

This is a specimen label, intended for use only as a guide in providing general information regarding use of this product. As labels are subject to revision, always carefully read and follow the label on the product container.

Arrest™ HERBICIDE

ACTIVE INGREDIENT:

Sethoxydim: 2-[1-(ethoxyimino)butyl]-5-[2-(ethythio)propyl]-
3-hydroxy-2-cyclohexen-1-one* 13.0%

OTHER INGREDIENTS: 87.0%

TOTAL: 100.0%

*Equivalent to 1.0 pound of sethoxydim per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If 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 in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

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EPA Est. No. 4-NY-001

REV 0305-44030

Distributed by: Whitetail Institute of North America, 239 Whitetail Trail, Hope Hull, AL 36043

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

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemically resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

Wash thoroughly with soap and water after handling. 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, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENT

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 hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing 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, 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 washwaters.

ENDANGERED SPECIES CONCERNS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of Federal law.

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.

All applicable directions, restrictions, precautions and Conditions of Sale and Limitation of Warranty and Liability are to be followed. This labeling must be in the user's possession during application.

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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not allow people or pets to come into contact with treated areas until sprays have dried.

GENERAL INFORMATION

Arrest™ Herbicide is a selective, broad spectrum, postemergence herbicide for control of annual and perennial grass weeds in noncrop sites listed on this label. Arrest™ does not control sedges or broadleaf weeds. Essentially, all grass crops, such as sorghum, corn, small grains, and rice, as well as ornamental grasses, such as turf, are susceptible to Arrest™. A program for total vegetation suppression may necessitate the use of a broadleaf herbicide. Any combination treatment using Arrest™ either tank mixed or sequential should be tested to determine if seedhead growth suppression is maintained without increased injury or discoloration to tall fescue or other desired plant species. A reduction in grass competition may make certain broadleaf weeds appear more prominent or may allow new weeds to germinate.

Arrest™ may be used in or around the following sites:

General indoor/outdoor sites

Mode of Action

Arrest™ rapidly enters the targeted grass weed through its foliage and translocates throughout the plant. The effects range from slowing or stopping growth (generally within 2 days), to foliage reddening and leaf tip burn. Subsequently, foliage burnback occurs. These symptoms will generally be observed within 3 weeks depending on environmental conditions.

Crop Tolerance

All labeled crops are tolerant to Arrest™ at all stages of growth. Leaf speckling may occur, but plants generally outgrow this condition within 10 days. New growth is normal and crop vigor is not reduced.

Notice to user: Due to variability within species, and in application techniques and equipment, and the number of tank mix combinations, neither the manufacturer nor the seller has determined whether or not Arrest™ can safely be used on all varieties and species of nonfood crops under all conditions. It is recommended that the professional user determine if Arrest™ can be used safely before broad use by applying the recommended use rate of Arrest™ under the conditions expected to be encountered on a small test area. Any adverse effects should be visible within 7 days.

Resistance

Repeated use of Arrest™ (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes with resistance to these products. If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. Consult your local representative or agricultural advisor for assistance.

Irrigation

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

Coverage

Apply Arrest™ to the foliage of grasses on a spray-to-wet basis uniformly and completely. Dense leaf canopies shelter smaller grassy weeds and can prevent adequate spray coverage. Do not spray to the point of runoff.

Cultivation/Mowing

If cultivation is an option, do not cultivate during the time between 5 days before and 7 days after applying Arrest™. Cultivating 7-14 days after treatment may help provide season-long control of perennial grasses. Centipedegrass and fine fescue areas should not be mowed within 7 days before or after applying Arrest™. Increased control has been observed when mowing is delayed until 14 days after application. Grass weeds that have been mowed or have regrown from mowed stubble may be controlled poorly. Repeat application if new germination or regrowth occurs.

Cleaning Spray Equipment

Clean spray equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product.

APPLICATION INSTRUCTIONS

Applications can be made to actively growing grassy weeds as broadcast or spot spray applications at the rates and growth stages listed in Tables 1 and 2, unless instructed differently in the Site-Specific Information section of this label. The most effective control will result from making postemergence applications of Arrest™ early, when grassy weeds are small. Delaying application permits grassy weeds to exceed the maximum size stated and may prevent adequate control.

Ground Application (Broadcast)

Water Volume: Use 5-50 gallons of spray solution per acre (1-10 pints per 1,000 square feet).

Spray Pressure: Use 30-60 psi (measured at the boom, not at the pump or in the line). When crop and grass weed foliage is dense, use a minimum of 20 gallons (3.67 pints per 1,000 square feet) of water and 60 psi.

Application Equipment: Use standard high-pressure pesticide flat fan or hollow cone nozzles spaced up to 20 inches apart. Do not use flood, whirl chamber, or controlled droplet applicator (CDA) nozzles as erratic coverage can cause inconsistent weed control. Refer to the nozzle manufacturer's directions for recommended height. Do not use selective application equipment such as wiper applicators or recirculating sprayers.

Spot or Small Area Application

Arrest™ can be applied using tank-type, knapsack sprayers, high-volume equipment with hand guns, or other suitable nozzle arrangements. Prepare a solution of Arrest™ in water according to Table 2. Do not make spot treatments in addition to broadcast treatments.

Table 1. Application Rates for Grass Control

Grass		Arrest™ (Rate)	
		Grasses up to 6" height	Grasses up to 12" height
Bahiagrass ¹	Panicum, Texas	2.25 pints per acre or 0.8 fluid ounces per 1,000 square feet	3.75 pints per acre or 1.4 fluid ounces per 1,000 square feet
Barnyardgrass	Quackgrass		
Bentgrass, Colonial	Ryegrass, Annual ³		
Bentgrass, Highland	Sandbur, Field		
Broadleaf Signalgrass	Shattercane/Wildcane		
Crabgrass, Large ¹	Sprangletop, Red*		
Crabgrass, Smooth ¹	Tall Fescue, Seedling		
Downy Brome ⁴	Volunteer, Barley		
German Velvetgrass ¹	Volunteer, Oats		
Goosegrass ^{1,2}	Volunteer, Rye		
Johnsongrass, Rhizome	Volunteer, Wheat		
Johnsongrass, Seedling	Wild Oats		
Junglerice	Wild Proso Millet		
Lovegrass	Wirestem Muhly		
Orchardgrass, Seedling	Witchgrass		
Panicum, Browntop	Woolly Cupgrass		
Panicum, Fall			
¹ Up to 4"			
² In seedling Centipedegrass and fine fescue, use 1.5 pints (0.5 fl. oz.)			
³ Up to 8"			
⁴ Up to 6"			
* Not recommended in CA, AZ, or Western NM			

Table 2. Spot Treatment Application Rates

Grass	Concentration of Arrest™ in Spray Solution
Annual grasses up to 6" height	1.5%
Annual grasses up to 12" height	2.25%
Perennial grasses	2.25% ¹
¹ Use 1.5% for wirestem muhly	

Table 3. Spot Treatment Dilution

Spray Solution Volume	Amount of Arrest™ to be Added	
	1.5% v/v	2.25% v/v
1 gallon	2 fl. oz.	3 fl. oz.
3 gallons	6 fl. oz.	9 fl. oz.
5 gallons	9.5 fl. oz.	14.5 fl. oz.

ADDITIVES

No additives or adjuvants are recommended for use with Arrest™.

Compatibility Test for Tank Mix Components

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

- Water** - For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- Products in PVA bags** - Cut an opening in the water-soluble PVA bag just large enough to use a teaspoon for measuring purposes. Use the opened water-soluble PVA bag first when preparing spray solution. Cap the jar and invert 10 cycles.
- Water-dispersible products** - (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions). Cap the jar and invert 10 cycles.
- Water-soluble products** - Cap the jar and invert 10 cycles.
- Emulsifiable concentrates** - (Arrest™) Cap the jar and invert 10 cycles.
- Water-soluble additives** - Cap the jar and invert 10 cycles.
- Let the solution stand for 15 minutes.
- Evaluate** the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

MIXING ORDER

- Water.** Begin by agitating a thoroughly clean spray tank half-full of clean water.
 - Products in PVA bags.** Rinse the tank thoroughly before adding any material in PVA bags as boron residue will prevent adequate mixing. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
 - Water-dispersible products** (such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
 - Water-soluble products**
 - Emulsifiable concentrates** (Arrest™)
 - Water-soluble additives**
 - Remaining quantity of water**
- Maintain constant agitation during application.

TANK MIXING APPLICATION

Always read and follow the applicable Restrictions and Limitations and Directions for Use on all products involved in tank mixing. Refer to the Site-Specific Information section of this label for more details. The most restrictive labeling applies to tank mixes. Separate applications should be made if all target grassy weeds are not at the correct growth stage for treatment at the same time.

Tank Mix Partners

The following herbicides may be tank mixed with Arrest™ according to the instructions in the respective product labels.

Basagran® T/O
 Basagran® SG
 Fortune®*
 Goal™
 Stinger™
 Surflan™ AS

*For use only in AZ, NV, OR, and WA

Crop injury, reduced grass weed control or physical incompatibility may result from mixing Arrest™ with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Whitetail Institute of North America does not recommend using tank mixes other than those listed on Whitetail Institute of North America labeling. Local agricultural authorities may be a source of information when using other than Whitetail Institute of North America recommended tank mixes.

GENERAL RESTRICTIONS AND LIMITATIONS

- Avoid all direct or indirect contact with any desired grass crop unless otherwise recommended on this label.
- Do not use treated vegetation as pasture, hay, feed, or forage.
- Do not apply Arrest™ with another pesticide whose label prohibits use with additives, surfactants, or oil adjuvants.
- Do not use selective application equipment such as recirculating sprayers, wiper applicators, or shielded applicators.
- Do not apply through any type of irrigation equipment.
- Arrest™ is rainfast 1 hour after application.
- Do not apply to grasses or crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control can result.
- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications as this injury may be enhanced or prolonged.

SITE SPECIFIC INFORMATION

NONFOOD CROP AREAS, NONCROP AREAS, and FALLOW LAND

Arrest™ may be applied to sites such as rights-of-way, fallow land, noncrop areas and nonfood crop areas such as airports, industrial sites, roadsides, and storage yards. Repeat application if new germination or regrowth occurs.

ROADSIDES, RIGHTS-OF-WAY, and NONFOOD CROP ALLEYS

(Not intended for domestic use, except by professional applicators)

Arrest™ will suppress the initiation and development of the seedheads of established tall fescue. Discoloration of the fescue will occur soon after application and may persist for 2-8 weeks depending on environmental conditions. Avoid applying to any tall fescue area where discoloration is aesthetically unacceptable.

Timing: Apply Arrest™ to tall fescue before the emergence of seedheads in the spring. Do not apply after May 1 in Alabama, Georgia, and Tennessee; timing may vary in other areas. Tall fescue must be one year old before the first application of Arrest™.

Rate: Apply 1.5 pints per acre (0.6 ounces per 1,000 square feet) of Arrest™.

Spray Volume: Use 30-50 gallons per acre (5.5-9.0 pints per 1,000 square feet).

Restrictions and Limitations

Do not make more than one application of Arrest™ to tall fescue per year. Treated vegetation may not be used as feed, forage, hay or silage. Arrest™ will not injure clovers, vetch, or other broadleaf plants that may be present.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Do not store below 32°F or above 100°F. Store in a dry place away from heat or open flame. Avoid contamination of feed or foodstuffs.

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

CONTAINER DISPOSAL:

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Storage and Disposal for Homeowners Use

Storage: Keep pesticide in original container. Do not put concentrate or dilute spray into food, feed or drink containers. Avoid contamination of feed and foodstuffs. Store in a cool, dry place, preferably in a locked storage area. Do not store diluted spray.

Disposal:

If empty: Do not reuse this container. Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency or call 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Whitetail Institute of North America or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Whitetail Institute of North America and Seller harmless for any claims relating to such factors.

Whitetail Institute of North America 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, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Whitetail Institute of North America, and Buyer and User assume the risk of any such use. WHITETAIL INSTITUTE OF NORTH AMERICA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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