn. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to corn. Read and follow label directions of all products in the tank mixture. The most restrictive label directions apply.

[Insert active ingredient(s) or brand name of product(s) containing the following active ingredient(s) that, at the time of printing, are registered for use postemergence to corn:]

- [Aim EC (Carfentrazone-ethyl, 279-3241)]
- [Antik EC (Carfentrazone-ethyl, 91234-XX)]
- [Balance FLEXX Herbicide (isoxalutole, 264-1067)]
- [Doleac DMA (Dicamba, 91234-148)]
- [Atticus Cavallo 4 SC (Mesotrione, 91234-75)]
- [Dolerity DGA (Dicamba, 91234-193)]
- [Distinct (Dicamba + Diflufenzopyr, 7969-150)]
- [Hornet (Clopyralid + Flumetsulam, 62719-253)]
- [Cicada WDG (Clopyralid + Flumetsulam, 91234-115)]

- [Linex (Linuron, 61842-23)]
- [Lorox (Linuron, 61842-23)]
- [Prowl H2O Herbicide (pendimethalin, 241-418)]
- [Python Herbicide (flumetsulam, 5481-677)]
- [JaRaka WDG (flumetsulam, 91234-116)]
- Resource (Flumiclorac, 59639-82)
- [Shark (Carfentrazone-ethyl, 279-3241)]
- [Tetris SG (rimsulfuron, 91234-85)]
- [Quinark EW (Carfentrazone-ethyl, 91234-XX)]
- [2,4-D]
- [Carfentrazone-ethyl]
- [Clopyralid]
- [Dicamba]
- [Diflufenzopyr]
- [Flumetsulam]
- [Flumiclorac pentyl ester]
- [Glyphosate]
- [Isoxaflutole]
- [Linuron]
- [Mesotrione]
- [Metribuzin]
- [Pendimethalin]
- [Rimsulfuron]

MISCANTHUS AND OTHER NON-FOOD PERENNIAL BIOENERGY CROPS

For weed control in Miscanthus and other non-food perennial bioenergy crops, apply **A381.05** at 1.3-1.7 pints (1.14 – 1.49 lb ai) per acre after the crop has been transplanted or after fully emerged to a height of at least 2-3 inches.

RESTRICTIONS:

DO NOT allow the Miscanthus or other non-food perennial bioenergy crop treated with **A381.05** to be grazed or used as animal feed.

Up to two applications of **A381.05** may be made each year. The total amount of this product applied each year must not exceed 3.4 pints (2.98 lb ai) per acre.

FALL APPLICATIONS

Geographic Restriction on Fall Applications: only in Iowa, Minnesota, North Dakota, South Dakota, Wisconsin, north of Route 91 in Nebraska and north of Route 136 in Illinois

Following soybean harvest, apply to soybean stubble after September 30, when the sustained soil temperature at 4-inch depth is less than 55°F, but before ground freezes. Use on medium- and fine textured soils with greater than 2.5% organic matter. Only corn may be planted the following spring. Ground may be tilled before or after application. **DO NOT** exceed 2-inch incorporation depth if tilled after application.

If a spring application is made, the total rate of the fall plus spring application must not exceed the maximum labeled rate for corn grown on that soil.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

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

CONTAINER HANDLING:

[For plastic containers ≤ 5 gallons: Nonrefillable Container: DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: Nonrefillable container: DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[A381.05] is a trademark of Atticus, LLC

[Harness®] is a registered trademark of the Bayer Group.

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

ACETOCHLOR	GROUP 15	HERBICIDE
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A381.05^[TM]

[Alternate Brand Name: Ventas]

Contains acetochlor, the active ingredient used in [Harness® Herbicide].

[A381.05 is an emulsifiable herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn, Sweet Corn, Popcorn, Miscanthus and other non-food perennial bioenergy]

ACTIVE INGREDIENT: (% by weight)

*Acetochlor.....75.9%

OTHER INGREDIENTS:.....24.1%

TOTAL 100.0%

*contains 839 gram/liter or 7.0 pounds/gallon of 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide.

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

FIRST AID	
If in eyes:	<ul style="list-style-type: none"> ● 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:	<ul style="list-style-type: none"> ● Take off contaminated clothing. ● Rinse skin immediately with plenty of water for 15-20 minutes. ● Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> ● 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:	<ul style="list-style-type: none"> ● Move person to fresh air. ● If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. ● Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING/AVISO

Causes substantial but temporary eye injury. Causes skin irritation. Harmful if swallowed or inhaled. Do not get in eyes, on skin or on clothing. Wear

protective eyewear. Wear coveralls worn over short-sleeved shirt and short pants, socks, chemical-resistant footwear, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

ENVIRONMENTAL HAZARDS: This product is toxic to fish. **DO NOT** apply directly to water, or to areas where surface water is present or intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters.

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.

STORAGE AND DISPOSAL

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See inside label booklet for 5 additional Precautionary Statements and Directions for Use.

[A381.05] is not manufactured, or distributed by Bayer CropScience, seller of Harness® Herbicide.

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

EPA Reg. No.: 91234-XX
EPA Est. No.: _____
NET CONTENTS: _____