

SFNMC Contact Meeting

Little Rock, Arkansas

July 22, 2024

2024 Container Herbicide Trials

Gallery[®] 75 DF

Arkon[™]



Nina Dowling Payne

2024 Container Herbicide Trials

Gallery[®] 75 DF

Purpose
Methods



2024 Gallery®75 DF (isoxaben) trials in container pine

Purpose of trial

- To test Gallery®75 DF for its suitability for use in weed control in containerized seedlings
- Gallery®75 DF:
 - Pre-emergent
 - Broadleaf weeds
 - Labeled for turf, ornamentals, conifer plantations, *not conifer nurseries*
 - Label reads '*Injury may be incurred if applied to... nursery seedling beds...pots less than 6 inches wide*' and '*Do not apply to newly transplanted ornamentals, nursery stock... until soil or potting media has been settled by packing and irrigation or rainfall*'
 - Canadian label lists '*conifer bareroot and container nursery stock...grown in nurseries*' as acceptable site
- SFNMC Gallery®DF history:
 - First SFNMC trial
 - PRT-IFCO tested in 1 US nursery in 2022 and 2023 at 30 days post-sow
 - Used in PRT Canada nurseries

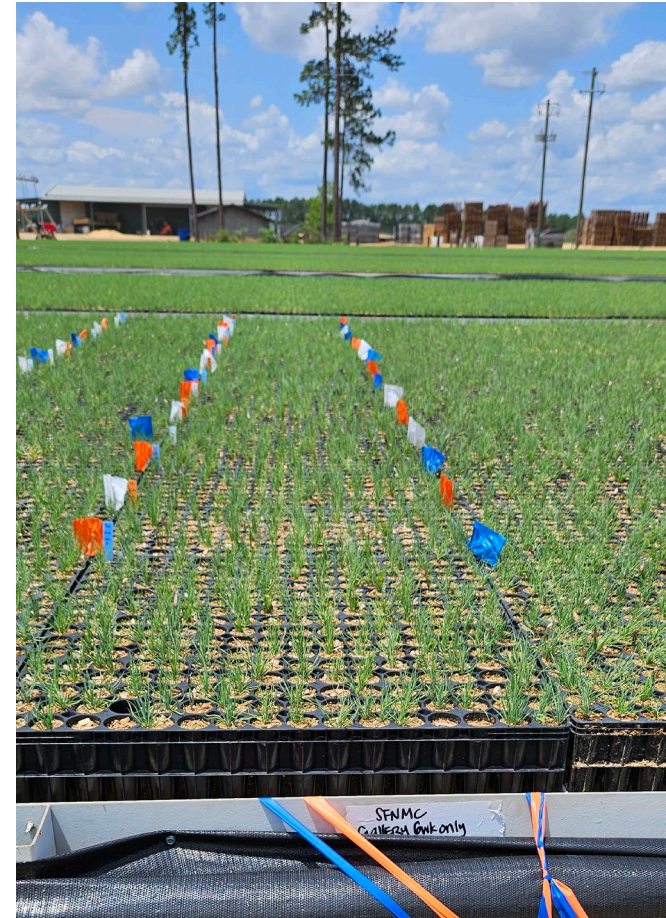
Methods

- Trials in PRT-IFCO Atmore, AL Nursery
- Trials in longleaf, loblolly, and slash pine
- 3 rates: 0, 1/2X, and 1X label rate
- 3 application timings:
 1. at 1 week post-sowing
 2. at 6 weeks post-sowing
 3. at 1 week and 6 weeks post-sowing
- 90 trays per species used
- Counted number of seedlings per tray (30 trays) prior to spray 6 week post-sow applications
- Will collect 10 sample seedlings per tray for measurements of seedling quality in late 2024
- Research report follows data analysis (2025)

Southern Forest Nursery Management Cooperative
2024 Gallery®75 DF (isoxaben) trials in container pine



Longleaf at 1 week post-sow

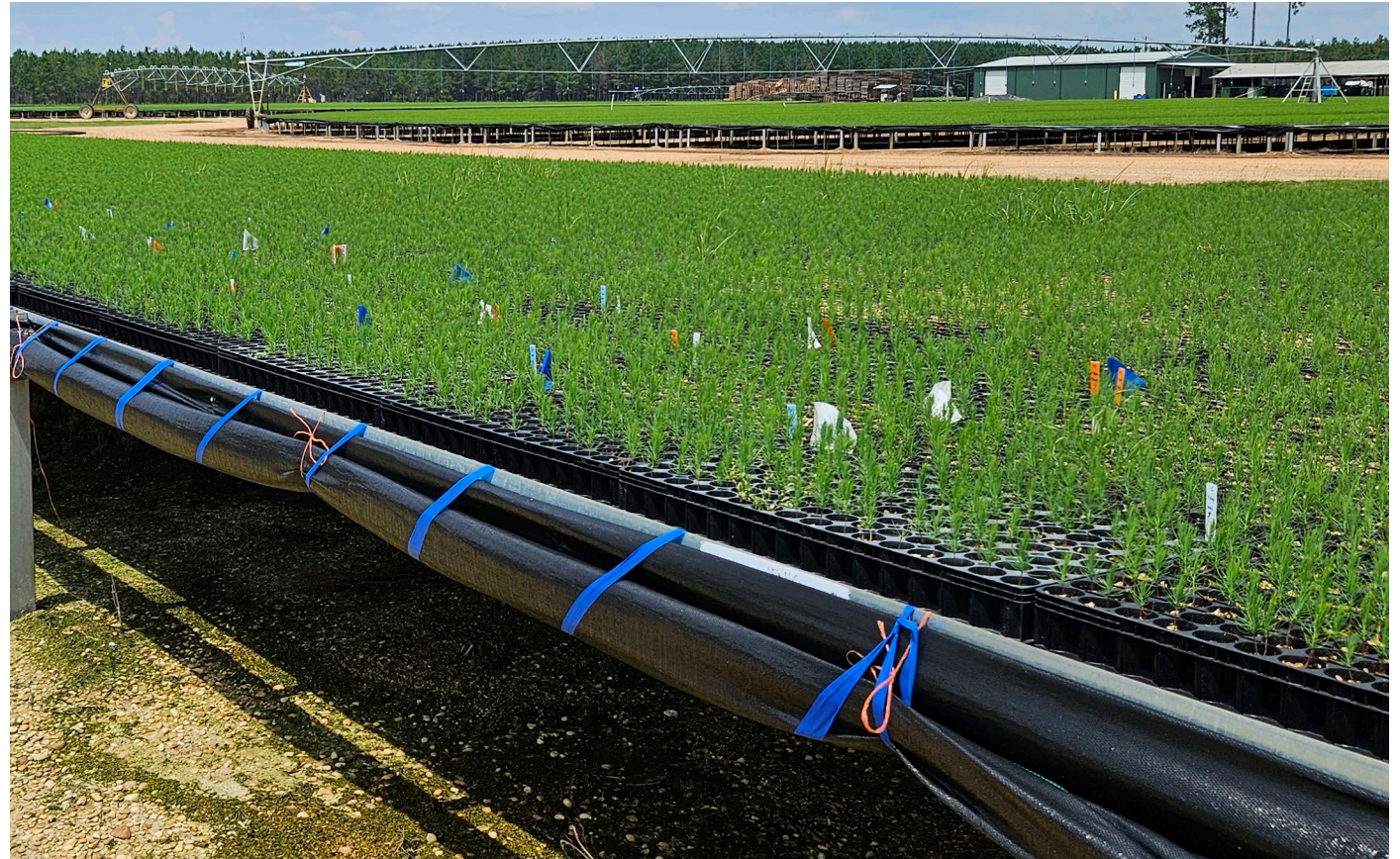


Longleaf at 6 weeks post-sow

Southern Forest Nursery Management Cooperative
2024 Gallery®75 DF (isoxaben) trials in container pine



Loblolly at 1 week post-sow

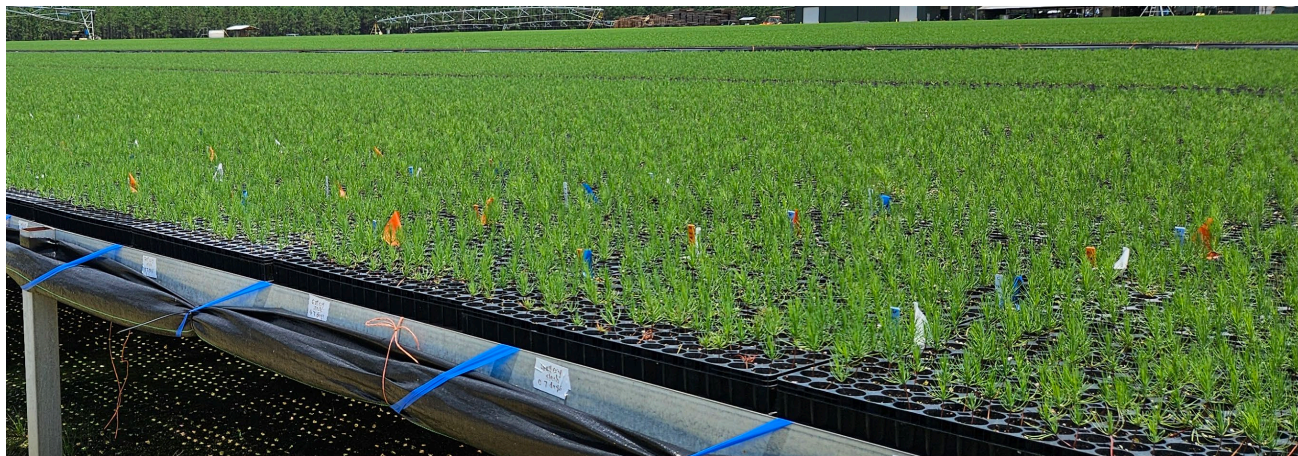


Loblolly at 6 weeks post-sow

Southern Forest Nursery Management Cooperative
2024 Gallery®75 DF (isoxaben) trials in container pine



Slash at 1 week post-sow



Slash at 6 weeks post-sow

Southern Forest Nursery Management Cooperative



Specimen Label



Gallery[®] SC

SPECIALTY HERBICIDE

™/® Trademarks of Corteva Agriscience and its affiliated companies

A preemergence herbicide for control of certain broadleaf weeds in:

- Established Turfgrass
- Landscape Ornamentals
- Container Grown Ornamentals
- Field Grown Ornamentals
- Groundcovers/Perennials
- Non-Cropland
- Ornamental Bulbs
- Christmas Tree/Conifer Plantations
- Non-Bearing Fruit and Nut Trees and Non-Bearing Vineyards

Group	21	HERBICIDE
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Active Ingredient:

isoxaben: N-[3-(1-ethyl-1-methylpropyl)-5-isoxazolyl]-2,6-dimethoxybenzamide and isomers	45.45%
Other Ingredients	54.55%
Total	100%

Contains 4.16 lb active ingredient per gallon.

Precautionary Statements

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-658

Keep Out of Reach of Children

CAUTION

Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves

Follow the 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.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift may result in reduced germination or emergence of non-target plants adjacent to treated area. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soil and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of isoxaben from runoff water and sediment.

Directions for Use

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

Read all Directions for Use carefully before applying.

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

Agricultural Use Requirements

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

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

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

- Coveralls
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements of 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.

Entry Restrictions for Non-WPS Uses: When this product is applied to turf and ornamental plantings in landscape settings and non-cropland areas, do not allow entry into treated areas until sprays have dried unless wearing coveralls, waterproof gloves, and shoes plus socks.

Storage and Disposal

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

Pesticide Storage: Store in original container. Do not store in direct sunlight. Do not store at temperatures above 120°F. In case of leak or spill, contain material and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable rigid containers 5 gal or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

US label



Canadian
label



2015-1219

2015-04-23

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(Container)



Dow AgroSciences

Gallery[™] 75 DF Herbicide

A selective preemergent herbicide for certain broadleaved weeds in conifer bareroot and container nursery stock for listed trees, shrubs and groundcovers grown for silviculture purposes, and containerized ornamentals grown in nurseries. For outdoor use only. Not for use on cut flowers.

COMMERCIAL

READ THE LABEL AND THIS LEAFLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

GUARANTEE: isoxaben 75%

REGISTRATION NO. 24110 PEST CONTROL PRODUCTS ACT

CAUTION



POISON

NET CONTENTS: 454 g

Dow AgroSciences Canada Inc.

Suite 2100, 450 - 1 Street S.W.

Calgary, Alberta

T2P 5H1

1-800-667-3852

®/™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

2024 Container Herbicide Trials

ArkonTM

Purpose
Methods





Southern Forest Nursery Management Cooperative

2024 Arkon™ (pyrimisulfan) trials in container pine

Purpose of trial

- To test Arkon™ for its suitability for use in weed control in containerized seedlings
- Arkon™ :
 - Liquid
 - Post-emergent
 - Annual sedge, purple and yellow nutsedge, rush, broadleaf weeds
 - Labeled for turf, sod production, non-cropland sites, *not conifer nurseries*
- SFNMC Arkon™ history:
 - First SFNMC trial in containers
 - First Arkon™ trials in bareroot loblolly and slash pine in 2023

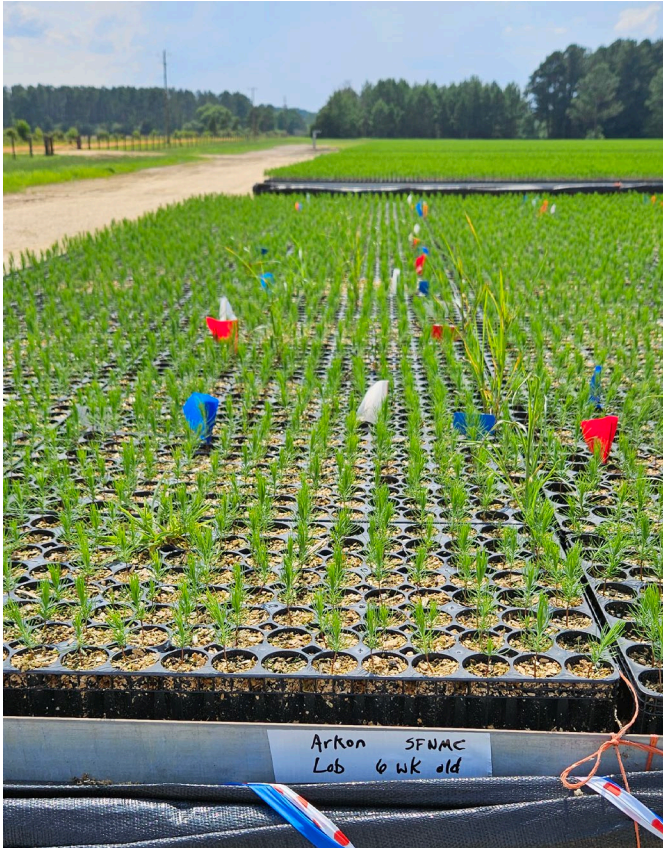
2024 Arkon™ (pyrimisulfan) trials in container pine

Methods

- Trials in 2 nurseries: PRT-IFCO Atmore, AL and Weyerhaeuser River Bend, MS Nurseries
- Trials in loblolly pine
- 3 rates: 0, 1X, and 2X label rate (same rates used in bareroot trials)
- 1 application timing at each nursery: PRT-IFCO 6 weeks post-sowing
Weyerhaeuser 7 weeks post-sowing
- Trays used: PRT-IFCO - 12 trays (4 per treatment)
Weyerhaeuser - 9 trays (3 per treatment)
- Counted number of seedlings per tray prior to spraying
- Will collect 10 sample seedlings per tray for measurements of seedling quality in late 2024
- Research report follows data analysis (2025)

Southern Forest Nursery Management Cooperative

2024 Arkon™ (pyrimisulfan) trials in container pine



Loblolly at Atmore Nursery
at 6 weeks post-sow



Loblolly at River Bend
at 7 weeks post-sow



Southern Forest Nursery Management Cooperative

2024 Arkon™ (pyrimisulfan) trials in container pine

ARKON™ HERBICIDE LIQUID

Not for sale, distribution or use in Nassau or Suffolk Counties in New York State.

ACTIVE INGREDIENT: Pyrimisulfan 1.24%
OTHER INGREDIENTS: 98.76%
TOTAL 100.00%

THIS PRODUCT CONTAINS: 0.103 lb. Pyrimisulfan per gallon or 1.24%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

STOP! READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals
CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

First Aid	
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment information.

Personal Protective Equipment (PPE)
All mixers, loaders, and applicators and other handlers must wear:
• Chemical resistant gloves made of barrier laminate, butyl rubber (≥ 14 mils), nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), polyvinyl chloride (PVC) (≥ 14 mils), or viton (≥ 14 mils),
• Long-sleeved shirt and long pants, and
• Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls
When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(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.

• Removing 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
Do not apply 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.

Groundwater Advisory: This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Surface Water Advisory: This product has a potential for reaching surface water via runoff after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of pyrimisulfan from runoff water. Runoff of this product will be reduced by avoiding applications when heavy rainfall or irrigation is expected to occur within 48 hours.

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.

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 protective equipment 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 made of any water-proof material,
• 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 enter or allow people (or pets) to enter the treated area until spray has dried.

1. Product Description
Arkon Herbicide Liquid is a selective herbicide for post-emergent control of listed broadleaf weeds, sedges, kyllinga, and rush species commonly found in turfgrasses. It can be used on established warm-season turfgrasses (including improved varieties of St. Augustinegrass such as Bitterblue and Floratam) and cool-season turfgrasses. Fall applications provide improved control of winter weeds such as herb, false dandelion, ground ivy (creeping charlie), and chickweed.

2. Resistance Management
For resistance management, this product contains Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.





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