



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

EPA Reg. Number:

93930-42

Date of Issuance:

10/13/20

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Avalaire 2,4-D Amine

Name and Address of Registrant (include ZIP Code):

Beth Anderson
Sr. Regulatory Manager
Avalaire, LLC
1204 Village Market Place, #173
Morrisville, NC 27560

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

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

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

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

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Continued on page 2

Signature of Approving Official:

Mindy Ondish, Product Manager 23
Herbicide Branch, Registration Division (7505P)

Date:

10/13/20

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

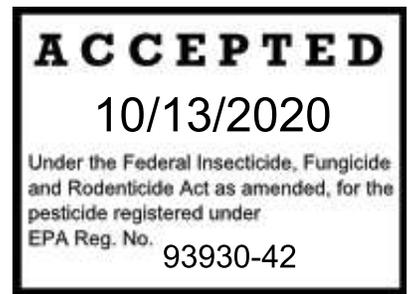
The alternate brand name "**Rixter 2,4-D Amine**" is noted for the product record.

Please also note that the record for this product currently contains the following CSF:

- Basic CSF dated 05/28/2020 (revised)

If you have any questions, please contact Endia Blunt by phone at 703-347-0788, or via email at Blunt.Endia@epa.gov.

Enclosure



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

2,4-D	GROUP	4	HERBICIDE
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Avalaire 2,4-D Amine

[Alternate Brand Name: Rixter 2,4-D Amine]
[Herbicide]

[Contains Dimethylamine Salt of 2,4-D*]

[For selective control of many broadleaf weeds in asparagus, cereal grain, corn, grapes, hops, rice, sorghum, soybeans, strawberries, sugarcane; apples, pear, stone fruit, and nut orchard floors; fallow cropland; forests; grass pastures; rangeland; Conservation Reserve Program acres; ornamental turf (including turf grown for sod or seed); non-cropland and aquatic areas. Also for control of trees by Injection.]

ACTIVE INGREDIENT:	(% by weight)
2,4-Dichlorophenoxyacetic acid, dimethylamine salt**	47.2%
OTHER INGREDIENTS:	52.8%
TOTAL:	100.0%

**2,4-dichlorophenoxyacetic acid equivalent 39.2% by weight or 3.8 lb/gal.

* Salts are the least volatile forms of 2,4-D and do not release enough vapors from treated areas to reduce yield of adjacent susceptible crops.

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

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

See [below] [inside label booklet] for [Precautionary Statements] [and] [Directions for Use].

First Aid	
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

**For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night**

Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

EPA Reg. No.: 93930-42

EPA Est. No:

Net Contents:

Manufactured for:
Avalaire, LLC
1204 Village Market Place, #173
Morrisville, NC 27560

{LANGUAGE INSIDE BOOKLET}

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE)

All mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes and socks,
- Chemical-resistant gloves made of any waterproof material when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Eye protection (goggles, face shield or safety glasses)

See Engineering Controls for Additional Requirements.

Discard clothing or 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. After each day of use, clothing or PPE must not be reused until it has been cleaned.

Engineering Controls Statements

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.607(d-e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.607(d-e)].

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. If pesticide gets on skin, wash immediately with soap and water.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This product is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal area below the mean high water mark. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas, and non-target plants. Do not contaminate water when disposing of equipment wash waters or rinsate.

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. Application around a cistern or well may result in contamination of drinking water or groundwater.

Fish breathe dissolved oxygen in the water and decaying weeds also use oxygen. For aquatic uses: When treating continuous, dense weed masses, it may be appropriate to treat only part of the infestation at a time. For example, apply the product in lanes separated by untreated strips that can be treated after vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3-week period following treatment. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Waters having limited and less dense weed infestations may not require partial treatments.

Mixing and Loading: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

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 48 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 over short-sleeved shirt and short pants,
- Shoes and socks,
- Chemical-resistant gloves made of any waterproof material, and
- Protective eyewear

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.

Entry Restrictions for Non-WPS Uses: When this product is applied to rangeland and established pastures not harvested for hay or seed; non-cropland areas, when applied by tree injection method only in forest sites, and when applied in aquatic areas, do not allow people (other than applicator) or pets on treatment area during application.

Do not enter or allow people (or pets) to enter the treated areas until sprays have dried.

Product Information

Avalaire 2,4-D Amine is intended for selective control of many broadleaf weeds in certain crops (cereal grains, corn, grain sorghum, soybeans and sugarcane), orchard floors (pome fruit, including apples and pears, stone fruit, nut orchards and pistachios), fallow cropland, forests, grass pastures, rangeland, Conservation Reserve Program acres, ornamental turf (including turf grown for sod or seed), non-cropland and aquatic areas.

Apply **Avalaire 2,4-D Amine** as a water or oil-water spray during warm weather when target weeds or woody plants are actively growing. Application under drought conditions will often give poor results. Use low spray pressure to minimize drift. Generally, the lower dosages specified on this label will be satisfactory for young, succulent growth of susceptible weed species. For less susceptible species and under conditions where control is more difficult, use higher specified rates. Deep-rooted perennial weeds such as Canada thistle and field bindweed and many woody plants usually require repeated applications for satisfactory control. Consult your State Agricultural Experiment stations or Extension Service Weed Specialists for recommendations from this label that best fit local conditions.

Use Precautions:

- Be sure that use of **Avalaire 2,4-D Amine** conforms to all application regulations.
- Excessive amounts of 2,4-D in the soil may temporarily inhibit seed germination of plant growth.
- Many states have regulations concerning aerial application of 2,4-D formulation. Consult local regulatory authorities before making applications. This product contains dimethylamine salt of 2,4-D.

Use Restrictions:

- Do not apply this product through any type of irrigation system.
- 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 registration.
- Do not use in greenhouses.
- Do not allow product to come into contact with desirable, susceptible plants, such as beans, cotton, fruit trees, grapes, legumes, ornamentals, peas, tomatoes, and other vegetables.

Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray,

apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, fruit trees, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that may not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Aerial Application

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Ground Boom Application

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

Mixing Instructions

Mix **Avalaire 2,4-D Amine** only with water, unless otherwise directed on this label. Add about half the water to the mixing tank, then add the **Avalaire 2,4-D Amine** with agitation, and finally the rest of the water with continuing agitation.

Note: Adding oil, wetting agent, or other surfactant to the spray mixture may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop damage.

Tank Mixing: 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. No label dosages should be exceeded. Do not tank mix this product with any product containing a label prohibition against tank mixing with 2,4-D.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of this product

and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jells, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Mixing with Liquid Nitrogen Fertilizer

This product may be combined with liquid nitrogen fertilizer suitable for foliar application to accomplish broadleaf weed control and fertilization of corn, small grains or pastures in a single operation. Use **Avalaire 2,4-D Amine** in accordance with directions for these crops provided in this label. Use liquid fertilizer at rates specified by the supplier or Extension Service Specialist. Test for mixing compatibility as describe above before mixing in spray tank. A compatibility aid such as Unite or Compex may be needed in some situations. Compatibility is best with liquid fertilizer solutions containing only nitrogen. Mixing with N-P-K solutions may not be satisfactory, even with the addition of a compatibility aid. Pre-mixing 1 part **Avalaire 2,4-D Amine** with up to 4 parts water may help in situations when mixing difficulty occurs.

Fill the tank about half full with the liquid fertilizer, then add the required amount of **Avalaire 2,4-D Amine** with agitation. Maintain agitation and complete filling the tank with liquid fertilizer. Apply immediately and continue agitation in spray tank during application. **Do not store the spray mixture.** Application during very cold weather (near freezing) is not advisable.

Sprayer Clean-Out

To avoid injury to desirable plants, equipment used to apply this product should be thoroughly cleaned before re-use or applying other chemicals.

1. Rinse and flush application equipment thoroughly after use at least three times with water. Dispose of all rinse water by application to treatment area or apply to non-cropland area away from water supplies.
2. During the second rinse, add 1 qt. of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 min). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Remove nozzles and screens and clean separately.
6. If equipment is to be used to apply another pesticide or agricultural chemical to a 2,4-D susceptible crop, additional steps may be required to remove all traces of 2,4-D, including cleaning of disassembled parts and replacement of hoses or other fittings that may contain absorbed 2,4-D.

Application

Apply with calibrated air or ground equipment using sufficient spray volume to provide adequate coverage of target weeds or as otherwise directed in specific use directions. For broadcast application, use a spray volume of 3 or more gallons per acre by air and 10 or more gallons per acre for ground equipment. Where states have regulations which specify minimum spray volumes, they should be observed. In general, spray volume should be increased as crop canopy, height and weed density increase in order to obtain adequate spray coverage. Do not apply less than 2 gallons per acre total spray volume by air or less than 10 gallons per acre total spray volume by ground. Specific crops may require higher volumes, as described in the crop specific sections, below.

Rate Ranges and Application Timing

The lower dosages given will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed. Apply **Avalaire 2,4-D Amine** during warm weather when weeds are young and actively growing.

Spot Treatments

To prevent misapplication, spot treatments should be applied with a calibrated boom or with hand sprayers using a

fixed spray volume per 1,000 sq. ft. as indicated below.

Hand-Held Sprayers: Hand-held sprayers may be used for spot applications of **Avalaire 2,4-D Amine**. Care should be taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on the application rate for an area of 1,000 sq. ft. Mix the amount of **Avalaire 2,4-D Amine** (fl. oz. or ml.) corresponding to the desired broadcast rate in 1 to 3 gallons of spray. To calculate the amount of **Avalaire 2,4-D Amine** required for larger areas, multiply the table value (fl. oz. or ml.) by the thousands of sq. ft. to be treated. An area of 1000 sq. ft. is approximately 10.5 X 10.5 yards (strides) in size.

Rate Conversion Table for Spot Treatment

Label Broadcast Rate (pt./acre)							
1/2	2/3	3/4	1	2	3	4	8
Equivalent Amount of Avalaire 2,4-D Amine per 1000 sq ft							
1/5 fl. oz. ¹ (5.5 ml.)	1/4 fl. oz. (7.3 ml.)	1/3 fl. oz. (8.3 ml.)	3/8 fl. oz. (11 ml.)	3/4 fl. oz. (22 ml.)	1 fl. oz. (33 ml.)	1 1/2 fl. oz. (44 ml.)	3 fl. oz. (88 ml.)
¹ Conversion factors: 1 fl. oz. = 29.6 (30) ml.							

Band Application: Avalaire 2,4-D Amine may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

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

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

Weeds Controlled

Annual or Biennial Weeds

- | | |
|---|---|
| Beggarticks ¹ | Mousetail ² |
| Bittercress, smallflowered ² | mustards (except blue mustard) |
| bitterweed | parsnip, wild |
| broomweed, common ¹ | Pennycress, field |
| burdock, common | Pepperweed ^{1,2} |
| buttercup, smallflowered ^{1,2} | pigweeds (<i>Amaranthus</i> spp.) ¹ |
| carpetweed | poorjoe |
| cinquefoil, common ² | primrose, common |
| cinquefoil, rough ² | purslane, common ² |
| cocklebur, common | pusley, Florida |
| coffeeweed | radish, wild |
| copperleaf, Virginia ² | ragweed, common |
| croton, Texas | ragweed, giant |
| croton, woolly | rape, wild |
| flixweed | rocket, yellow |
| galinsoga | salsify, common ¹ |
| geranium, Carolina ² | salsify, western ¹ |
| hemp, wild | shepherdspurse |
| horseweed, (marestail) ² | sicklepod |
| jewelweed | smartweed (annual species) ^{1,2} |
| jimsonweed | sneezeweed, bitter |
| knotweed ¹ | sowthistle, annual |
| kochia | sowthistle, spiny |
| lambsquarters, common | spanishneedles |
| lettuce, prickly ^{1,2} | sunflower |
| lettuce, wild | sweetclover |
| lupines | tansymustard |
| mallow, little ¹ | thistle, bull |

mallow, Venice¹
marshelder
morningglory, annual
morningglory, ivy
morningglory, woolly

thistle, musk¹
thistle, Russian (tumbleweed)¹
velvetleaf
vetches

Perennial Weeds

alfalfa^{1,2}
artichoke, Jerusalem¹
aster, many-flower¹
Austrian fieldcress¹
bindweed (hedge, field and
European)^{1,2}
blue lettuce
blueweed, Texas
broomweed
bullnettle^{1,2}
carrot, wild¹
catnip
chicory
clover, red^{1,2}
coffeeweed
cress, hoary¹
dandelion¹
docks¹
dogbanes¹

eveningprimrose, cutleaf²
garlic, wild¹
goldenrod
hawkweed, orange¹
healall
ironweed, western²
ivy, ground¹
Jerusalem-artichoke
loco, bigbend
nettles (including stinging)¹
onion, wild¹
pennywort
plantains
ragwort, tansy¹
sowthistle, perennial
thistle, Canada^{1,2}
vervains¹
waterplantain
wormwood

¹ These weeds are only partially controlled and may require repeated applications and/or use of higher specified rates of this product even under ideal conditions of application.

² This product may not be used to control this weed species in the state of California.

Specific Use Sites

Asparagus

Application Timing	2,4-D Amine 4 (pt./acre)	Specific Use Directions
<p>Apply this product in the spring on actively growing weeds.</p> <p>Refer to the Weeds Controlled section for specific weeds controlled.</p>	3 to 4	<p>Apply in 50-60 gallons of water per acre for ground application and 12 gallons per acre for aerial application.</p> <p>If asparagus spears are present, treat immediately after cutting. Make no more than 2 applications during the harvest season and these should be spaced at least 1 month apart. Spears contacted by the spray may be malformed and off-flavored. If spears are malformed by spray, cut immediately and discard.</p> <p>Only apply as a postharvest spray using drop nozzles to avoid spraying the fern.</p>
<p>Restrictions:</p> <ul style="list-style-type: none"> • Preharvest interval (PHI) is 3 days. • Limited to 2 applications per crop cycle. • Do not apply more than 4.0 pts. of this product (2 lbs. ae) per acre per application. • Minimum of 30 days between applications. • Do not apply more than 8.0 pints of this product (4.0 lb. ae) per acre per year. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds ae per acre per year.</p>		

Cereal Grains (Wheat, Barley Millet, Oats, Rye and Triticale)

(Not Underseeded with Legumes)

Crop/Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
<p>Wheat, Barley, Millet, Rye, Triticale</p> <p>Annual and Biennial broadleaf weeds</p> <p>Perennial broadleaf Weeds</p>	<p>1/2 to 2¹</p> <p>1 to 2¹</p>	<p>Apply after crop is fully tillered, but before boot stage of growth (usually 4 to 8 inches tall). Do not apply before tillering or from early boot through the milk stage of growth.</p>
<p>Oats</p> <p>Spring Seeded</p> <p>Fall Seeded Southern</p>	<p>1/2</p> <p>3/4 to 1-1/2¹</p>	<p>Apply after crop is fully tillered, but before boot stage of growth (usually 4 to 8 inches tall). Do not apply before tillering or from early boot through the milk stage of growth.</p> <p>Do not apply during or immediately following cold weather.</p>

Preharvest application		Apply using air or ground equipment when crop is in dough stage of grain development to control or suppress weeds that might interfere with harvest. Do not apply from early boot through the milk stage of growth.
All Cereals	1	
¹ Use the lower rate in the labeled rate range for small rapidly growing annual or biennial weeds and a higher rate for perennial weeds or for annual or biennial weeds in advanced growth stages or when growing conditions are less than ideal. Higher labeled rates increase the risk of crop injury and should be used only where weed growth justifies such risk. Do not apply Avalaire 2,4-D Amine at the crop seedling stage of growth. Consult state agricultural experiment station or extension service weed specialists for recommendations or suggestions to fit local conditions.		
Restrictions: <ul style="list-style-type: none"> Limited to 1 application per crop cycle. Do not apply more than 3.5 pints of this product (1.75 lb. ae) per acre per year. Postemergence: Do not apply more than 2.0 pints of this product (1.0 lbs. ae) per acre per application. Preharvest: Do not apply more than 1 pint of this product (0.5 lb. ae) per acre per application. Do not harvest for grain for 14 days after application. Do not allow grazing or harvest as forage within 14 days after application. 		
Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.75 pounds ae per acre per year.		

Corn (Field Corn, Popcorn and Sweet Corn)

NOTE: Corn hybrids vary in tolerance to 2,4-D. Apply this product only to varieties known to be 2,4-D tolerant. Consult your seed company representative or local Agricultural Experiment Station or Extension Service Weed Specialist for information on 2,4-D tolerance of corn varieties. Application of this product may cause temporary stem brittleness in corn. To avoid breakage, delay cultivation for 8 to 10 days following application.

Application Timing/ Stage of Growth	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Preplant (Burndown) Preemergence (Field corn, popcorn, and sweet corn) Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.	1 to 2	Use high rate in the labeled rate range for less susceptible weed or cover crops, weeds in advanced stages of development, or unless favorable growth conditions. Preplant: Apply 7 to 14 days before planting corn to control emerged broadleaf weed seedling or exiting cover crops. Preemergence: Apply any time after planting, but before corn emerges to control broadleaf weed seedlings or existing cover crops. Do not use on light sandy soils.
Postemergence (Field corn, popcorn, and sweet corn) Annual broadleaf weeds Crop up to 8 inches tall Crop 8 inches tall to tasseling (directed spray only) Perennial broadleaf weeds	 1/2 to 1 1 1	Apply when weeds are small and corn is less than 8 inches tall (to top of crop canopy). If corn is more than 8 inches tall, use drop nozzles and directed sprays to keep spray off foliage. Treat perennial weeds when they are in bud to bloom stage. Do not tank mix with atrazine, oil or other adjuvants. Do not apply from tasseling to hard dough stage. Sweet Corn: To minimize potential for crop injury, use the lowest rate in the labeled rate range.
Preharvest (Field corn and popcorn only)	up to 3	Apply after corn is in hard dough (or denting) stage. Do not apply preharvest to sweet corn.

Restrictions:

- **Field Corn and Popcorn:**

Preharvest interval (PHI) is 7 days.

Do not use treated crop as fodder for 7 days following application

Limited to 1 Preplant, 1 Postemergence and 1 Preharvest application per crop cycle.

Preplant or Preemergence: Do not apply more than 2 pints of this product (1 lb. ae) per acre per application.

Postemergence: Do not apply more than 1 pint of this product (0.5 lb. ae) per acre per application.

Preharvest: Do not apply more than 3 pints of this product (1.5 lbs. ae) per acre per application.

Do not apply more than 6 pints of this product (3.0 lbs. ae) per acre per crop cycle.

- **Sweet Corn:**

Preharvest interval (PHI) is 45 days.

Minimum of 21 days between applications.

Limited to 1 Preplant or Preemergence and 1 Postemergence application per crop cycle.

Preplant or Preemergence: Do not apply more than 2 pints of this product (1 lb. ae) per acre per application.

Postemergence: Do not apply more than 1 pint of this product (0.5 lb. ae) per acre per application.

Do not apply more than 3 pints of this product (1.5 lbs. ae) per acre per crop cycle.

Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 3.0 pounds ae per acre per year for Field and Pop Corn. Do not exceed a combined total of 1.5 pounds of ae per acre for Sweet Corn.

Fallow Land and Crop Stubble

Fallowland is idle land, postharvest to crops or between crops.

Type of Weeds	2,4-D Amine 4 (pt./acre)	Specific Use Directions
Annual broadleaf weeds	1 to 2	Use a lower rate in the labeled rate range when weeds are small (2 to 3 inches tall) and actively growing. Use a higher rate in the labeled rate range when weeds are larger and under less favorable growth conditions.
Biennial broadleaf weeds	2 to 4	Apply when musk thistles or other biennial species are in the seedling to rosette stage and before development of flower stalks. The lower labeled rate can be used in the spring during the rosette stage. Use the highest labeled rate in the fall or after flower stalks have developed.
Perennial broadleaf weeds	2 to 4	Apply when perennial weeds are in bud to early bloom stage or while in good vegetative growth.
Wild garlic and onion in crop stubble	4	Apply to new regrowth of wild garlic or onion which occurs in the fall after harvest of small grains, corn or grain sorghum.
Precautions:		
<ul style="list-style-type: none"> • For best weed control results, do not cultivate for at least 2 weeks after application or until top growth is dead. 		

Restrictions:

- Do not cut forage for hay within 7 days of application.
- Limited to 2 applications per year.
- Minimum spray interval between application is 30 days.
- Plant only labeled crops within 29 days following application*.
- Do not apply more than 4.0 pints of this product (2.0 lbs. ae) per acre per application.
- Do not apply more than 8.0 pints of this product (4.0 lbs. ae) per acre per year

Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds ae per acre per year.

***Planting in Treated Areas**

Labeled Crops: Within 29 days after an application of this product, plant only those crops listed on this or other registered 2,4-D labels. Follow more stringent limitations, if any, provided in directions for specific crops. Labeled crops may be at risk of crop injury or loss if planted soon after application, especially during the first 14 days. Degradation factors described below should be considered in weighing this risk.

Other Crops: All other crops may be planted 30 or more days after application without concern for illegal residues in the planted crop. However, under certain conditions, there may be a risk of injury to susceptible crops. Degradation factors described below should be considered in weighing this risk. Under normal conditions, any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed since application.

Degradation Factors: When planting into treated areas, the risk of crop injury is less if lower rates of product were applied and conditions following application have included warm, moist soil conditions that favor rapid breakdown of 2,4-D. Risk is greater if higher rates of product were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application. Consult your local agricultural extension service or information about susceptible crops and typical conditions in your area.

GRAPE VINEYARDS (For use in California, Oregon and Washington only)

Established at least 3 years to control Field Bindweed (Morning Glory), Canadian Thistle, and other 2,4-D susceptible broadleaf weeds.

Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Apply when weeds are in the bud to early bloom stage and growing vigorously. Apply after shatter following bloom and before grape shoots reach the ground or during dormant season.	1.8 to 2.7	Dilute in 10 to 100 gallons of water to treat 1 acre of ground to be sprayed. For band or spot treatment, calculate rates according to the actual portion of an acre treated. Use a hooded boom and low pressure flooding nozzles to deliver coarse droplets.
Precautions: Grapes are extremely sensitive to 2,4-D. Use a direct application so no 2,4-D contacts grape leaves and young shoots or stems.		
Restrictions: <ul style="list-style-type: none"> • For use in California, Oregon and Washington. • Preharvest Interval (PHI) is 100 days. • Limited to 1 application per crop cycle. • Do not apply more than 2.7 pints of this product (1.36 lbs. ae) per acre per application. 		
Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain		

2,4-D, do not exceed a combined total of 1.36 pounds ae per acre per crop cycle.

HOPS

Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
<p>Postemergence</p> <p>Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.</p>	<p>1</p>	<p>Make directed applications to the row middles. Make up to 3 applications at 30 day intervals with the last application before harvest.</p>
<p>Precautions: Hop foliage, especially new growth, is susceptible to this product. Take care to avoid spray or drift outside target area. The use of shielded or hooded sprayers, coarse sprays and low pressure (30 psi or less) will minimize contact with foliage and plant injury.</p>		
<p>Restrictions:</p> <ul style="list-style-type: none"> • Preharvest Interval (PHI) is 28 days. <p>Postemergence</p> <ul style="list-style-type: none"> • Limited to 3 applications per crop cycle. • Minimum of 30 days between applications. • Do not apply more than 1 pint of this product (0.5 lb. ae) per acre per application. • Do not apply more than 3 pints of this product (1.5 lbs. ae) per acre per crop cycle. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 pounds ae per crop cycle.</p>		

Orchard Floors
Apples, Pears, Stone Fruit, Nut Orchards and Pistachios

Application Timing	2,4-D Amine 4 (pt./acre)	Specific Use Directions
Postemergence annual and biennial weeds perennial weeds	1 – 2 up to 4	For application to orchard floors, use coarse, low pressure sprays and sufficient water for thorough coverage of weeds. Apply to annual weeds when small and actively growing. Apply to perennial weeds from bud to bloom stage.

To avoid tree injury:

- Avoid application immediately before irrigation and withhold irrigation for 2 days before and 3 days after application.
- To avoid leaching, do not spray bare ground or apply to dry soils.
- Do not make orchard floor applications in areas with light sandy soils.
- Avoid spray drift contact on foliage, fruit, stems, trunks, or trees or exposed roots.
- Newly established trees or young orchards are more susceptible to 2,4-D injury. Apply only to orchards that are at least one year old and well-established as indicated by vigorous plant growth.
- Do not apply when orchards are blooming.

Restrictions;

- **Preharvest Intervals (PHI):**
Apples and Pears: Do not harvest for 14 days after application.
Stone Fruit: Do not harvest for 40 days after application.
Nut Orchards and Pistachios: Do not harvest for 60 days after application.
- Do not cut orchard floor foliage for hay within 7 days after application.
- Limited to 2 applications per year.
- Minimum of 75 days between applications.
- Do not apply more than 4 pints of this product (2 lbs. ae) per acre per application.
- Do not apply more than 8.0 pints of this product (4.0 lb. ae) per acre per year.

Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of ae per acre per year.

Rice (Not for Use in California)

NOTE: Some rice varieties under certain conditions or stages of growth may be injured by 2,4-D. Before applying, consult local university or agricultural extension service specialists regarding local treatment recommendations for various rice varieties.

Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Preplant	1 to 2	Apply 2 to 4 weeks before planting rice to control emerged broadleaf weeds.
Postemergence Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.	1 to 2 ¹	Apply when rice is in late tillering stage and at the time of first joint development (first to second green ring). Do not apply after panicle initiation, after rice internodes exceed one-half inch, at early seedling, early panicle or boot and heading stages.
¹ Up to 3 pt./acre may be applied postemergence for difficult weed control situations. However, there is greater risk of crop injury at rates greater than 2 pt./acre and such rates should be used only when the need for weed control justifies additional risk to the crop.		
Restrictions: <ul style="list-style-type: none"> • Limited to 1 application per crop cycle. • Preharvest Interval (PHI) is 60 days. • Preplant: Do not apply more than 2 pints of this product (1 lb. ae) per acre per application. • Postemergence: Do not apply more than 3 pints of this product (1.5 lbs. ae) per acre per application. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 pounds of ae per acre per crop cycle.</p>		

WILD RICE (For use in Minnesota only)

For the control of Common Waterplantain

NOTE: For use only on wild rice grown in commercial paddies. Do not apply to wild rice growing in lakes, rivers or streams. Water that is drained out of wild rice paddies is not to be used to irrigate other crops. In order to protect federally listed endangered or threatened species, the Minnesota Department of Agriculture has a program to pre-notify landowners where pesticide applications may affect federally listed endangered or threatened species.

Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
<p>Postemergence</p> <p>Apply when wild rice is in the 1 to 2 aerial leaf to early tillering stage and after water plantain has emerged from the water and before wild rice has reached the boot stage.</p>	<p>1/2</p>	<p>Broadcast in 4 to 10 gallons total spray volume.</p> <p>Apply after water plantain has emerged from the water and when wild rice is in the 1 to 2 aerial leaf to early tillering stage.</p> <p>Do not spray after wild rice has reached the boot stage.</p>
<p>Restrictions:</p> <ul style="list-style-type: none"> • Preharvest interval (PHI) is 60 days. <p>Postemergence</p> <ul style="list-style-type: none"> • Limited to 1 application per crop cycle. • Do not apply more than 1/2 pint of this product (0.25 lb. ae) per acre per application. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 0.25 pounds of ae per acre per crop cycle.</p>		

Sorghum [Grain Sorghum (Milo) and Forage Sorghum]

NOTE: Temporary crop injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply **Avalaire 2,4-D Amine** herbicide under these conditions, use no more than 2/3 pint per acre. Sorghum hybrids vary in tolerance to 2,4-D. Some are easily injured. Apply only to varieties known to be tolerant to 2,4-D. Consult the seed company or your agricultural experiment station or extension service weed specialist for this information.

Application Timing/ Stage of growth	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
<p>Postemergence</p> <p>Crop 6 – 8 inches tall</p> <p>Crop 8 – 15 inches tall (directed spray only)</p> <p>Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.</p>	<p>1/2 to 1-1/2</p> <p>3/4 to 1-1/2</p>	<p>Apply when sorghum is 6 to 15 inches tall. If sorghum is more than 8 inches tall (to top of crop canopy), use drop nozzles and apply as a directed spray to keep spray off foliage.</p>
<p>Restrictions:</p> <ul style="list-style-type: none"> • Do not use with oil or other adjuvants. • Do not treat during boot, flowering or dough stage. • Do not apply more than 1-1/2 pint of this product (0.75 lbs. ae) per acre per application. • Limited to 1 application per crop cycle. • Preharvest Interval (PHI) is 30 days. • Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application. • Do not apply more than 1.5 pints /acre of Avalaire 2,4-D Amine (0.75 lb. ae) per year. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.0 pound of ae per acre per year.</p>		

Soybeans (Preplant Burndown Only)

NOTE: Unacceptable injury to soybeans planted in treated fields may occur. Whether or not soybean injury occurs and the extent of such injury will depend on weather (temperature and rainfall) from herbicide application until soybean emergence and agronomic factor; such as the amount of weed vegetation and previous crop residue present at the time of application. Injury is more likely under cool rainy conditions and where there is less weed vegetation and crop residue present.

Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Preplant (Burndown) Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.	3/4 to 1	Apply not less than 15 days before planting soybeans, when weeds are small and actively growing. Use the higher labeled rate on larger weeds and when perennials are present.
	> 1 to 2	Apply not less than 30 days before planting soybeans, when weeds are small and actively growing. Use the higher labeled rate on larger weeds and when perennials are present.
Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may be added to spray mixtures of Avalaire 2,4-D Amine to increase the herbicidal effectiveness on certain weeds. Read and follow all directions and precautions on this label and on the label of each product added to the spray mixture. Refer to the " Mixing Instructions " section for instructions for tank mixing and compatibility testing		
After applying, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter press wheel, if necessary, to ensure that planted seed is completely covered. If desired, this product may be applied Preplant to soybeans in tank mixtures with other herbicides such as Poast® (sethoxydim, 7969-58), Poast Plus® (sethoxydim, 7969-88), Roundup & Roundup D-Pak® (glyphosate, 524-537), Honcho® (glyphosate, 524-539), Gramoxone® (paraquat dichloride, 100-1431), Prowl® (pendimethalin, 241-337), Pursuit Plus® (Imazethapyr, 241-310), Scepter 70 DG® (Imazaquin, 241-306), Squadron® (pendimethalin and imazaquin, 241-327) and others that are registered for Preplant soybean 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, 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.		
Precautions: <ul style="list-style-type: none"> • Applying Avalaire 2,4-D Amine as a preplant application in soybeans may result in soybean injury, including possible stand loss and/or yield reduction. • Mowing or cultivating weeds prior to treating with this product may result in poor control. 		
Restrictions: <ul style="list-style-type: none"> • Do not feed treated hay, forage, or fodder or graze treated soybeans to livestock. • Do not feed or graze treated cover crops to livestock. • Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D preplant use. • Do not apply more than 2 pints of this product (1.0 lb. ae) per acre per crop cycle. • Preplant (2 application option): Do not apply more than 1 pint of this product (0.5 lb. ae) per acre per preplant application. Do not apply within 15 days of planting soybeans. • Preplant (single application option): Do not apply more than 2 pints of this product (1.0 lb. ae) per acre per application. Do not apply within 30 days of planting soybeans. 		
Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.0 pounds of ae per acre per crop cycle.		

STRAWBERRIES (Established plantings only)

Not for use in California and Florida

Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Apply in early spring when strawberries are dormant or immediately after the last picking. Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.	2 to 3	Apply in 25 to 50 gallons of water per acre. Apply in established strawberry plantings only. Do not apply unless possible injury to the crop is acceptable. Follow recommendations of State Extension Horticultural Specialist in the area.
<p>Restrictions:</p> <ul style="list-style-type: none"> Do not apply in California or Florida. Dormant or after last picking: Limited to 1 application per crop cycle. Do not apply more than of 3 pints of this product (1.5 lbs. ae) per acre per application. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 pounds of ae per acre per crop cycle.</p>		

Sugarcane

Application Timing/ Stage of Growth	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Preemergence Postemergence Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.	3 3 to 4	Preemergence: Apply before cane emerges. Postemergence: Apply after cane emerges through layby. Use higher labeled rate for perennial weeds and difficult-to-control species.
<p>Restrictions:</p> <ul style="list-style-type: none"> Limited to 1 preemergence application per crop cycle. Do not harvest cane prior to crop maturity. Do not apply more than 8.0 pints of this product (4.0 lbs. ae) per acre per crop cycle. Preemergence Application: Do not apply more than 4 pints of this product (2.0 lbs. ae) per acre per application. Postemergence Application: Do not apply more than 4 pints of this product (2.0 lbs. ae) per acre per application. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of ae per acre per year.</p>		

Forestry Uses

Forest site preparation, forest roadsides, brush control, established conifer release (including Christmas trees and reforestation areas)

Agricultural Use Requirements for Forest Use (Except Tree Injection Use): For use in forests, follow PPE and Reentry instructions in the “Agricultural Use Requirements” section under the “Directions for Use” heading of this label.

Treatment Site Method of Application	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Annual Weeds	2 to 4	Apply when weeds are small and growing actively before the bud stage. Apply when biennial and perennial species are in the seedling to rosette stage and before flower stalks appear. For difficult to control perennial broadleaf weeds and woody species, use up to 8 pints of Avalaire 2,4-D Amine herbicide and 1 to 4 qt. Garlon® (triclopyr, 62719-37) 3A herbicide per acre. For conifer release, make application in early spring before budbreak of conifers when weeds are small and actively growing.
Biennial and perennial broadleaf weeds and susceptible woody plants	4 to 8	
Spot Treatment to control broadleaf weeds	See Instructions for “Spot Treatment”	To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the specified broadleaf rate and spray to thoroughly wet all foliage. See rate conversion table and instructions for “Spot Treatment” and use of hand-held sprayers under “Application”.
Conifer Release: Species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir	3 to 8	To control competing hardwood species such as alder, aspen, birch, hazel, and willow, apply from mid to late summer when growth of conifer trees has hardened off and woody plants are still actively growing. Apply with ground or air equipment, using sufficient spray volume to ensure complete coverage. Because this treatment may cause occasional conifer injury, do not apply if such injury cannot be tolerated.
Directed Spray: Conifer plantations including pine	8 pt/100 gal	Apply when brush or weeds are actively growing by directing the spray so as to avoid contact with conifer foliage and injurious amounts of spray. Apply in oil, oil-water, or water carrier in a spray volume of 10 to 100 gallons per acre.
Basal Spray (May also be used in rangeland, pastures, and noncropland)	17 pt /100 gal or	Thoroughly wet the base and root collar of all stems until the spray begins to accumulate around the root collar at the ground line. Wetting stems with the mixture may also aid in control. Apply as soon as possible after cutting trees. Thoroughly soak the entire stump with the 2,4-D mixture including cut surface, bark and exposed roots.
Surface of Cut Stumps (May also be used in rangeland, pastures, and noncropland)	2.6 fl. oz./gal of water	

<p>Frill and Girdle (May also be used in rangeland, pastures, and noncropland)</p>		<p>Cut frills (overlapping V-shaped notches cut downward through the bark in a continuous ring around the base of the tree) using an axe or other suitable tool. Treat freshly cut frills with as much of the 2,4-D mixture as they will hold.</p>
<p>Tree Injection Application (May also be used in rangeland, pastures, and noncropland)</p>	<p>(1 to 2 ml. per injection site)</p>	<p>To control unwanted hardwood trees such as elm, hickory, oak, and sweetgum in forests and other non-crop areas, apply by injecting at a rate of 1 ml. of undiluted Avalaire 2,4-D Amine per inch of trunk diameter at breast height (DBH) as measured approximately 4 ½ ft. above the ground. For hard to control species such as ash, maple, and dogwood use 2 ml. of undiluted Avalaire 2,4-D Amine per injection site or double the number of 1 ml. injections. Make applications as close to the root collar as possible and the injection bit must penetrate the inner bark. Applications may be made throughout the year, but for best results apply between May 15 and October 15. Maples should not be treated during the spring sap flow. For hard to control species such as ash, maple, and dogwood, use 2 ml of undiluted Avalaire 2,4-D Amine per injection site.</p> <p>Note: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.</p>
<p>Restrictions:</p> <ul style="list-style-type: none"> • Do not allow sprays to contact conifer shoot growth (current year's new growth) or injury may occur. • Do not apply to nursery seed beds. • For conifer release, do not use on plantations where pine or larch are among the desired species. • Grazing and Haying Restrictions: If grazing or haying is anticipated, do not apply more than 4 pt/acre of Avalaire 2,4-D Amine per application. Do not harvest forage or hay from treated area for 7 days after application. • Limited to 1 broadcast application per year. • For broadcast applications, do not apply more than 8.0 pints of this product (4.0 lb. ae) per 12 month period. • Basal Spray, Cut Surface – Stumps and Frill: Limited to 1 basal spray or cut surface application per year. Do not apply more than 16 pints of this product (8.0 lbs. ae) per 100 gallons of spray solution. <p>Injection: Limited to 1 injection application per year. Do not apply more than 2.0 ml of this product per injection site.</p>		

Rangeland and Established Grass Pastures
(Including Perennial Grasslands Not in Agricultural Production Such as Conservation Reserve
Program Acres)

Agricultural Use Requirements for Rangeland and Established Pastures: When this product is applied to rangeland and established pastures not harvested for hay or seed follow reentry requirements given in the “**Non-Agricultural Use Requirements**” section under the “**Directions for Use**” heading of this label.

Target Weeds or Woody Plants	2,4-D Amine 4 (pt./acre)	Specific Use Directions
Annual broadleaf weeds Biennial and perennial broadleaf weeds	2 2 to 4	For best results, apply when weeds are small and growing actively before the bud stage. Apply when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks appear. Refer to the "Weeds Controlled" section for a listing of susceptible weed species and weeds that may be only partially controlled and require repeat applications and/or use of higher specified rates, even under ideal conditions of application
Spot Treatment to control broadleaf weeds	See instructions for "Spot Treatment"	To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rate specified for this treatment site and spray to thoroughly wet all foliage. See rate conversion table and instructions for "Spot Treatment" and use of hand-held sprayers under "Application".
Tree Injection Application	See instructions for tree injection application in "Forestry Uses" section.	
Wild garlic and wild onion	4	Make three applications (fall-spring-fall or spring-fall-spring) starting in late fall or early spring.
Broadleaf weed control in newly sprigged coastal bermudagrass	2 to 4	Applications may be made either preemergence or postemergence. Follow "Specific Use Directions" for annual, biennial and perennial broadleaf weed control, above.
Sand shinnery oak Sand sagebrush	2	Sand shinnery oak: Apply by aircraft between May 15 and June 15. Sand sagebrush: Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use a 1:4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre.
Big sagebrush Rabbitbrush	4	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use a 1:4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre. Retreatment may be needed.

Chamise, manzanita, buckbrush, coastal sage, coyotebrush, and chaparral species.	4	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use water or 1:4 oil-water emulsion as carrier and a spray volume of 5 to 10 gallons per acre. Retreatment may be needed.
Southern wild rose Broadcast application Spot treatment	up to 4 8 pt/100 gal of spray	Broadcast: Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment. Spot treatment: Apply when foliage is well developed. Thorough coverage is required. Use 8 pints of Avalaire 2,4-D Amine plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water. Two treatments may be required.
Woody Brush Control	See instructions for basal treatment, cut stump or frill & girdle in “ FORESTRY USES ” section.	
Conservation Reserve Program (CRP) Acres	For program lands such as CRP, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules, or this labeling, must be followed.	
Restrictions:		
<ul style="list-style-type: none"> • Do not apply more than 4 pints of this product (2.0 lbs. ae) per acre per application. • Minimum of 30 days between applications. • Do not harvest forage or hay from treated areas for 7 days after application. • Do not apply more than 8 pints of this product (4.0 lb. ae) per acre per year. • Limited to 2 applications per year. • Do not use on bentgrass, alfalfa, clover, or other legumes. • Do not use on newly seeded areas until grass is well established. • Do not use from early boot to milk stage where grass seed production is desired. • Use 2 or more gallons of spray solution per acre. • Postemergence: For susceptible annual and biennial broadleaf weeds use 2.0 pints of this product (1.0 lbs ae) per acre per application. For moderately susceptible biennial and perennial broadleaf weeds use 2.0 to 4.0 pints of this product (1.0 to 2.0 lbs ae) per acre per application. For difficult to control weeds and woody plants use 4 pints of this product (2.0 lbs ae) per acre per application. • For spot treatment use 4 pints of this product (2.0 lbs ae) per acre per application. • Livestock Feeding Restriction: Do not graze dairy animals on treated areas within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 7 days after application. For government program grasslands, follow program grazing restrictions if more restrictive than those given above. For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules, or this label must be followed. 		
Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of ae per acre per year.		

Non-Cropland Areas

Such as fencerows, hedgerows, roadsides, drainage ditches, rights-of way, utility power lines, railroads, airports

Agricultural Use Requirements for Non-cropland Areas: When this product is applied to non-cropland areas follow reentry requirements given in the “**Non-Agricultural Use Requirements**” section under the “**Directions for Use**” heading of this label.

Treatment Site Method of Application	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Annual broadleaf weeds Biennial and perennial broadleaf weeds Susceptible woody plants	2 to 4 4 to 8	Apply when annual weeds are small and growing actively before the bud stage. Biennial and perennial weeds should be rosette to bud stage, but not flowering at the time of application. For difficult to control perennial broadleaf weeds and woody species, tank mix up to 8 pints of 2,4-D Amine plus 1 to 4 qt. Garlon® (triclopyr, 62719-37) 3A herbicide per acre. Oil or wetting agent may be added to the spray, if needed, for increased effectiveness. For ground application: (High volume) apply a total of 100 to 400 gal. per acre; (low volume) apply a total of 10 to 100 gal. per acre. For helicopter: Apply a total of 5 to 30 gal. per acre spray volume.
Spot Treatment to control broadleaf weeds	See Instructions for “ Spot Treatment ”	To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rate specified for this treatment site and spray to thoroughly wet all foliage. See rate conversion table and instructions for “ Spot Treatment ” and use of hand-held sprayers under “ Application ”.
Tree Injection Application	See instructions for tree injection application in "Forestry Uses" section.	
Southern wild rose Broadcast application Spot treatment	up to 8 8 pts./100 gal. of spray	Broadcast: Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment. Spot treatment: Apply when foliage is well developed. Thorough coverage is required. Use 8 pints of Avalaire 2,4-D Amine plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water. Add a non-ionic surfactant to improve coverage. Two or more treatments may be required.
Precautions: <ul style="list-style-type: none"> • Bentgrass, St. Augustine, clover, legumes and dichondra may be severely injured or killed by this treatment. Restrictions: <ul style="list-style-type: none"> • Do not apply more than 8 pints of this product (4.0 lb. ae) per acre per year. • Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants 		

being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

- Do not apply to newly seeded areas until grass is well established.
- Use 2 or more gallons of spray solution per acre.
- Do not harvest forage or hay from treated areas for 7 days after application.
- **Postemergence (Annual, biennial and perennial broadleaf weeds):** Limited to 2 applications per year. Do not apply more than 4 pints of this product (2.0 lb. ae) per acre per application. Minimum of 30 days between applications.
- **Postemergence (Woody Plants):** Limited to 1 application per year. Do not apply more than 8 pints of this product (4.0 lb. ae) per acre per application.

Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of ae per acre per year.

Turf Uses

Grasses Grown for Seed or Sod Farms

Agricultural Use Requirements: When used in grass grown for seed or sod farms, follow PPE and reentry instructions in the "Agricultural Use Requirements" section under the "Directions for Use" heading of this label.

Treatment Site Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Grasses Grown for Seed (Postemergence Use) Seedling grass (five-leaf stage or later) Well-established grasses	3/4 to 1 1 to 4	Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth. Do not apply to newly seeded grasses until well established (five-leaf stage or later) and then use a maximum of 1 pt./acre. Cool season grasses are tolerant of higher rates. Do not apply to grass in the early boot through milk stage if seed production is desired.
Sod Farms (Postemergence) Refer to the Weeds Controlled section for the specific weeds controlled and any comments for each.	1/2 to 4	When grass is well established, higher rates of up to 4 pt./acre may be applied for control of hard-to-kill annual or perennial weeds. Deep-rooted perennials such as bindweed and Canada thistle may require repeat applications. Avoid mowing sod farms for 1 to 2 days before or after application. Delay irrigation until the day following application.

Restrictions:

- Do not use on creeping grasses such as bent except as a spot treatment.
- Do not use on injury-sensitive southern grasses such as St. Augustinegrass.
- Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed.
- **Reseeding:** Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall application, reseed in the spring.
- Use sufficient spray solution for thorough and uniform coverage, and no less than 2 gallons per acre.
- Do not apply more than 8 pints of this product (4.0 lb. ae) per acre per year.
- Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.
- **Postemergence (Annual, biennial and perennial broadleaf weeds):** Limited to 2 applications per year. Do not apply more than 4 pints of this product (2.0 lb. ae) per acre per application. Minimum of 30 days between applications.
- **Postemergence (Woody Plants):** Limited to 1 application per year. Do not apply more than 8 pints of this product (4.0 lb. ae) per acre per application.

Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of ae per acre per year.

Ornamental Turf (Excluding Grasses Grown for Seed or Sod Farms)

(Includes lawns, golf courses, cemeteries and parks, airfields, roadsides, vacant lots, drainage ditch banks)

Use Requirements for Ornamental Turf Areas: When this product is applied to ornamental turf areas, follow PPE and reentry instructions in the "Non-agricultural Use Requirements" section of this label.

Treatment Site Application Timing	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
<p>Ornamental Turf (Postemergence)</p> <p>Seedling grass (five-leaf stage or later)</p> <p>Well-established grasses</p> <p>Biennial and perennial broadleaf weeds</p>	<p>3/4 to 1</p> <p>2 to 3</p> <p>3</p>	<p>Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth.</p> <p>Deep-rooted perennial weeds such as bindweed and Canada thistle may require repeat applications. Do not apply to newly seeded grasses until well established (five-leaf stage or later) and then use a maximum of 1 pt./acre. Cool season grasses are tolerant of higher rates.</p>
<p>Restrictions:</p> <ul style="list-style-type: none"> • Limited to 2 applications per year (does not include spot treatments). • Do not apply more than 3 pints of this product (1.5 lbs. ae) per acre per application. • Do not apply more than 6 pints of this product (3.0 lbs. ae) per acre per year, excluding spot treatments. • Do not use on creeping grasses such as bent except as a spot treatment. • Do not use on injury-sensitive southern grasses such as St. Augustinegrass. • Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed. • Do not reapply within 30 days of a previous broadcast application. • Reseeding: Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall application, reseed in the spring. <p>Avalaire 2,4-D Amine contains 0.5 pounds ae of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 3.0 pounds of ae per acre per year.</p>		

HYBRID POPLAR TREES, COTTONWOOD TREES AND WILLOW TREES GROWN AS BIOENERGY CROPS

This product may be used in hybrid poplar trees, cottonwood trees and willow trees grown as bioenergy crops. Application during warm weather is preferred. Apply when weeds are actively growing, preferably before bud stage. Repeat treatment may be necessary for less susceptible weeds; re-apply as needed. For hybrid poplar, cottonwood and willow make application prior to or after planting. For ground spray equipment, use 1/2 to 3 pints per acre. Apply 1 to 4 pints per acre using wick type applicators that treat weeds directly. Crop injury may result if the wick, wick solution or spray solution contact leaves or green bark of the crop trees.

NOTE: Exercise extreme care to avoid contact of the spray solution, spray, drift, or mist with tree foliage, green bark of trunks, stems or exposed roots of the poplar, cottonwood and willow trees. Contact of the spray solution to these parts can result in serious damage. Even when using extreme care in application of this product, injury to crops from this herbicide may occur. If you are not prepared to accept some degree of crop injury, do not use this product.

TANK MIXTURES

This product may be tank mixed with glyphosate to provide broader spectrum of control. 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.

RESTRICTIONS:

- Limited to 1 broadcast application per year.
- Do not apply more than of 4 pints of this product (2 lb. ae) per acre per application.
- Minimum of 30 days between applications.
- Use sufficient spray volume for thorough and uniform coverage, but a minimum of 10 gallons per acre for broadcast application.
- Do not apply this product by air for use of weed control in hybrid poplar tree, cottonwood trees and willow trees grown as bioenergy crops.
- Do not apply through any type of irrigation system.
- Do not allow people (other than applicator) or pets on treatment area during application.
- Do not enter or allow people (or pets) to enter treated areas until sprays have dried.
- Do not use this product in or near greenhouses, for use of weed control in hybrid poplar tree, cottonwood trees and willow trees grown as bioenergy crops.
- Do not spray immediately before irrigation and withhold above-ground irrigation for 3 days after application.
- Do not use treated vegetation for forage or hay or allow livestock to graze treated fields.
- Treated plantings not to be consumed by human or animal.

Aquatic Uses

Control of Weeds and Brush on Banks of Irrigation Canals and Ditches

Ditchbank Application: Postemergence

Target Weeds/Plants	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Annual Weeds	2 to 4	Apply using low pressure spray (10 to 40 psi) in a spray volume of 20 to 100 gallons per acre using power operated spray equipment. Apply when wind speed is low, 5 mph or less. Apply working upstream to avoid accidental concentration of spray into water.
Biennial and Perennial broadleaf weeds and susceptible wood plants	4	<p>Cross-stream spraying to opposite banks is not permitted and avoid boom spraying over water surface. When spraying shoreline weeds, allow no more than 2 foot overspray onto water surface with an average of less than 1 foot of overspray to prevent significant water contamination.</p> <p>Apply when weeds are small and growing actively before the bud stage. Apply when biennial and perennial species are in the seedling to rosette stage and before flower stalks appear. For hard-to-control weeds, a repeat application after 30 days at the same rate may be needed.</p> <p>For woody species and patches of perennial weeds, mix 8 pints of Avalaire 2,4-D Amine per 64 to 150 gallons of total spray. Wet foliage by applying about 3 to 4 gallons of spray per 1000 sq. ft. (10.5 X 10.5 steps)</p>

Restrictions:

- Limited to 2 applications per season.
- Do not apply more than 4 pints of this product (2.0 lbs. ae) per acre per application.
- Minimum of 30 days between applications.
- Do not apply more than 8 pints/acre per year.
- Spot treatment permitted.
- Do not use on small canals with a flow rate less than 10 cubic feet per second (CFS) where water will be used for drinking purposes.

CFS may be estimated by using the formula below:

The approximate velocity needed for the calculation can be determined by observing the length of time it takes a floating object to travel a defined distance. Divide the distance (ft.) by the time (sec.) to estimate city (ft. per sec.). Repeat 3 times and use the average to calculate CFS.

$$\text{Average Width (ft.)} \times \text{Average Depth (ft.)} \times \text{Average Velocity (ft. per sec.)} = \text{CFS}$$

For ditchbank weeds:

- Do not allow boom spray to be directed onto water surface.
- Do not spray across stream to opposite bank.

For shoreline weeds:

- Allow no more than 2 foot overspray onto water.

Aquatic Weed Control in Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches, Canals, Rivers and Streams that are Quiescent or Slow Moving, Including Programs of the Tennessee Valley Authority

Floating and Emergent Weeds: Including Water hyacinth (*Eichornia crassipe*)

Apply to emergent aquatic weeds in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, non-irrigation canals, rivers, and streams that are quiescent or slow moving.

NOTE: Before application, coordination and approval of local and state authorities may be required, either by letter or agreement or issuance of special permits for such use.

Target Weeds	Avalaire 2,4-D Amine (pt./acre)	Specific Use Directions
Water hyacinth (<i>E. crassipes</i>)	4 to 8	<p>Spray weed mass only. Apply when water hyacinth plants are actively growing. Repeat application as necessary to kill regrowth and plants missed in previous operation.</p> <p>Surface Application: Use power operated sprayers with boom or spray gun mounted on boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 100 to 400 gallons of spray mixture per acre. Special precautions such as use of low pressure, large nozzles and spray thickening agents should be taken to avoid spray drift to susceptible crops. Follow label directions for use of any drift control agent.</p> <p>Aerial Application: Use drift control spray equipment or thickening agent mixed in the spray mixture. Apply 1 gallon of Avalaire 2,4-D Amine per acre using standard boom systems using a minimum spray volume of 5 gallons per acre. For Microfoil* drift control spray systems, apply Avalaire 2,4-D Amine in a total spray volume of 12 to 15 gallons per acre.</p>
Other Floating and Emerged Aquatic Weeds	2.5 to 8	<p>Apply when leaves are fully developed above the waterline and are actively growing. Spray to wet foliage thoroughly. Contact your State Department of Game and Fish Commission for assistance in determining the best time and rate of application under your local conditions.</p> <p>Perennial and other hard to control weeds may require repeat applications for adequate control.</p>
<p>Restrictions:</p> <ul style="list-style-type: none"> • Do not apply more than 8 pints of this product (4.0 lbs. ae) per surface acre per application. • Limited to 2 applications per season. • Minimum of 21 days between applications. • Spot treatments are permitted. 		

Dissolved Oxygen Ratio: Fish breathe dissolved oxygen in the water and decaying weeds also use oxygen. When treating continuous, dense weed masses, it may be appropriate to treat only part of the infestation at a time. For example, apply the product in lanes separated by untreated strips that can be treated after vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment. Waters having limited and less dense weed infestations may not require partial treatments. Other local factors such as water exchange and sediment load can also influence the dissolved oxygen level. Coordination and approval of local and

state authorities may be required, either by letter of agreement or issuance of special permits for aquatic applications.

Water Use:

1. Water for Irrigation or Sprays:

- A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as pastures, turfgrass or cereal grains, the treated water may be used to irrigate and/or mix sprays for these sites at anytime after the 2,4-D aquatic application.
- B. Due to potential phytotoxicity considerations, the following restrictions are applicable: If treated water is intended to be used to irrigate or mix sprays for plants grown in commercial nurseries and greenhouses; and other plants or crops that are not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:
 - i. A setback distance from functional water intake(s) of > 600 feet was used for the application, or,
 - ii. A waiting period of 7 days from the time of application has elapsed, or,
 - iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. Wait at least 3 days after application before initial sampling at water intake.

2. Drinking Water (Potable Water):

- A. Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The potable water use restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of 2,4-D in the water is less than the MCL (Maximum Contaminant Level) of 70 ppb. Applicators should consider the unique characteristics of the treated waters to assure that 2,4-D concentrations in potable water do not exceed 70 ppb at the time of consumption.
- B. For floating and emergent weed applications, the drinking water setback distance from functioning potable water intakes is > 600 feet.
- C. If no setback distance of > 600 feet is used for the application, applicators or the authorizing organization must provide a drinking water notification prior to a 2,4-D application to the party responsible for a public water supply or to individual private water users. Notification to the party responsible for a public water supply or to individual private water users must be done in a manner to assure that the party is aware of a water use restrictions when this product is applied to potable water.

The following is an example of notification via posting, but other methods of notification which convey the above restrictions may be used and may be required in some cases under state or local law or as a condition of a permit.

EXAMPLE: Posting notification should be located every 250 feet including the shoreline of the treated area and up to 250 feet of shoreline past the application site to include immediate public access points. Posting must include the day and time of application. Posting may be removed if analysis of a sample collected at the intake 3 days or more following application shows that the concentration in the water is less than 70 ppb (100 ppb for irrigation or sprays), or after 7 days following application, whichever occurs first.

Text of Notification: Wait 7 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation, or sprays, unless water at functioning drinking water intakes is tested at least 3 days after application and is demonstrated by assay to contain no more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: _____ Time: _____

- D. Following each application of this product, treated water must not be used for drinking water unless one of the following restrictions has been observed:
 - 1. A setback distance from functional water intake(s) of > 600 feet was used for the application, or,
 - 2. A waiting period of at least 7 days from the time of application has elapsed, or,
 - 3. An approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) or less at the water intake. Sampling for drinking water analysis should occur no sooner than 3 days after 2,4-D application. Analysis of samples must be completed by a laboratory that is certified under the Safe

Drinking Water Act to perform drinking water analysis using a currently approved version of analytical Method Number 515, 555, other methods for 2,4-D as may be listed in Title 40 CFR Part 141.24, or Method Number 4015 (immunoassay of 2,4-D) from U.S. EPA Test Methods for Evaluating Solid Waste SW-846.

E. **Note:** Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intake.

F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.

SUBMERGED AQUATIC WEEDS: Including Eurasian Water Milfoil (*Myriophyllum spicatum*)

Apply to emergent aquatic weeds in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, non-irrigation canals, rivers, and streams that are quiescent or slow moving.

NOTE: Coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

Treatment Site	Application Rate per Acre	Specific Use Directions
<p>Aquatic Weed Control in Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches, Canals, Rivers and Streams that are Quiescent or Slow Moving, Including Programs of the Tennessee Valley Authority</p>	<p>2.8 gals. (10.8 lb. ae per acre foot)</p>	<p>Application Timing: For best results, apply in spring or early summer when aquatic weeds appear. Check for weed growth in areas heavily infested the previous year. A second application may be needed when weeds show signs of recovery, but no later than mid–August in most areas. Subsurface Application: Apply Avalaire 2,4-D Amine undiluted directly to the water through a boat mounted distribution system. Shoreline areas should be treated by subsurface injection application by boat to avoid aerial drift. Surface Application: Use power operated boat mounted boom sprayer. If rate is less than 5 gallons per acre, dilute to a minimum spray volume of 5 gallons per surface acre. Aerial Application: Use drift control spray equipment or thickening agents mixed with sprays to reduce drift. Apply through standard boom systems in a minimum spray volume of 5 gallons per surface acre. For Microfoil™ drift control spray systems, apply Avalaire 2,4-D Amine in a total spray volume of 12 to 15 gallons per acre. Apply to attain a concentration of 2 to 4 ppm (see Table 1 below).</p>
<p>Restrictions:</p> <ul style="list-style-type: none"> • Do not apply more than 2.8 gallons (22.7 pints) of this product (10.8 lbs. ae) per acre-foot of treated water per application. • Do not apply within 1500 ft of an active potable or irrigation water intake. • Limited to 2 applications per season. • Minimum of 21 days between applications. • When treating moving bodies of water, applications must be made while traveling upstream to prevent concentration of 2,4-D downstream from the application. • Do not treat areas that are not infested with aquatic weeds. • Wind Speed: Do not apply when wind speed is at or above 10 mph when making ground or surface applications. Do not aeri ally apply when wind speed is greater than 5 mph. Wind speed restrictions do not 		

- apply for subsurface applications used in submerged aquatic weed control programs.
- Irrigation: Unless an approved assay indicated that the 2,4-D concentration is 100 ppb (0.1 ppm acid or less, do not use water from treated areas for;
 1. irrigation other than non-crop areas or those crops or plants labeled for direct application of 2,4-D; or
 2. mixing sprays for agricultural or ornamental plants.
 - Potable Water: Unless an approved assay indicated that the 2,4-D concentration is 70 ppb (0.07 ppm) acid or less, do not use water from treated areas for potable water (drinking water).
 - Other Uses of Treated Water: Except as stated above, there are no restrictions on use of water from treated areas for fishing, watering of livestock, or other domestic purposes.

Table 1. Amount of 2,4-D to Apply for a Target Subsurface Concentration

Surface Area	Average Depth	For typical conditions – 2 ppm 2,4-D ae/acre-foot	For difficult conditions* - 4 ppm 2,4-D ae/acre-foot
1 acre	1 ft.	5.4 lbs. (11.3 pints product)	10.8 lbs. (22.7 pints product)
	2 ft.	10.8 lbs. (22.7 pints product)	21.6 lbs. (45.4 pints product)
	3 ft.	16.2 lbs. (34.1 pints product)	32.4 lbs. (68.2 pints product)
	4 ft.	21.6 lbs. (45.4 pints product)	43.2 lbs. (90.0 pints product)
	5 ft.	27.0 lbs. (56.8 pints product)	54.0 lbs. (113.6 pints product)
* Examples include spot treatment of pioneer colonies of Eurasian Water Milfoil and certain difficult to control aquatic species.			

Dissolved Oxygen Ratio: Fish require oxygen dissolved in water for life processes and a favorable water- oxygen ratio must be maintained. Decaying weeds use up dissolved oxygen in water. Fish kill resulting from decaying plant material can be prevented by: (1) treating the entire area when the weed mass is sparse and the rate of decomposition will not be sufficient to disturb the water-oxygen ratio; or (2) If application is delayed until there is a dense weed mass, at no more than one-half of a lake or pond at one time. For large bodies of weed-infested water, apply product in lanes, leaving buffers strips at least 100 feet wide which can be treated in 4 to 5 weeks or when vegetation in treated lanes has decomposed. During the growing season, decomposition of treated strips will usually occur in 2 to 3 weeks.

Water Use:

1. Water for Irrigation or Sprays

- A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as pastures, turfgrass or cereal grains, the treated water may be used to irrigate and/or mix sprays for these sites at anytime after the 2,4-D aquatic application.
- B. Due to potential phytotoxicity and/or residue considerations, the following restrictions are applicable: If treated water is intended to be used to irrigate or mix sprays for unlabeled crops, non-crop areas or other plants not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:
 - i. A setback distance described in the Drinking Water Setback Table was used for the application, or,
 - ii. A waiting period of 21 days from the time of application has elapsed, or,
 - iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. See "Table 3" for the waiting period after application but before taking the initial sampling at water intake.

2. Drinking Water (Potable Water):

A. Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The potable water use restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of 2,4-D in the water is less than the MCL (Maximum Contaminant Level) of 70 ppb. Applicators should consider the unique characteristics of the treated waters to assure that 2,4-D concentrations in potable water do not exceed 70 ppb at the time of consumption.

B. For submersed weed applications, the drinking water setback distances from functioning potable water intakes are provided in "*Table 2 Drinking Water Setback Distance*" (below).

C. If no setback distance from the Drinking Water Setback Table (*Table 2*) is to be used for the application, applicators or the authorizing organization must provide a drinking water notification and an advisory to shut off all potable water intakes prior to a 2,4-D application.

Notification to the party responsible for a public water supply or to individual private water users must be done in a manner to assure that the party is aware of the water use restrictions when this product is applied to potable water.

The following is an example of notification via posting, but other methods of notification which convey the above restrictions may be used and may be required in some cases under state or local law or as a condition of a permit.

EXAMPLE: Posting notification should be located every 250 feet including the shoreline of the treated area and up to 250 feet of shoreline past the application site to include immediate public access points. Posting should include the day and time of application. Posting may be removed if analysis of a sample collected at the intake no sooner than stated in *Table 3* (below) shows that the concentration in the water is less than 70 ppb (100 ppb for irrigation or sprays), or after 21 days following application, whichever occurs first.

Text of Notification: Wait 21 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation, or sprays, unless water at functioning drinking water intakes is tested no sooner than (insert days from *Table 3*) and is demonstrated by assay to contain no more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: _____ Time: _____

D. Following each application of this product, treated water must not be used for drinking water unless one of the following restrictions has been observed:

- i. A setback distance described in the Drinking Water Setback Distance Table was used for the application, or,
- ii. A waiting period of at least 21 days from the time of application has elapsed, or,
- iii. An approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) or less at the water intake. Sampling for drinking water analysis should occur no sooner than stated in *Table 3*. Analysis of samples must be completed by a laboratory that is certified under The Safe Drinking Water Act to perform drinking water analysis using a currently approved version of analytical Method Number 515, 555, other methods for 2,4-D as may be listed in Title 40 CFR Part 141.24 or Method Number 4015 (immunoassay of 2,4-D) from U.S. EPA Test Methods for Evaluating Solid Waste SW-846.

E. **Note:** Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.

F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.

Table 2. Drinking Water Setback Distance for Submersed Weed Applications

Application Rate and Minimum Setback Distance (feet) From Functioning Water Intake

1 ppm*	2 ppm*	3 ppm*	4 ppm*
600	1200	1800	2400
* ppm acid equivalent (ae) target water concentration			

Table 3. Sampling for Drinking Water Analysis After 2,4-D Application for Submersed Weed Applications

Minimum Days After Application Before Initial Water Sampling at the Functioning Potable Water Intake

1 ppm*	2 ppm*	3 ppm*	4 ppm*
5	10	10	14
* ppm acid equivalent (ae) target water concentration			

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep container tightly closed when not in use. If exposed to subfreezing temperatures, the product should be warmed to at least 40°F and mixed thoroughly before using.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. 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 HANDLING:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Triple rinse as follows:

[Containers 5 gallons or less: 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. Once cleaned, offer for recycling or reconditioning if appropriate.]

[Containers larger than 5 gallons: 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 back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip 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 a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Once cleaned, offer for recycling or reconditioning if appropriate.]

Pressure rinse as follows (all sizes): Empty the remaining contents into 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.

LIMITATION OF WARRANTY AND LIABILITY

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

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

[Avalaire 2,4-D Amine] is a trademark of Avalaire, LLC

Poast[®], Prowl[®], Pursuit[®], Scepter[®] and Squadron[®] are registered trademarks of BASF AG Product

Garlon[™] is a trademark of Dow AgroSciences, LLC

Honcho[®], Roundup[®] and Roundup[®] D-Pak[®] are registered trademarks of Monsanto Company

Gramoxone^{®*} is a registered trademark of Syngenta Crop Protection, LLC

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

2,4-D	GROUP 4	HERBICIDE
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Avalaire 2,4-D Amine

[Alternate Brand Name: Rixter 2,4-D Amine]

[Herbicide]

[Contains Dimethylamine Salt of 2,4-D*]

[For selective control of many broadleaf weeds in asparagus, cereal grain, corn, grapes, hops, rice, sorghum, soybeans, strawberries, sugarcane; apples, pear, stone fruit, and nut orchard floors; fallow cropland; forests; grass pastures; rangeland; Conservation Reserve Program acres; ornamental turf (including turf grown for sod or seed); non-cropland and aquatic areas. Also for control of trees by injection.]

ACTIVE INGREDIENT:	(% by weight)
2,4-Dichlorophenoxyacetic acid, dimethylamine salt**	47.2%
OTHER INGREDIENTS:	52.8%
TOTAL:	100.0%

**2,4-dichlorophenoxyacetic acid equivalent 39.2% by weight or 3.8 lb/gal.

*Salts are the least volatile forms of 2,4-D and do not release enough vapors from treated areas to reduce yield of adjacent susceptible crops.

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

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

FIRST AID	
If in eyes:	<ul style="list-style-type: none"> ● Hold eye open and rinse slowly and gently with water for 15-20 minutes. ● Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. ● Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> ● Take off contaminated clothing. ● Rinse skin immediately with plenty of water for 15-20 minutes. ● Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> ● Call a poison control center or doctor immediately for treatment advice. ● Have person sip a glass of water if able to swallow. ● Do not induce vomiting unless told to do so by the poison control center or doctor. ● Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> ● Move person to fresh air. ● If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. ● Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.	

For Chemical Emergency:

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

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

Corrosive. Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or spray mist.

ENVIRONMENTAL HAZARDS: This product is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal area below the mean high water mark. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas, and non-target plants. Do not contaminate water when disposing of equipment wash waters or rinsate.

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. Application around a cistern or well may result in contamination of drinking water or groundwater.

Fish breathe dissolved oxygen in the water and decaying weeds also use oxygen. For aquatic uses: When treating continuous, dense weed masses, it may be appropriate to treat only part of the infestation at a time. For example, apply the product in lanes separated by untreated strips that can be treated after vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3-week period following treatment. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Waters having limited and less dense weed infestations may not require partial treatments.

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Triple rinse as follows:

[Containers 5 gallons or less: 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 $\frac{1}{4}$ 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. Once cleaned, offer for recycling or reconditioning if appropriate.]

[Containers larger than 5 gallons: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip 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 a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Once cleaned, offer for recycling or reconditioning if appropriate.]

Pressure rinse as follows (all sizes): Empty the remaining contents into 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.

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

Manufactured for:
Avalaire, LLC
1204 Village Market Place, #173
Morrisville, NC 27560

EPA Reg. No.: 93930-42
EPA Est. No.: _____
NET CONTENTS: _____