

GROUP 5 15 HERBICIDES

Headwin

An Herbicide For use in Potatoes, Tomatoes and Soybeans for Control of Certain Grass Weeds and Broadleaf Weeds

ACTIVE INGREDIENTS:	% By Weight
Metolachlor*	58.52%
Metribuzin**	13.93%
OTHER INGREDIENTS:	27.55%
TOTAL:	100.00%

Contains 5.40 lbs. of metolachlor and 1.28 lbs. of metribuzin per gallon.

*CAS No. 51218-45-2

**CAS No. 21087-64-9

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 label booklet for complete First Aid, Precautionary Statements, Directions For Use,
and Storage and Disposal.

Manufactured For:

Sharda USA LLC 

7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

EPA Reg. No.: 83529-70
EPA Est. No.: 39578-TX-001

Net Contents: 2.5 Gallons

FIRST AID	
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"> • Immediately call a poison control center or doctor for further treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
IF IN EYES	<ul style="list-style-type: none"> • Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes. • Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or call an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at 1-800-222-1222 .	
NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING**

Harmful if swallowed. Causes skin irritation. Do not get on skin or on clothing. Causes moderate eye irritation. Avoid contact with eyes. This product may cause skin sensitization reactions in some people. 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, or viton \geq 14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

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

ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs, or aircraft 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 thoroughly with soap and water 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

For Terrestrial Uses Only. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from target area.

GROUNDWATER ADVISORY

Metolachlor has the potential to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Metribuzin is a chemical which can travel (seep or leach) through soil and can contaminate groundwater which may be used as drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Users are advised not to apply metribuzin where the water table (groundwater) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

SURFACE WATER ADVISORY

Metolachlor has the potential to contaminate surface water through ground spray drift. Under some conditions, metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, and areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

IMPORTANT: FAILURE TO FOLLOW THE DIRECTIONS FOR USE, RESTRICTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

New York State: Not for sale or use in Nassau and Suffolk Counties.

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), notification to workers, 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 24 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 over short-sleeve shirt and short pants
- Chemical-resistant gloves made of nitrile, butyl, neoprene and/or barrier laminate \geq 14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures

PRODUCT INFORMATION

Headwin is a selective herbicide for the control or suppression of certain grass, broadleaf and sedge weeds in potatoes, tomatoes, and soybeans. **Headwin** is a mixture of the active ingredients metolachlor and metribuzin.

Headwin must be activated by a small amount of soil moisture following application. In areas of low rainfall, follow a pre-emergence application with light irrigation of 0.25 to 0.5 inch of water. Do not apply heavy irrigation immediately after application. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

Application Rate Ranges: Where a rate range is provided within a soil texture or organic matter classification, use a lower rate on soils that are relatively coarse-textured and/or low in organic matter. Use a higher rate on soils that are relatively fine-textured and/or high in organic matter.

Crop Rotation: See the **CROP ROTATION** section of this label for specific instructions on crop rotation. Crop injury may result if crop rotation guidelines are not followed.

Replanting: If replanting is necessary in fields previously treated with **Headwin**, the field may be replanted to potatoes, tomatoes, or soybeans. Before replanting, refer to the specific crop use sections for directions, precautions and restrictions about replanting.

RESISTANCE

Metolachlor is classified as a Group 15 mode of action – biosynthesis inhibitor herbicide and works by preventing cell division in weeds that are emerging. Metribuzin is classified as a Group 5 mode of action – photosynthetic inhibitor herbicide and works by disrupting photosynthesis and ultimately leads to the death of the plant.

There is potential risk of resistance development in some weeds against the herbicides that have been used repeatedly. While the development of resistance is well understood, it is not easily predicted. Therefore, herbicides must be used in conjunction with resistance management strategies in your area. Consult your local or State agricultural advisors for details. If weed resistance develops in your area, this product used alone may not continue to provide sufficient levels of weed control. If the reduced levels of control cannot be attributed to improper application timing, unfavorable weather conditions or abnormally high weed pressure, a resistant strain may have developed.

To reduce the potential for weed resistance, use this product in a rotation program with other classes of chemistry and modes of action. Always apply this product at the specified labeled rates and in accordance with the use directions. Do not use less than specified label rates alone or in tank mixtures. Do not use reduced rates of the tank mix partner. For optimum performance, scout fields carefully and begin applications when weeds are smaller rather than larger. If resistance is suspected, contact the local or State agricultural advisors.

INTEGRATED PEST MANAGEMENT

Integrate **Headwin** into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
3. Where states have more stringent regulations, they must be observed.
4. The applicator must be familiar with and take into account the information covered in the **AERIAL DRIFT REDUCTION ADVISORY INFORMATION**.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity, and Temperature Inversions**).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Do not make applications at a height greater than 10 feet above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up-and-downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind directions and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Because drift potential is high, do not apply during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

This product may only be applied when the potential for drift to adjacent sensitive areas (e.g., non-target crops, bodies of water, residential areas, known habitat for threatened or endangered species) is minimal (e.g., when wind is blowing away from the sensitive areas).

Chemigation Application

Headwin may be applied through a center pivot irrigation system only. Do not apply **Headwin** through any other type of irrigation system. See the **Center Pivot Application** section of this label for more information.

APPLICATION INSTRUCTIONS

Application of **Headwin** may be made by ground spray equipment (including center pivot) and aerial spray equipment. As detailed below, use a minimum of 10 gallons spray volume per acre for ground application and 2 gallons spray volume per acre for application made by air. When using center pivot treatment, make application in 0.5 to 1 inch of water.

Prepare only enough spray volume for the area that will be immediately treated. Before using this product, the sprayer should be completely clean and free of pesticide residue, rust or corrosion or other debris. Remove and inspect strainers and screens to be sure the equipment is clean from previously used pesticides, residues, or other debris.

When tank mixing and making applications with this product, maintain constant, vigorous agitation of spray mixture and apply immediately. Do not allow tank mixtures to stand for extended periods of time or overnight. After application, flush the spray equipment thoroughly and apply the rinsate to a treated area following Sprayer Clean-up instructions below.

Ground Application

Make application of **Headwin** alone or in tank mixtures by ground spray equipment in a minimum of 10 gallons spray volume per acre, unless otherwise directed. Use equipment that provide accurate and uniform application. Sprayers should be calibrated prior to application and often. If application of **Headwin** is made in combination with a wettable powder or dry flowable formulation, use screens and strainers with a minimum 50-mesh size.

If application of **Headwin** is made in a band, use the formula below to calculate the amount of herbicide needed for band treatment:

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Rate per Acre} = \text{Amount Needed per Acre of Field}$$

Aerial Application

Make application **Headwin** in water with a minimum of 2 gallons spray volume per acre.

Restrictions

- Do not make treatments under conditions where uniform coverage cannot be obtained or when excessive spray drift may occur. Apply at a maximum height of 10 ft. above the crop with low drift nozzles using a maximum pressure of 40 PSI.
- Do not apply or allow to drift to humans or animals.
- Do not inhale spray mist or allow prolonged contact with skin.
- Avoid application to humans or animals.

Center Pivot Application

If using chemigation, make application of **Headwin** only through a center pivot irrigation system. Do not make application of **Headwin** through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from distribution of treated water that is not uniform. Contact your local State Extension specialists, equipment manufacturers, or other experts if you have questions about calibration. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Center Pivot Application Operating Instructions

1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump or piston pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not make application when wind speed favors drift beyond the area intended for treatment.
8. Prepare a mixture with a minimum of 1 part water to 1 part herbicide(s) and inject this mixture into the center pivot system. Injecting a larger volume of a more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the herbicide in suspension.
9. Meter into irrigation water during entire period of water application.
10. Make application in 0.5 to 1 inch of water. Use the lower water volume (0.5 inch) on **coarse-textured soils** and the higher volume (1 inch) on **fine-textured soils**. More than 1 inch of water at application may reduce weed control by moving the herbicide below the effective zone in the soil.

Important: When using chemigation with **Headwin** through center pivot, insufficient weed control may occur if the sprinkler distribution patterns do not overlap adequately. In addition, if sprinkler distribution patterns overlap in excess, crop injury may occur.

Application by Impregnated Dry Bulk Granular Fertilizers

Headwin may be coated or impregnated on a variety of dry bulk granular fertilizers and applied with the fertilizers to control weeds. When making application of **Headwin** with dry bulk fertilizers, follow all restrictions and precautions on the **Headwin** label regarding target crops, rates per acre, soil texture, methods of application, rotational crops and other directions for use.

It is the responsibility of the individual and/or company selling the herbicide/fertilizer mixture to comply with all individual State regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application.

Prepare the mixture using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Space the nozzles used to make the application **Headwin** onto the fertilizer so that they provide uniform spray coverage. Take care to aim the spray onto the fertilizer only, avoiding the walls of the blender.

If the fertilizer/herbicide mixture is too wet, add a highly absorptive material, such as Agsorb® FG or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, so that the end product is dry and free-flowing. Add absorptive materials only after the herbicide has been thoroughly blended into the fertilizer mixture. Optimum application results will be obtained using a granule of 6/30 particle size or of a size similar to that of the fertilizer materials being used. Typically, less than 2% by weight of absorptive material will be required. Avoid using more than 5% absorptive material by weight.

Use the following formula to calculate the amount of **Headwin** to be used per ton of fertilizer:

$$\frac{2,000}{\text{Pounds of Fertilizer Desired per Acre}} \times \text{Number of Pints of Headwin Required per Acre} = \text{Pints of Headwin per Ton of Fertilizer}$$

Pneumatic (Compressed Air) Equipment Application

The following conditions may result in fertilizer mixture build-up or plugging the distributor head, air tubes or nozzle deflector plates: High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer. To minimize plugging or build up, mix **Headwin** with Exxon Aromatic 200 at a rate of 2.0 to 2.5 pints per gallon of **Headwin** before mixing with other products or preparing the spray tank. Aromatic 200 is a non-combustible/non-flammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. When using Aromatic 200, drying agents should not be used.

Use Restrictions:

- Combinations of **Headwin** and Aromatic 200 must only be used on dry fertilizer. Poor results or crop injury may occur if these mixtures are used in water or liquid fertilizer solutions for spray treatments.
- **To Avoid Explosion Potential:**
 - Do not impregnate **Headwin** on the following: ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
 - Do not mix **Headwin** with a single superphosphate (1-20-0) or treble superphosphate (0-46-0).
 - Do not impregnate **Headwin** on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone may be impregnated.

Use Precautions:

- For On-The-Go impregnation equipment, drying agents are not recommended.

When using a blender to impregnate **Headwin**, a drier mixture can be obtained by substituting a drying agent for Aromatic 200. The use of a drying agent with a particle size of 6/30 such as Agsorb FG is recommended.

Application of Impregnated Dry Bulk Granular Fertilizer

Make application of 200 to 700 pounds of the fertilizer/herbicide mixture per acre. For optimum performance, make application of the mixture uniformly to the soil with properly calibrated equipment immediately following blending. Uniform application of the fertilizer/herbicide mixture is essential to prevent possible crop injury to subsequent crops. Non-uniform application may also result in insufficient weed control. In areas where conventional tillage is used, a shallow incorporation of the mixture into the soil is recommended to obtain sufficient weed control. On fine- or medium-textured soils in areas where soil incorporation is not planned, for instance, reduced-tillage situations or in some conventional till situations, apply treatment approximately 30 days prior to planting so that moisture moves the fertilizer/herbicide mixture into the soil. On coarse-textured soils, apply treatment approximately 14 days before planting. To help avoid injury to rotational crops, make application as early as possible, since **Headwin** impregnated onto dry bulk fertilizers is expected to have a longer residual in the soil than **Headwin** applied as a spray in water or fluid fertilizer.

TANK MIXING INSTRUCTIONS AND SPRAYER CLEAN-UP

Prepare only enough spray volume for the area that will be immediately treated. Before using this product, the sprayer should be completely clean and free of pesticide residue, rust or corrosion or other debris. Remove and inspect strainers and screens to be sure the equipment is clean from previously used pesticides, residues, or other debris.

When tank mixing and making applications with this product, maintain constant, vigorous agitation of spray mixture and apply immediately. Do not allow tank mixtures to stand for extended periods of time or overnight. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

Spray Tank Preparation

Use care when mixing or loading **Headwin** to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates. Check-valves or anti-siphoning devices must be used on all mixing and/or irrigation equipment.

Headwin may not be mixed or loaded within 50 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. **Headwin** may not be mixed/loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of **Headwin** into or from pesticide handling or application equipment or containers within 50 ft. 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 wash water, and rain water 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.

Headwin in Water or Liquid Fertilizers

When using **Headwin** alone, add 1/3 of the specified amount of water or fluid fertilizer to the tank and then, while the agitator is running, add **Headwin** to the tank. Continue agitation while adding the remainder of the water or fluid fertilizer. Start application of the spray solution after **Headwin** has completely dispersed in the water or fluid fertilizer. Continue agitation until all of the mixture has been applied.

When using **Headwin** with tank mixtures, add 1/3 of the specified amount of water or fluid fertilizer to the mix tank. Start the agitator running before adding any tank mix partners. In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids such as **Headwin**, and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

Important: When using **Headwin** in tank mixtures, all products in water-soluble packaging should be added to the tank and mixed with plain water before any other tank mix partner, including **Headwin**. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner product to the tank. Water-soluble packets will not properly dissolve in most spray solutions that contain fluid fertilizers.

When using **Headwin** in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank mix product label. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Headwin is compatible with most commonly used tank mixtures. However, always conduct a compatibility test using the jar test method with any proposed tank mixture to ensure compatibility before use following the procedure below.

Compatibility Testing

The test below is for a spray volume of 25 gallons per acre. For other spray volumes, adjust accordingly.

Note: Water may be replaced all or in part by nitrogen solutions or complete fluid fertilizers for pre-plant surface, pre-plant incorporated, or pre-emergence applications only.

Always check compatibility before use because liquid fertilizers vary, and results may vary. Incompatibility of tank mixtures is more common when using suspensions of fertilizer and pesticides.

Test Procedure

1. Add 1.0 pint of selected carrier (fertilizer or water) to two, one-quart jars with tight lids. **Note:** The same source of water at the same temperature that the actual application will be made with should also be used for the test.
2. Add 1/4 teaspoon of a compatibility agent approved for this use to one of the jar (such as Complex® or Unite®). 1/4 teaspoon is equivalent to 2.0 pints per 100 gallons spray. Place lid on jar and mix gently by shaking.
3. Add the pesticide(s) in their relative proportions based on listed label rates to both jars. If using more than one pesticide, add separately with dry pesticides first, flowables next, and emulsifiable concentrates last. Shake or stir gently to thoroughly mix after each addition.
4. Following the addition of all ingredients, place lids on and tighten, and invert each jar ten times to mix. Let mixtures stand for 15 to 30 minutes and then inspect for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if a compatibility agent is needed by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is maintained. If the mixtures are incompatible, test the following methods for improving compatibility: Slurry the dry pesticide(s) in water before addition, or add 1/2 the compatibility agent to the fertilizer or water and the other 1/2 to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
5. After testing is complete, dispose of any pesticide wastes in accordance with the **STORAGE AND DISPOSAL** section of this label.

Sprayer Equipment Clean-Up

Prior to application of **Headwin**, spray equipment must be cleaned. Follow clean-up procedures specified on the labels of products used previously. If no clean-up directions are provided, use the steps provided below.

After application of **Headwin**, equipment clean-up is very important. - Special attention must be given to cleaning equipment if spray equipment will be used to make applications to a crop other than those registered for use on this label because some crops are sensitive to low rates of **Headwin**.

Sprayer Clean-Up

To avoid adverse crop response or crop injury to non-target crops, thoroughly clean and drain spray equipment used to make applications of **Headwin** each use. Cleaning should occur as soon as possible after application of **Headwin**. Use the following procedure to clean the spray equipment:

1. Drain any remaining spray tank mixture with **Headwin** from the spray tank and dispose of according to label disposal instructions.
2. Use a hose to spray down the interior surfaces of the tank with water. Flush booms, nozzles, hoses, and tank with clean water for 15 minutes.
3. Prepare a cleaning solution of one gallon of household ammonia per 50 gallons of water. Commercial spray tank cleaners may be used, as well. Consult your Sharda USA LLC representative for a listing of approved tank cleaners and more information about proper tank cleaning procedures. Do not use chlorine-based cleaners such as Clorox®.
4. Use a pressure washer to clean the inside of the spray tank with this solution if available. Take care to wash all parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Using agitation, thoroughly re-circulate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
5. Repeat steps 2 through 4 above two times.
6. Remove and clean the nozzles and screens separately.
7. Thoroughly wash the outside of spray tank and the boom, if the spray tank equipment will be used on crops other than those labeled for use with **Headwin**.
8. Rinse water must be disposed of in compliance with local, state, and federal guidelines.

USE PRECAUTIONS

When using **Headwin**, observe all precautions and limitations on the **Headwin** label as well as on the labels of each product that might be used in tank mixtures. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Do not make application of **Headwin** under conditions which favor runoff or wind erosion of soil containing **Headwin** to non-target areas.

In order to prevent off-site movement of **Headwin** in runoff or wind erosion, the below guidelines should be followed:

- Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under such conditions, the soil surface should first be settled by rainfall or irrigation.
- Do not make application to impervious substrates, such as paved or highly compacted surfaces.
- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops, unless at ½ inch of rainfall has occurred between application and the first irrigation.

POTATOES (Except Kern County, CA)

Headwin may be applied to potatoes for pre-emergence weed control if application is made before or after potato emergence. Although **Headwin** has some post-emergence activity, the spectrum of weeds controlled, level of control and consistency of control is better when it the application is made before weeds have emerged. Do not make application of **Headwin** as a pre-plant incorporated treatment because of the increased risk for crop injury. Do not rotate to food or feed crop other than listed. When used according to label directions, **Headwin** provides control or suppression of the weeds listed in the table below.

ANNUAL GRASSES		Weeds Controlled or Suppressed ¹ in Potatoes				SEDGES	
		BROADLEAVES ²					
Barley, volunteer	S	Anoda, spurred	C	Pigweed spp.	C	Yellow nutsedge	C
Barnyardgrass	C	Beggarweed, Florida	C	Purslane, common	C		
Bluegrass, annual	C	Carpetweed	C	Pusley, Florida	C		
Crabgrass	C	Chickweed, common	C	Ragweed, common	S		
Crowfootgrass	C	Cocklebur	S	Redweed	C		
Cupgrass, prairie	C	Copperleaf, hophornbeam	C	<i>Sesbania</i> spp.	C		
Cupgrass, southwestern	C	<i>Galinsoga</i> spp.	C	Shepherd's purse	C		
Foxtail spp.	C	Henbit	C	Sicklepod	C		
Goosegrass	C	Jimsonweed	C	Sida, prickly/teaweed	C		
Johnsongrass, seedling	S	Knotweed spp.	C	Smartweed, Pennsylvania	C		
Junglerice	C	Kochia	S	Spurge, spotted	C		
Panicum, fall	C	Ladysthumb	C	Starbur, bristly	C		
Panicum, Texas	S	Lambsquarters, common	C	Sunflower, common	S		
Sandbur spp.	S	Lettuce, prickly	C	Thistle, Russian	C		
Shattercane	S	Mallow, Venice	C	Velvetleaf	S		
Rice, red	C	Mustard spp.	C	Waterhemp spp.	C		
Signalgrass, broadleaf	C	Nightshade, black	C				
Sorghum, volunteer	S	Nightshade, hairy	S				
Wheat, winter	S	Pennycress, field	C				
Witchgrass	C	Pepperweed, Virginia	C				

C = Controlled
S = Suppressed
¹Suppression means significant activity, but not always at a level considered acceptable for commercial weed control.
²**Headwin** will provide control of these annual broadleaf weeds except triazine-resistant biotypes other than *Galinsoga* spp., black nightshade, pigweed spp., and waterhemp spp.

Pre-Emergence Applications

Make application of **Headwin** following planting but prior to crop emergence, or make application after drag-off if this operation is part of the usual cultural practice. **Headwin** may be used with ground spray equipment, aerial spray equipment, or by center pivot irrigation equipment that is capable of making a uniform broadcast application.

Post-Emergence Applications

Make application of **Headwin** only in center pivot irrigation water, after drag-off if that is the usual cultural practice. Do not make application of **Headwin** within 60 days of harvest. Consult the **Center Pivot Application** section of this label for application information.

Application Rates

Application use rates for **Headwin** in potatoes are provided in the tables below: "**Pre-Emergence Use Rates for Headwin in Potatoes**" and "**Post-Emergence Use Rates for Headwin in Potatoes (For Application in Center Pivot Irrigation Water Only)**". If a rate range is given, use lower rates on the more coarse-textured soils within that group and/or where weed pressures are known to be light; use the higher end of the rate range on fine-textured soils listed within the group and/or where the weed pressure is known to be high.

Pre-Emergence Use Rates for Headwin in Potatoes

Soil Texture	0.5 - 3% Organic Matter Pts./Acre	< 3% Organic Matter Pts./Acre
Coarse¹ (Sand, loamy sand, sandy loam)	1.5 - 2.0	2.0 - 2.4
Medium or Fine (Loam, silt loam, silt, sandy clay, sandy clay loam, silty clay, silty clay loam, clay, clay loam)	2.4 - 2.75	2.75 - 2.9

¹On soils that classify as a "sand" texture do not use more than 1.5 pints per acre of **Headwin**, or more than 0.5 lb. a.i./A of metribuzin in total, or crop injury may occur.

Post-Emergence Use Rates for Headwin in Potatoes (For Application in Center Pivot Irrigation Water Only)

Soil Texture	0.5% Organic Matter and Above Pts./Acre
Coarse¹ (Sand, loamy sand, sandy loam)	1.5
Medium or Fine (Loam, silt loam, silt, sandy clay, sandy clay loam, silty clay, silty clay loam, clay, clay loam)	1.5 - 2.2

¹Crop injury may occur on soils that classify as a "sand" texture and have less than 0.5% organic matter.

Use Precautions - Potatoes

- Post-emergence applications should be made only on russetted or white skinned varieties of potatoes that are not early maturing, to avoid crop injury. Avoid post-emergence applications on Atlantic, Bellchip, Centennial, Chipbelle, Shepody, and Superior varieties. Applications made pre-emergence on these varieties may cause crop injury under adverse weather conditions, on coarse soils, under high soil pH and with higher use rates.
- Potato varieties may vary in their response and sensitivity to a given herbicide application. When making application with **Headwin** for the first time on a particular variety, always determine crop tolerance prior to use on a field-scale.
- The planting of sensitive crops such as lettuce, cole crops, and cucurbits during the next growing season after application of **Headwin** may result in injury to that crop.
- Certain cereal varieties are sensitive to metribuzin (Ex. Refer to the cereal section of the Sencor 4 or Sencor DF labels) and should not be planted during the next growing season unless the following cultural practices are followed:
 - a) Distribute potato vines that have been left in the row as a result of harvest uniformly over the soil surface before plowing, and
 - b) Use a moldboard plow to a depth sufficient to mix the upper 8 inches of soil.

Use Restrictions - Potatoes

- Do not make application of **Headwin** as a pre-plant incorporated application in potatoes, or crop injury may result.
- Do not apply more than two treatments per year. Do not make application of more than 4.57 pints (3.0 lb. a.i. metolachlor) per acre/year. Do not make application of more than 1.0 lb. a.i. of metribuzin per acre/year. Do not make application of **Headwin** to muck or peat soils.
- Do not apply **Headwin** post-emergence if the weather in the next 3 days is predicted to be cool, wet, or cloudy, as crop injury may occur.
- Do not harvest within 60 days of the last **Headwin** application.
- Do not make application after June 30 in Idaho, Oregon, or Washington if the treated land will be planted to a crop other than potatoes in the fall.
- Do not make application of **Headwin** to sweet potatoes or yams.

Tank Mixtures with Other Products Registered for Use in Potatoes

Headwin may be tank mixed with other pesticide products and applied pre-emergence in potatoes. Make sure the other products are registered for pre-emergence use in potatoes and follow the directions for use, observe the stated precautions, and abide by the limitations and restrictions on the most restrictive of the product labels. If you do not have prior experience mixing these products under similar conditions, perform a compatibility test prior to large-scale mixing (refer to the **Compatibility Testing** section of this label).

For applications made post-emergence (center pivot irrigation applications only), i.e. where potato vines are exposed, the risk of crop injury from certain product mixtures may be increased. During this application timing, only tank mix **Headwin** with pesticide products that allow tank mixing and post-emergence chemigation on their product label. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

SOYBEANS
(Except California)

To control or suppress the weeds listed in the “Weeds Controlled or Suppressed¹ in Soybeans” table (below), application of **Headwin** may be made to soybeans as a pre-plant surface, pre-plant incorporated, pre-emergence, or as a sequential application.

- Treated soybean plants may be grazed or fed to livestock 40 days after the last application.
- When a rate range is listed, use a lower use rate of **Headwin** on soils that are coarse-textured and/or low in organic matter. Use a higher use rate on soils that are relatively fine-textured and/or high in organic matter.
- The field may be replanted to soybeans if replanting is necessary in fields previously treated with **Headwin**. Minimum tillage is recommended. Do not make a second treatment as injury to soybeans may result.

Use Precautions - Soybeans

Soybean injury or reduced weed control may result when application of **Headwin** is made under certain conditions. The conditions listed below should be avoided whenever possible if making applications of **Headwin** to soybeans:

- Application to any soil with less than 0.5% organic matter.
- When soil incorporation is deeper than recommended.
- When spray equipment is not calibrated accurately.
- Where soils have a calcareous surface area or a pH of 7.5 or higher.
- When application is made in conjunction with soil-applied organic phosphate pesticides.
- When high soil levels of atrazine are present.
- Due to the sensitivity of certain soybean varieties, **Headwin** is not recommended for use on Altona, AP 55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig606, Tracy, Vansoy, and Vinton 81. If you decide to plant a newly released soybean variety, contact your seed supplier for information on its tolerance to metribuzin (an active ingredient in **Headwin**) prior to using this product.
- Uneven application or improper incorporation of **Headwin** can decrease the level of weed control and/or increase the level of crop injury.
- When heavy rains happen soon after application, especially in poorly drained areas where water may stand for several days.
- When soybeans are planted less than 1.5 inches deep, particularly if a pre-emergence application of **Headwin** is applied.
- If using poor quality soybean seed.

		Weeds Controlled or Suppressed¹ in Soybeans					
ANNUAL GRASSES		BROADLEAVES²				SEDGES	
Barley, volunteer	S	Anoda, spurred	C	Pigweed spp.	C	Yellow nutsedge	C
Barryardgrass	C	Beggartweed, Florida	C	Purslane, common	C		
Bluegrass, annual	C	Carpetweed	C	Pusley, Florida	C		
Crabgrass spp.	C	Chickweed, common	C	Ragweed, common	S		
Crowfootgrass	C	Cocklebur	S	Redweed	C		
Cupgrass, prairie	C	Copperleaf, hophornbeam	C	<i>Sesbania</i> spp.	C		
Cupgrass, southwestern	C	<i>Galinsoga</i> spp.	C	Shepherd's purse	C		
Foxtail spp.	C	Henbit	C	Sicklepod	C		
Goosegrass	C	Jimsonweed	C	Sida, prickly/teaweed	C		
Johnsongrass, seedling	S	Knotweed spp.	C	Smartweed, Pennsylvania	C		
Junglerice	C	Kochia	S	Spurge, spotted	C		
Panicum, fall	C	Ladysthumb	C	Starbur, bristly	C		
Panicum, Texas	S	Lambsquarters, common	C	Sunflower, common	S		
Rice, red	C	Lettuce, prickly	C	Thistle, Russian	C		
Sandbur spp.	S	Mallow, Venice	C	Velvetleaf	S		
Shattercane	S	Mustard spp.	C	Waterhemp spp.	C		
Signalgrass, broadleaf	C	Nightshade, black	C				
Sorghum, volunteer	S	Nightshade, hairy	S				
Wheat, volunteer	S	Pennycress, field	C				
Witchgrass	C	Pepperweed, Virginia	C				

C = Controlled
S = Suppressed

¹Suppression means significant activity, but not always at a level considered acceptable for commercial weed control.

²**Headwin** will provide control of these annual broadleaf weeds except triazine-resistant biotypes other than *Galinsoga* spp., black nightshade, pigweed spp., and waterhemp spp.

Headwin as a Foundation Treatment for Planned Two-Pass Weed Control Systems: Application of **Headwin** may be made pre-plant incorporated or pre-emergence at 1.5 to 1.8 pints per acre on all soils to reduce competition from the weeds listed in the "**Weeds Controlled or Suppressed¹ in Soybeans²**" table (see above), for a 30-day period when followed by a planned post-emergence weed control application. Recommended post-emergence treatments include any product or combination of products labeled to control the specific weeds that are left in the field including Roundup[®] brand (for use only on Roundup Ready[®] or glyphosate tolerant soybean varieties). Follow all directions for use for **Headwin** used alone, either pre-plant incorporated or pre-emergence. For the post-emergence herbicide application, refer to the selected post-emergence herbicide manufacturer's label for a list of weeds controlled, weed size, application rate, additional use directions, precautions, and limitations before use. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Restriction: On soils that have a pH above 7.0, use only the 1.5 pints per acre rate of **Headwin**.

Conventional Soybean Tillage Systems

Pre-Plant Incorporated Application: Incorporate **Headwin** uniformly into the top 2 inches of soil within 14 days prior to planting using a disk, field cultivator, rolling cultivator, or similar implement. Make application of **Headwin** pre-plant incorporated if furrow irrigation is used or if there is a period of dry weather following application is expected. If soybeans are planted on beds, make application, and incorporate the tank mixture following bed formation.

Pre-Emergence Application: Dry weather that follows pre-emergence application of **Headwin** may reduce product effectiveness. If weeds develop, cultivate uniformly with shallow tilling equipment that will not damage the soybeans.

For information on application of **Headwin** in fluid or dry fertilizer, consult the sections of the label on **Spray Tank Preparation, Application of Impregnated Dry Bulk Granular Fertilizers and Application by Impregnated Dry Bulk Granular Fertilizers**.

Conventional Soybean Tillage Systems Use Rates (Broadcast) for Headwin

Soil Texture	0.5 - 3% Organic Matter Pts./Acre	< 3% Organic Matter ² Pts./Acre
Coarse¹ (Loamy sand, sandy loam)	1.2 - 1.5 ³	1.5 - 1.8
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.8 - 2.1	2.1 - 2.4
Fine (Silty clay, silty clay loam ⁴ , clay, clay loam)	2.4 - 2.7	2.4 - 3.0

¹Do not use on sand soils. On coarse-textured soils, do not use on loamy sand soils with less than 2% organic matter.

²For pre-plant incorporated application, use the lower rate.

³For Southern and Southeastern states, see the below **In Coarse (Light) Soils** section.

⁴Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

In Coarse (Light) Soils

(Only in AL, AR, FL, GA, LA, MS, MO, NC, OK, SC, TN, TX, and VA)

Headwin may be used as a pre-plant incorporated or pre-emergence application in coarse-textured, low organic matter soils in the states listed above. Consult the appropriate sections of this label for specific directions on use, recommendations, and restrictions. See the "**Weeds Controlled or Suppressed¹ in Soybeans²**" table for the list of weeds controlled or suppressed.

Soybean Use Rates (Broadcast) for Pre-Emergence Application of Headwin

Soil Texture	Organic Matter	Headwin ² Pts./Acre
Coarse (Sand ¹ , loamy sand, sandy loam)	0.5% or above	1.2 - 2.1

¹Do not use on sand with less than 1% organic matter.

²Use the higher rate under heavy weed pressures and/or on soils higher in organic matter. For maximum control of sicklepod, use a pre-emergence application.

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

Headwin plus Canopy[®] 75 DG Tank Mix Application

Application of **Headwin** may be made with Canopy herbicide as a pre-plant surface, pre-plant incorporated, or pre-emergence application for the control of certain broadleaf weeds and grasses in soybeans. Refer to the Canopy herbicide label for specific directions on use, recommendations, and restrictions not specified on this label.

Weeds Controlled

In addition to weeds controlled by **Headwin** alone (see "**Weeds Controlled or Suppressed¹ in Soybeans²**" table), **Headwin** plus Canopy will provide improved control of cocklebur and velvetleaf. **Headwin** plus Canopy will also provide additional suppression (reduced competition) of giant ragweed, common ragweed, and morningglory spp.

Headwin plus Canopy 75 DG Application (Broadcast Rates)

Soil Texture ¹	Headwin ² Pts./Acre	Canopy ³ 75 DG Oz./Acre
Coarse (Loamy sand, sandy loam)	1.2 - 1.5 ³	N/A
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5 - 2.1	3.0
Fine (Silty clay, silty clay loam ⁴ , clay, clay loam)	2.1 - 2.7	3.0 - 4.0

¹Do not use on soils with pH greater than 7.0.

²Use higher rate on soils with more the 3% organic matter.

³For Southern and Southeastern states, see the above **In Coarse (Light) Soils** section.

⁴Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

⁵Do not use Canopy 75 DG as a mix partner on soils with pH above 6.8.

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

Headwin plus Command[®] 3ME Tank Mix Application

Application of **Headwin** may be made with Command as a pre-plant or shallow incorporated broadcast application in soybeans for the control of certain broadleaf weeds and grasses. Command may also be applied pre-emergent. Refer to the Command label for specific directions for use, recommendations, and restrictions not specified on this label.

Weeds Controlled

In addition to weeds controlled by **Headwin** (see "**Weeds Controlled or Suppressed¹ in Soybeans**" table), **Headwin** plus Command will also provide improved control of heavy infestations of velvetleaf, jimsonweed, and common ragweed.

Headwin plus Command Application (Broadcast Rates)

Soil Texture	Headwin ¹ Pts./Acre	Command 3ME Pts./Acre
Coarse (Loamy sand, sandy loam)	1.2 - 1.5 ²	2/3 - 1.0
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5 - 2.1	2/3 - 1.0
Fine (Silty clay, silty clay loam ³ , clay, clay loam)	2.1 - 2.7	2/3 - 1.0

¹Use higher rate on soils with more the 3% organic matter.

²For Southern and Southeastern states, see the above **In Coarse (Light) Soils** section.

³Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

- **Do not plant wheat, oats, barley, rye, or alfalfa in the fall or following spring after application as crop injury may result.**
- **Do not make application where weather conditions favor drift.**

Headwin plus FirstRate[®] 84 WDG Tank Mix Application

Application of **Headwin** may be made with FirstRate 84 WDG herbicide as a pre-plant, pre-plant incorporated, or pre-emergence application in soybeans for the control of certain broadleaf weeds and grasses. Refer to the FirstRate label for specific directions for use, recommendations, and restrictions not specified on this label.

Weeds Controlled

In addition to weeds controlled by **Headwin** alone (see "**Weeds Controlled or Suppressed¹ in Soybeans**" table), **Headwin** plus FirstRate will provide improved control of cocklebur, giant ragweed, common ragweed, common sunflower, and velvetleaf. **Headwin** plus FirstRate will also provide additional suppression (reduced competition) of morningglory species.

Headwin plus FirstRate Application (Broadcast Rates)

Soil Texture	Headwin Pts./Acre	FirstRate 84 WDG ¹ Oz./Acre
Coarse (Loamy sand, sandy loam)	1.2 - 1.5 ²	0.3 - 0.45
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5 - 2.1	0.3 - 0.45
Fine (Silty clay, silty clay loam ³ , clay, clay loam)	2.1 - 2.7	0.3 - 0.45

¹Use higher rate on soils with more the 3% organic matter.

²For Southern and Southeastern states, see the above **In Coarse (Light) Soils** section.

³Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

Headwin plus Prowl® 3.3 EC Tank Mix Application

Application of **Headwin** may be made with Prowl as a pre-plant surface, pre-plant incorporated, or pre-emergence broadcast application in soybeans for the control of certain broadleaf weeds and grasses. Refer to the Prowl label for specific directions for use, recommendations, and restrictions not specified on this label.

Weeds Controlled

In addition to weeds controlled by **Headwin** alone (see "**Weeds Controlled or Suppressed**' in Soybeans" table), **Headwin** plus Prowl will provide improved control of triazine-resistant weeds such as common lambsquarters, pigweed spp., etc.

Headwin plus Prowl Application (Broadcast Rates)

Soil Texture	Headwin ¹ Pts./Acre	Prowl 3.3 EC Oz./Acre
Coarse (Loamy sand, sandy loam)	1.5 - 1.8 ²	1.2 - 2.4
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.8 - 2.1	1.8 - 3.6
Fine (Silty clay, silty clay loam ³ , clay, clay loam)	2.1 - 2.7	1.8 - 3.6

¹Use higher rate on soils with more the 3% organic matter.

²For Southern and Southeastern states, see the above **In Coarse (Light) Soils** section.

³Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

Headwin plus Python® 80 WDG Tank Mix Application

Application of **Headwin** may be made with Python herbicide as a pre-plant surface, pre-plant incorporated, or pre-emergence application in soybeans for the control of certain broadleaf weeds and grasses. Refer to the Python label for specific directions on use, recommendations, and restrictions not specified on this label.

Weeds Controlled

In addition to weeds controlled by **Headwin** alone (see "**Weeds Controlled or Suppressed**' in Soybeans" table), **Headwin** plus Python will provide improved control of Palmer amaranth, velvetleaf, common ragweed, wild sunflower, waterhemp spp., kochia, and triazine-resistant common lambsquarters. (**Note:** Python will not improve control of ALS-resistant weeds.)

Headwin plus Python 80 WDG Application (Broadcast Rates)

Soil Texture	Headwin ¹ Pts./Acre	Python 80 WDG Oz./Acre
Coarse ² (Loamy sand, sandy loam)	1.2 - 1.5	0.8 - 0.89
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5 - 2.1	0.89 - 1.0
Fine (Silty clay, silty clay loam ³ , clay, clay loam)	2.1 - 2.7	0.89 - 1.0

¹Use higher rate on soils with more the 3% organic matter.

²For Southern and Southeastern states in coarse soils, refer to the section above **In Coarse (Light) Soils**.

³Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

Headwin plus Scepter® 70 DG Tank Mix Application

Application of **Headwin** may be made with Scepter herbicide as a pre-plant surface, pre-plant incorporated, or pre-emergence application in soybeans for the control of certain broadleaf weeds and grasses. Refer to the Scepter label for specific directions on use, recommendations, and restrictions not specified on this label.

Weeds Controlled

In addition to weeds controlled by **Headwin** alone (see "**Weeds Controlled or Suppressed¹ in Soybeans**" table), **Headwin** plus Scepter provides improved control of a number of annual broadleaf weeds including buffalobur, cocklebur, pitted morningglory, smallflower morningglory, common ragweed, sicklepod and sunflower. **Headwin** plus Scepter will also provide suppression (reduced competition) of ivyleaf and tall morningglory and giant ragweed.

Headwin plus Scepter Application (Broadcast Rates)

Soil Texture	Headwin ¹ Pts./Acre	Scepter 70 DG ² Oz./Acre
Coarse (Loamy sand, sandy loam)	1.2 - 1.5 ³	1.4 - 2.1
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5 - 2.1	1.4 - 2.1
Fine (Silty clay, silty clay loam ⁴ , clay, clay loam)	2.1 - 2.7	1.4 - 2.1

¹Use higher rate on soils with more the 3% organic matter.

²For pre-emergence application, use the higher rate. For maximum control of moderate to heavy infestations of cocklebur, giant ragweed and sicklepod, use the higher rate and a pre-plant incorporated application.

³For Southern and Southeastern states, see the section above **In Coarse (Light) Soils**.

⁴Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

Restrictions: On soils that have a pH above 7.0, soybean injury caused by the metribuzin in **Headwin** may result at rates higher than 1.5 pints per acre. To avoid injury, do not use **Headwin** at rates more than 1.5 pints per acre on soils that have a pH above 7.0.

Herbicides That May Be Applied Post-Emergence After Headwin

If additional control of certain weeds is needed, application of a post-emergence herbicide may be made after an application of **Headwin** alone or in tank mixture. Post-emergence herbicides that may be applied with **Headwin** include:

Aim®	FirstRate®	Poast®	Roundup® Brands ¹
Arrow®	Flexstar®	Poast Plus®	Scepter®
Assure® II	Fusilade® DX	Pursuit®	Select®
Basagran®	Frontrow®	Raptor®	Storm®
Classic®	Fusion®	Reflex®	Synchrony® XP ³
Cobra®	Harmony® GT XP	Resource®	Touchdown® brands ¹
Extreme® ¹	Liberty® ²	Rezult® A&B	Ultra Blazer®

¹Use on Roundup-Ready or glyphosate-tolerant soybean varieties only.

²Use on LibertyLink® soybean varieties only.

³Use on STS™ soybean varieties only.

See the above information and the individual product labels for use directions, use rates, and special precautions/restrictions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Reduced Rate Scepter 70 DG Application Following Headwin

If necessary, an application of **Headwin** alone or in tank mixture may be followed by an early post-emergence application of a reduced rate of Scepter herbicide to improve control of cocklebur. Make application of 0.7 to 1.4 ounces of Scepter 70 DG. Use the lower use rate of Scepter if cockleburs are less than 3 inches tall or have fewer than 3 leaves and are actively growing; use the use higher rate if cockleburs are 3 to 6 inches tall and actively growing. Do not use Scepter when plants are under conditions of stress. Use of a NIS (non-ionic surfactant) or COC (crop oil concentrate) is recommended for Scepter applications. See the Scepter 70 DG label for additional use directions and special precautions/restrictions.

Burndown Weed Control

Headwin may be used as part of a burndown herbicide spray program for control of existing vegetation before soybean emergence in conservation tillage (reduced-tillage/no-till) systems. **Headwin** may be mixed with Defy® 2,4-D low volatile ester (LVE), Parazone®, Roundup brands, Fusion, Poast Plus, or Arrow for control of emerged weeds before crop emergence. **Headwin** burndown tank mixes can be applied prior to planting or before crop emergence. Make application of **Headwin** up to 30 days prior to planting or pre-emergence. Make application only by ground equipment when **Headwin** is used for burndown of existing vegetation in conservation tillage systems. Use the higher end of the use rate range for **Headwin** applications that are made 14 to 30 days prior to planting. See the below "**Annual Grasses & Broadleaves Controlled by Burndown Rates of Headwin Tank Mixtures**" table for use rates of **Headwin** and to the table below for rates of tank mix partners.

Rates of Tank Mix Partners to be Used in Combination with Headwin for Burndown Applications

Product	Rate of Tank Mix Partner	Directions and Remarks
2,4-D LVE (Such as Defy)	0.25 - 1.0 lb. a.i./A	Make application at least 7 days pre-plant when using 2,4-D LVE at 0.25 - 0.5 lb. a.i./A and at least 30 days pre-plant with rates greater than 0.5 lb. a.i./A. Include COC at the rate of 1.0 gal./100 gals. of spray solution (1% v/v).
Parazone	1.3 - 2.7 pts./A	Application must be made before crop emergence. Use 1.3 - 2.7 fl. oz. of Parazone for weeds less than 4 inches in height and 40 - 64 fl. oz. when weeds are 4 to 6 inches in height. Make application in 20 - 60 gals. of water/acre. Include either a NIS at the rate of 1 quart/100 gals. (0.25% v/v) or COC at 1 gal./100 gals. (1% v/v) of spray solution.
Parazone + 2,4-D LVE	1.3 - 2.7 pts./A + 0.25 - 1.0 lb. a.i./A	Follow the Directions and Remarks section above for 2,4-D LVE and Parazone. Special attention should be made to crop planting restrictions with 2,4-D LVE. Include either NIS or COC in this tank mix.
Roundup brands	Refer to product labels for use rates.	Must be applied prior to crop emergence. Use the higher use rates as weeds approach the maximum weed heights listed in the Annual Grasses & Broadleaves Controlled by Burndown Rates of Headwin Tank Mixtures table below. Make application in 10 - 20 gallons of water/acre. See the Touchdown or Roundup label for use rates and spray adjuvant recommendations. Any glyphosate formulation registered and labeled for use in soybeans may be tank mixed with Headwin .
Roundup brands + 2,4-D LVE	Refer to product labels for use rates. + 0.25 lb. a.i./A	Follow the Directions and Remarks section above for 2,4-D LVE and Touchdown/Roundup. Special attention should be made to planting restrictions with 2,4-D LVE. See the Touchdown or Roundup label for use rate and spray adjuvant recommendations. Do not use COC.
Fusion + 2,4-D LVE	Refer to product label for use rates. + 0.25 - 1.0 lb. a.i./A	Follow the planting restrictions under the Directions and Remarks section above for 2,4-D LVE. Fusion rates of 4, 6, and 8 fl. oz. will control certain grasses up to 2, 4, and 6 inches in height, respectively. Include either COC at the rate of 1 gal./100 gals. (1.0% v/v) or NIS at 1 - 2 qts./100 gals. (0.25 - 0.5% v/v) of spray solution. See the Fusion label for specific use rate and additional information.
Poast Plus + 2,4-D LVE	Refer to product label for use rates. + 0.25 - 1.0 lb. a.i./A	Follow the planting restrictions under the Directions and Remarks section above for 2,4-D LVE. The 8 and 12 fl. oz. rates of Poast Plus will control certain grasses up to 2 and 3 inches in height, respectively. Include either COC at the rate of 1 gal./100 gals. of spray solution (1% v/v) or Dash® HC at 1 pt./acre. See the Poast Plus label for use rate and additional information.
Arrow + 2,4-D LVE	Refer to product label for use rates. + 0.25 - 1.0 lb. a.i./A	Follow the planting restrictions under the Directions and Remarks section above for 2,4-D LVE. The 3 and 4 fl. oz. rates of Arrow will control certain grasses up to 3 and 4 inches in height, respectively. Include COC at the rate of 1 qt./acre and 28% UAN (urea ammonium nitrate) at a rate of 1 - 2 qts./acre. See the Arrow label for use rate and additional information.

Precautions for Burndown Weed Control - Soybeans

- Do not make application of these treatments after crop has emerged.
- Follow all precautions and limitation on the labeling of all products used in tank mixtures.
- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- Make application of only 2,4-D low volatile ester formulations that are registered for pre-plant or burndown use.
- Do not make tank mixture applications that contain 2,4-D LVE if wind is blowing toward desired susceptible plants (ex. cotton, tobacco, tomato, etc.) or when wind speeds exceed 6 miles per hour.

Weeds Controlled

Headwin in tank mixtures with the herbicides listed in the above "Rates of Tank Mix Partners to be Used in Combination with Headwin for Burndown Applications" table will provide burndown control of the weeds listed below in the "**Annual Grasses & Broadleaves Controlled by Burndown Rates of Headwin Tank Mixtures**" table below.

Annual Grasses & Broadleaves Controlled by Burndown Rates of Headwin Tank Mixtures

Weeds Controlled	Headwin +								
	2,4-D LVE	Poast Plus + 2,4-D LVE	Arrow + 2,4-D LVE	Fusion + 2,4-D LVE	Touchdown/ Roundup	Touchdown/ Roundup + 2,4-D LVE	Parazone	Parazone + 2,4-D LVE	
Annual Grasses	Maximum Burndown Height (Inches)								
Barley	Does not improve control of these species.	-	-	-	8	8	4 - 6	4 - 6	
Barnyardgrass		2 - 3	3 - 4	-	6	6	4 - 6	4 - 6	
Crabgrass spp.		2 - 3	-	-	6	6	4 - 6	4 - 6	
Foxtail spp.		2 - 3	3 - 4	2 - 6	8	8	4 - 6	4 - 6	
Johnsongrass, Seedling		2 - 3	-	-	8	8	4 - 6	4 - 6	
Panicum, Fall		2 - 3	3	2 - 6	6	6	4 - 6	4 - 6	
Sandbur, Field		-	-	-	8	8	4 - 6	4 - 6	
Shattercane		2 - 3	-	-	8	8	4 - 6	4 - 6	
Wheat, Volunteer		-	-	-	6	6	4 - 6	4 - 6	
Witchgrass		2 - 3	-	-	6	6	4 - 6	4 - 6	
Broadleaves		Maximum Burndown Height (Inches)							
Buffalobur		-	-	-	-	6	6	4 - 6	4 - 6
Chickweed, Common	6	6	6	6	6	6	4 - 6	4 - 6	
Cocklebur, Common	6	6	6	6	6	8	4 - 6	4 - 6	
Dandelion, Common	6 dia ¹	6 dia ¹	6 dia ¹	6 dia ¹	2 dia ²	6 dia ¹	4 dia ³	6 dia ¹	
Henbit	4	4	4	4	4	4	4 - 6	4 - 6	
Horseweed (Marestail)	6 ¹	6 ¹	6 ¹	6 ¹	4 ²	6	3	6 ¹	
Jimsonweed	6	6	6	6	6	6	4 - 6	4 - 6	
Kochia	4 ¹	4 ¹	4 ¹	4 ¹	4	4	4	4	
Ladysthumb	6	6	6	6	6	8	4 - 6	4 - 6	
Lambsquarters, Common	6	6	6	6	6	8	4 - 6	4 - 6	
Lettuce, Prickly	6	6	6	6	4	6	4 - 6	4 - 6	
Mallow, Venice	6	6	6	6	6	6	4 - 6	4 - 6	
Morningglory spp.	6	6	6	6	2	4	2	4	
Mustard spp.	6	6	6	6	6	8	4 - 6	4 - 6	
Pennycress, Field	6	6	6	6	6	6	4 - 6	4 - 6	
Pigweed spp. (Annual)	6	6	6	6	6	8	4 - 6	4 - 6	
Ragweed, Common	6	6	6	6	6 ²	8	4 - 6	4 - 6	
Ragweed, Giant	6 ¹	6 ¹	6 ¹	6 ¹	4 ²	6	4	6	
Shepherd's Purse	6	6	6	6	6	6	4 - 6	4 - 6	
Sida, Prickly	6	6	6	6	4	4	4	4	
Smartweed, Pennsylvania	6	6	6	6	6	8	4 - 6	4 - 6	
Sunflower, Common	6	6	6	6	6	6	4 - 6	4 - 6	
Thistle, Russian	4 ¹	4 ¹	4 ¹	4 ¹	2 - 4 ²	4	4	4 - 6	
Velvetleaf	6	6	6	6	6	8	4 - 6	4 - 6	
Waterhemp spp.	6	6	6	6	6	8	4 - 6	4 - 6	

¹Use 2,4-D LVE at 0.5 pound active ingredient per acre.
²Use a minimum of 0.75 pound active ingredient per acre of Touchdown or Roundup.
³Suppression only.

Headwin Use Rates For Reduced- and No-Till Systems

Pre-Plant Surface Application: Application of **Headwin** may also be made in reduced-till and no-till systems. Treatments may be made up to 30 days prior to planting or following planting, but prior to soybean emergence. Residual herbicides such as Canopy, FirstRate, Scepter, Command, Python, and Prowl may be tank mixed for additional weed control. If weeds are present at time of application, burndown herbicides may be added to the tank mixes (Refer to the **Burndown Weed Control** section). See the tank mix partner product labels for specific rates and use directions.

Headwin Rates for Reduced- and No-Till Systems (Broadcast Rates)

Soil Texture ¹	Headwin Pts./Acre ¹
Coarse ² (Loamy sand, sandy loam)	1.2 - 2.1
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	2.1 - 3.0
Fine (Silty clay, silty clay loam ³ , clay, clay loam)	2.7 - 3.6

¹Use low rate in specified range for low residue level or soils with less than 3% organic matter. Use the higher rate in specified range for high residue level or soils with greater than 3% organic matter.
²Do not use on sand soils. On coarse-textured soils, do not use on loamy sand soils with less than 2% organic matter.
³Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

Headwin Sequential Application

Improved weed control of broadleaf and grass weeds may be obtained by an application that is made early pre-plant (surface-applied or shallow incorporated) with **Headwin**, followed by a second pre-emergence application after planting but prior to soybean emergence. A sequential application will decrease the need for tillage and/or burndown herbicides to control existing vegetation prior to planting, while also providing residual control of weeds after planting.

Application

An early pre-plant treatment may be applied 15 to 30 days prior to planting soybeans. Follow this application with a pre-emergence overlay application of **Headwin** following planting but prior to crop emergence. Observe directions on this label for sequential applications from 0 to 14 days prior to planting.

When a rate range is listed, use the higher use rates:

- In fields that have a history of severe weed pressure.
- if the time between early pre-plant and pre-emergence overlay applications approaches the maximum 30 days.
- if the organic matter content of the soil is over 3%.
- if heavy crop residues are present on the soil surface.

If weeds exceed 1 to 1.5 inches in height or diameter at the time of application, use a burndown herbicide, such as Roundup, Parazone, or 2,4-D LVE.

Weeds Controlled

In addition to weeds controlled by **Headwin** alone (see "**Weeds Controlled or Suppressed**" in Soybeans" table), the sequential application provides improved control of annual broadleaf weeds such as buffalobur, cocklebur, common ragweed, sunflower, and velvetleaf.

Headwin Sequential Application (Broadcast Rates)

Soil Texture	Early Pre-Plant Application Headwin ² Pts./Acre	Followed By	Pre-Emergence Overlay Application Headwin ² Pts./Acre
Coarse ¹ (Loamy sand, sandy loam)	1.2 - 1.8	Followed By	0.3 - 0.9
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5 - 2.1	Followed By	0.6 - 1.2
Fine (Silty clay, silty clay loam ³ , clay, clay loam)	1.8 - 2.4	Followed By	0.9 - 1.5

¹Do not use on sand soils with less than 1% organic matter. On coarse-textured soils, with a calcareous surface area or a pH of 7.5 or higher, do not use on sand soils with less than 2% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.

²Do not exceed a total of 3.9 pts. of **Headwin** per acre per use season.

³Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **Headwin**, treat this soil as "fine-textured soil".

TOMATOES
(Except Kern County, CA)

Make application of **Headwin** herbicide with ground equipment to seeded and transplanted tomatoes as specified below. Application by air is prohibited.

Transplanted Tomatoes

- **Pre-Plant Incorporated Before Transplanting:** Make application at specified rate in 10 or more gallons of water per acre as a broadcast spray to the soil surface immediately prior to transplanting. Incorporate to a depth of 2 to 4 inches with equipment capable of uniformly mixing the chemical into the soil. When transplanting tomatoes, place the root system of the plant below the herbicide incorporation zone or injury may result.
- **Post-Directed to Transplants:** **Headwin** may also be applied as a post-directed spray to transplants following the first settling rain or irrigation. When an application is made post-directed, make application in a minimum of 20 gallons of water per acre avoiding contact with tomato plants. Do not make application until transplants have recovered from transplant shock and new growth is evident. Do not make application to tomatoes within 24 hours of applications of other pesticides. (Refer to the **Special Precautions** below). When banding, refer to the appropriate section in this label.
- **Row Middles:** **Headwin** may also be applied to treat row-middles in bedded tomatoes, as long as the total amount of **Headwin** does not exceed the maximum dose allowed per crop.

Seeded Tomatoes

- **Post-Directed to Seeded Tomatoes:** Application of **Headwin** may be made post-directed to direct seeded tomatoes. Tomato plants must be at least 4 inches tall at the time of application and the product must be applied in a minimum of 20 gallons of water per acre. Avoid spray contact with tomato plants.

Tomato Use Rates

Pre-Plant Incorporated to Transplanted Tomatoes:

- For coarse soils, make application of **Headwin** at 1.5 - 2.0 pts./Acre if organic matter content is less than 3% or 2.0 pts./Acre if the organic matter is 3% or greater.
- For medium soils, make application of **Headwin** at 2.0 - 2.5 pts./Acre.
- For fine soils, make application of **Headwin** at 2.0 - 2.5 pts./Acre if organic matter content is less than 3% or 2.5 - 3.0 pts./Acre if the organic matter content is 3% or greater.

Post-Emergence Directed Sprays to Established Tomatoes:

- For coarse soils, make application of **Headwin** at 1.5 - 2.0 pts./Acre if organic matter content is less than 3% or 2.0 pts./Acre if the organic matter is 3% or greater.
- For medium soils, make application of **Headwin** at 2.0 - 2.5 pts./Acre.
- For fine soils, make application **Headwin** at 2.0 - 2.5 pts./Acre if organic matter content is less than 3% or 2.5 - 3.0 pts./Acre if the organic matter content is 3% or greater.

Transplanted Tomatoes: Pre-Plant Incorporated and Pre-Plant Applications

WEEDS CONTROLLED	WEEDS PARTIALLY CONTROLLED
Barnyardgrass (Watergrass) Carpetweed Crabgrass Crowfootgrass Cupgrass, Prairie Cupgrass, Southwestern Foxtail, Bristly Foxtail, Giant Foxtail, Green Foxtail, Millet Foxtail, Yellow Foxtails, Robust (Purple & White) Galinsoga Goosegrass Lambsquarters Nightshade, Eastern Black Nutsedge, Yellow Panicum, Fall Pigweed Pusley, Florida Rice, Red Signalgrass (<i>Brachiaria</i>) Waterhemp, Common Waterhemp, Tall Witchgrass	Beggarweed, Florida* Cupgrass, Woolly Eclipta Johnsongrass, Seedling Nightshade, Hairy Proso Millet, Wild Purslane, Common Sandbur Shattercane Sorghum, Volunteer
*For partial control of this weed, use a minimum of 3 pts./Acre and apply pre-emergence.	

Established Tomatoes: Post-Emergence Directed Sprays

For effective control of weeds with post-emergence application, apply **Headwin** before weeds are 1-inch tall.

WEEDS CONTROLLED	WEEDS PARTIALLY CONTROLLED
Carpetweed Foxtail, Yellow* Fumitory Galinsoga Goosegrass Johnsongrass* Ladysthumb* Lambsquarters Mustard, Wild Pigweeds Purslane Ragweed, Common* Smartweed, Pennsylvania* Toadflax Velvetleaf*	Barnyardgrass Crabgrass
*For optimum control of these weeds, use the highest rate listed on the label for the type of application to be made.	

Tomatoes**Use Precautions**

- Do not make application to varieties or cultivars with unknown tolerance to **Headwin**.
- **Headwin** may damage transplants that have been weakened by any factor.
- To prevent damage, plant only healthy transplants. Do not plant when there are wet, cool, or unfavorable growing conditions.
- In transplanted tomatoes, if application of **Headwin** is made pre-plant incorporated, incorporate to a depth less than the depth of transplanting, and use the lower end of the use rate range for the given soil type, or damage may result.
- There is potential for crop injury to occur in the form of leaf epinasty when row middle applications are made to tomatoes that are grown on sandy soils and when high soil moisture conditions may exist (low binding and high evaporation conditions), in areas such as the states of Florida, Georgia, Maryland and Virginia. The risk of this type of injury may be reduced by incorporating **Headwin** immediately following application, making the application of **Headwin** 7 or more days prior to transplanting (but only after the beds have been formed), minimizing the application of **Headwin** onto the plastic on the bed, or any combination of the above.

Use Restrictions

- Do not make application of **Headwin** within 90 days of tomato harvest.
- Do not exceed the maximum label use rate of **Headwin** for the soil texture per year.
- Do not make application of more than 1.0 lb. a.i./A of Metribuzin (an active ingredient in **Headwin**) per crop per season.
- Do not make application of the total maximum use amount of 1.0 lb. a.i./A of Metribuzin within a period of less than 35 days except in the case of directed sprays.
- Allow a minimum of 14 days between Metribuzin applications regardless of dosage or method of application or severe crop injury may result.
- Make application by ground application only.
- Aerial application is prohibited.
- Do not make application of more than 1 post-emergence treatment per year.
- Do not make application within 3 days after periods of cool, wet, or cloudy weather or crop injury will result.
- Do not use hot caps on tomatoes within 7 days prior to or at any time after treatment of **Headwin**. Do not treat seeded tomatoes until plants have reached the 5- to 6-leaf stage or severe crop injury may result.
- Crop injury or delayed maturity may occur from broadcast or directed spray applications if tomatoes are growing under stress conditions such as periods of drought or cool, wet, and cloudy weather preceding treatment.
- For newly introduced tomato varieties with unknown tolerance to **Headwin**, make application on a small area to determine if **Headwin** can be used without injury to the crop.

CROP ROTATION INTERVALS

Do not rotate to any food or feed crops after application of **Headwin** other than those listed in the below table or injury could occur.

Planting Crop Rotation Intervals Between Treatment with Headwin^{1,2,3}

Crop	Crop Rotation Intervals (Months)
Alfalfa; Barley (Winter); Wheat (Winter)	4.5
Corn; Barley (Spring); Peas; Rice; Wheat (Spring)	8
Asparagus; Cotton; Forage Grasses; Lentils; Sainfoin; Sugarcane; Tomatoes; Other Crops Not Listed (Except Root Crops)	12
Onions; Sugar Beets; Other Root Crops	18

¹Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed. Stand reductions may occur in some areas.

²Crop rotation intervals on this label do not include restrictions for the tank mix partner. Refer to the label of the other product for additional restrictions.

³Refer to the specific crop use sections for additional crop rotation precautions.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in original container only.

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 (five gallons or less):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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 reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Nonrefillable Container (greater than five gallons):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. 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 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Refillable Container (greater than five gallons):] Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Triple rinse as follows: 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% 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. When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. DO NOT transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with State and local regulations.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

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 SHARDA USA LLC 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 SHARDA USA LLC and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, SHARDA USA LLC 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 SHARDA USA LLC 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 SHARDA USA LLC 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 MANUFACTURER.

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 SHARDA USA LLC 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, SHARDA USA LLC 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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Headwin

An Herbicide For use in Potatoes, Tomatoes and Soybeans
for Control of Certain Grass Weeds and Broadleaf Weeds

ACTIVE INGREDIENTS:	% By Weight
Metolachlor*	58.52%
Metribuzin**	13.93%
OTHER INGREDIENTS:	27.55%
TOTAL:	100.00%

Contains 5.40 lbs. of metolachlor and 1.28 lbs. of metribuzin per gallon.

*CAS No. 51218-45-2

**CAS No. 21087-64-9

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 label booklet for complete Precautionary Statements and Directions For Use.

FIRST AID

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. **IF SWALLOWED:** Immediately call a poison control center or doctor for further treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. **IF IN EYES:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes. Call a poison control center or doctor for treatment advice. **IF INHALED:** Move person to fresh air. If person is not breathing, call 911, or call an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at 1-800-222-1222.

NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Harmful if swallowed. Causes skin irritation. Do not get on skin or on clothing. Causes moderate eye irritation. Avoid contact with eyes. This product may cause skin sensitization reactions in some people. 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.

GROUP 5 15 HERBICIDES

STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in original container only.

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 (five gallons or less):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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 reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Nonrefillable Container (greater than five gallons):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. 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 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Refillable Container (greater than five gallons):] Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Triple rinse as follows: 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% 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. When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. DO NOT transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with State and local regulations.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

Manufactured For: Sharda USA LLC, 7217 Lancaster Pike, Suite A, Hockessin, Delaware 19707
EPA Reg. No. 83529-70 EPA Est. No. 39578-TX-001 Net Contents: 2.5 Gallons

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