

55467-11

11/24/2009

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:
55467-11

Date of Issuance:
NOV 24 2009

NOTICE OF PESTICIDE:

x Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: conditional

Name of Pesticide Product:
Tenkoz Lo-Vol 4 Herbicide

Name and Address of Registrant (include ZIP Code):

Tenkoz Inc.
100 North Point Center East
Alpharetta, GA 30022

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

This product is conditionally registered in accordance with FIFRA provided that you:

- 1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.
2. Make the following label revisions:
a. Change "EPA REG. NO. 55467-" to "EPA REG. NO. 55467-11."
b. Revise the heading "General Information" to "Product Information" on page 8. In addition, delete "General" from the heading "General Use Precautions and Restrictions" on page 9 and also from the heading, "General Use Directions" on page 16 of the label. The word 'General' in a section heading makes all text within the section unenforceable.
c. Revise the Non-Agricultural Use Requirement, "Do not enter or allow people (or pets) to enter the treated area until dusts have settled." To "Do not enter or allow people (or pets) to enter the treated area until sprays have dried."

Continued on Page 2

Signature of Approving Official:

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)

[Handwritten signature of Kathryn V. Montague]

Date:

NOV 24 2009

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d. Revise all instances of "recommended" rates/dosages to "listed" rates/dosages on this label. Note that recommendations are not enforceable.

-See the last line on page 8

-See the second line in the first paragraph on page 9

-See the second bullet under the 'Tank Mixing Precautions' on page 10

-See the 'Application Rates' paragraph on page 11 (lines 1 and 3)

-See footnote (1) above the 'Crop Uses' heading on page 13

e. "Forests" table revisions:

Remove the text "(May also be used in Rangeland, Pastures, and Noncropland)" from the "Basal Spray", "Surface of Cut Stumps" and "Frill and Girdle" sections since use rates are not the same for forest and pasture/rangeland sites.

Include the following restrictions:

"Limit of one basal spray or cut surface application per year."

"Limit to one injection application per year."

"Rangeland, Established Grass Pastures..." table revisions:

The following application rate information must be included in the "Basal spray, cut surface, frill and girdle" section:

"Maximum of 4 pints of Tenkoz Lo-Vol 4 (2.0 lbs ae) per acre per application for spot and broadcast applications"

3. Submit one (1) copy of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

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(Base label):

Tenkoz Lo-Vol 4 Herbicide

For selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures, including Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf.

Active Ingredients:

2,4-Dichlorophenoxyacetic Acid, 2-Ethylhexyl Ester	65.9%
Other Ingredients	34.1%
Total	100.0%

Contains petroleum distillates

Acid Equivalents: 2,4-dichlorophenoxyacetic acid: 44.1% – 3.8 lb/gal

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

NOV 24 2009
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

55467-11

Keep Out of Reach of Children

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful If Swallowed Or Absorbed Through Skin • Causes Moderate Eye Irritation • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Skin Reactions In Some Individuals

Avoid contact with skin, eyes, or clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile rubber, neoprene rubber, or viton. If you want more options, follow the instructions for category E on an EPA chemical resistance category selections chart.

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

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (except pilots), and
- Chemical resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate

See engineering controls for additional requirements

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

Engineering Controls Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid

If swallowed: Call a Poison Control Center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment.

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

Note: Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

Note to Physician: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters 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.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Nonrefillable containers 5 gallons or less:

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

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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: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons:

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: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container.

Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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Storage and Disposal

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Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows:

Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or 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.

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Refer to label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 55467-

EPA Est. _____

Tenkoz Inc.
100 North Point Center East
Alpharetta, GA 30022

Net Contents _____

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(cover):

Tenkoz Lo-Vol 4 Herbicide

For selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures including Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf.

Active Ingredients:

2,4-Dichlorophenoxyacetic Acid,	
2-Ethylhexyl Ester	65.9%
Other Ingredients	34.1%
Total	100.0%

Contains petroleum distillates

Acid Equivalents: 2,4-dichlorophenoxyacetic acid: 44.1% – 3.8 lb/gal

Keep Out of Reach of Children

CAUTION

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to inside of label booklet for Directions for Use.

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Alpharetta, GA 30022

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[Page 1 through end]:

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful If Swallowed Or Absorbed Through Skin • Causes Moderate Eye Irritation • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Skin Reactions In Some Individuals

Avoid contact with skin, eyes, or clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile rubber, neoprene rubber, or viton. If you want more options, follow the instructions for category E on an EPA chemical resistance category selections chart.

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

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (except pilots), and
- Chemical resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate

See engineering controls for additional requirements

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

Engineering Controls Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid

If swallowed: Call a Poison Control Center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment.

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Note: Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

Note to Physician: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters 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.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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

Agricultural Use Requirements

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

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

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

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

Non-Agricultural Use Requirements

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

Do not enter or allow people (or pets) to enter the treated area until dusts have settled.

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.

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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.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons:

Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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General Information

Tenkoz Lo-Vol 4 Herbicide is intended for selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures including Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf.

Apply **Lo-Vol 4** as a water or oil-water spray during warm weather when 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 recommended on this label will be satisfactory for young,

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for young, succulent growth of susceptible weed species. For less susceptible species and under conditions where control is more difficult, use higher recommended 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.

General Use Precautions and Restrictions

Chemigation: Do not apply this product through any type of irrigation system.

Excessive amounts of 2,4-D in the soil may temporarily inhibit seed germination and plant growth.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et al. v. EPA, C01-0132C, (W.D. WA). For further information, please refer to EPA Web site: <http://www.epa.gov/espp>.

Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, 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.

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

Mixing Instructions

1. Fill the spray tank about half full with water, then add the required amount of **Lo-Vol 4** with agitation, and finally the rest of the water.
Note: Lo-Vol 4 in water forms an emulsion that tends to separate unless the mixture is kept agitated.
2. If oil is added, first mix the **Lo-Vol 4** and the oil and then add this mixture to the water. However, with adequate agitation, the oil can be added after **Lo-Vol 4** is mixed with water.
3. If straight oil is used, a solution is formed and separation does not occur. Do not allow any water to get into the oil-herbicide mixture to avoid formation of an invert emulsion.

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

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates. Do not tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.

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, jels, 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 **Lo-Vol 4** in accordance with recommendations for these crops provided in this label. Use liquid fertilizer at rates recommended by the supplier or Extension Service Specialist. Test for mixing compatibility by mixing spray ingredients in correct proportions in a clear glass jar 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 **Lo-Vol 4** with 1 to 4 parts water may help in situations when mixing difficulty occurs.

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Fill the tank about half full with the liquid fertilizer, then add the required amount of **Lo-Vol 4** 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 Instructions

Spray Volume: 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, apply the recommended rate of this product in a spray volume of 2 or more gallons per acre by air and 10 or more gallons per acre for ground equipment. Use low-pressure sprays to minimize drift. Where states have regulations, that 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 total spray volume per acre.**

Application Rates: Generally, lower rates in recommended rate ranges will be satisfactory for more sensitive weeds species, when weeds are small, and when environmental conditions are favorable for rapid growth. Use higher rates in the recommended rate range for less sensitive species and under less favorable growing conditions. For crop uses, do not mix with oil or other adjuvants unless specifically recommended on this label. Deep-rooted perennial weeds such as Canada thistle and field bindweed and many woody plants usually require repeated applications for effective control.

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 **Lo-Vol 4** in labeled crops. 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 a treatment area of 1,000 sq ft. Mix the amount of **Lo-Vol 4** (fl oz or ml) corresponding to the desired broadcast rate in one (1) or more gallons of spray. To calculate the amount of **Lo-Vol 4** required for larger areas, multiply the table value (fl oz or ml) by the number of thousands of sq ft of area to be treated. An area of 1000 sq ft is approximately 10.5 X 10.5 yards (strides) in size. To calculate the amount of **Lo-Vol 4** required for a broadcast rate higher than those listed, use a multiple of the table value, for example, if a spot treatment requires the equivalent of an 8 pt per acre, use 2X the amount per gallon of spray required for the 4 pt/acre rate.

Rate Conversion Table for Spot Treatment:

Label Broadcast Rate (pt/acre)						
1/2	2/3	3/4	1	2	3	4
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Equivalent Amount of Lo-Vol 4 per 1000 sq ft							
1/5 fl oz † (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)

† Conversion factors: 1 pt - 16 fl oz.; 1 fl oz = 29.6 (30) ml

Band Application: Lo-Vol 4 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 (fanweed) |
| burdock, common | pepperweeds (<i>Lepidium</i> spp.) ⁽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 (marestalk) ⁽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, Venice ⁽¹⁾ | thistle, musk ⁽¹⁾ |
| marshelder | thistle, Russian (tumbleweed) ⁽¹⁾ |
| morningglory, annual | velvetleaf |
| morningglory, ivy | vetches |
| morningglory, woolly | |

Perennial Weeds

Alfalfa ^{(1), (2)}	eveningprimrose, cutleaf ⁽²⁾
artichoke, Jerusalem ⁽¹⁾	garlic, wild ⁽¹⁾
aster, many-flower ⁽¹⁾	hawkweed, orange ⁽¹⁾
Austrian fieldcress ⁽¹⁾	healal
bindweed (hedge, field and European) ^{(1), (2)}	ironweed, western ⁽²⁾
blue lettuce	ivy, ground ⁽¹⁾
blueweed, Texas	Jerusalem-artichoke
broomweed	loco, bigbend
bullnettle ^{(1), (2)}	nettles (including stinging) ⁽¹⁾
carrot, wild ⁽¹⁾	onion, wild ⁽¹⁾
catnip	pennywort
chicory	plantains
clover, red ^{(1), (2)}	ragwort, tansy ⁽¹⁾
coffeeweed	sowthistle, perennial
cress, hoary ⁽¹⁾	thistle, Canada ^{(1), (2)}
dandelion ⁽¹⁾	vervains ⁽¹⁾
docks ⁽¹⁾	wormwood
dogbanes ⁽¹⁾	
goldenrod	

⁽¹⁾ These weeds are only partially controlled and may require repeat applications and/or use of higher recommended 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.

Crop Uses

Agricultural Use Requirements for Crops: For the following crop uses, follow PPE and Reentry instructions in the "Agricultural Use Requirements" section of this label.

Cereal Grains (Wheat, Barley, Millet, Oats, Rye) (Not Underseeded with Legumes)

Crop/Application Timing	Lo-Vol 4 (pt/acre)	Specific Use Directions
Wheat, Barley, Millet, Rye Annual and biennial broadleaf weeds	1/2 to 2 †	Postemergence: Apply after crop is fully tillered, (usually 4 to 8 inches tall) but not forming joints in the stem.
Perennial broadleaf weeds	1 to 2 †	
Oats (Spring Seeded) (Fall Seeded Southern)	1/2 3/4 to 1 1/4 †	Postemergence: Apply after crop is fully tillered, but (usually 4 to 8 inches tall) but not forming joints in the stem.
Preharvest application (all cereals)	1	Apply using air or ground equipment to control weeds that could interfere with harvest, or to suppress perennial weeds. Apply when grain is in dough stage. Do not apply from early boot through the milk stage of growth.

† Use the lower rate in the rate range if small annual or biennial weeds are the major problem. Use the higher rate if perennial weeds or annual or biennial weeds are present which are considered to be hard-to-kill as determined by local experience. Up to 2.5 pt/acre may be applied postemergence to wheat,

barley, rye and millet. However, there is greater risk of crop injury at rates greater than 1 1/3 pt/acre and such rates should be used only when the need for weed control justifies additional risk to the crop. Do not apply Lo-Vol 4 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:

- **Preharvest Interval:** Do not harvest for hay or harvest grain within 14 days after application.
- Do not apply more than 3.5 pt/acre (1.75 lb of acid equivalent) of Lo-Vol 4 per year.
- Do not make more than one post-emergence application and one pre-harvest application per crop cycle.

Corn (Field Corn, Popcorn and Sweet Corn)

Application Timing/ Stage of Growth	Lo-Vol 4 (pt/acre)	Specific Use Directions
Preplant (Burndown) Preemergence (Field corn, popcorn, and sweet corn)	1 to 2	General: For best results, growth conditions should be favorable for active weed growth. Use high rate in rate range for less susceptible weeds, cover crops such as alfalfa, weeds in advanced stages of development, or under less favorable growth conditions. Preplant: Apply 7 to 14 days before planting corn to control emerged broadleaf weed seedlings or existing 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 canopy). If corn is more than 8 inches tall, use drop nozzles 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. Note: Corn treated with 2,4-D may become temporarily brittle. Wind or cultivation may cause stem breakage during the period of time that corn is brittle. Sweet Corn: To minimize potential for crop injury, use only lowest rate in rate range.
Preharvest (Field corn and popcorn only)	up to 3	Apply after corn is in hard dough (or denting) stage. Do not apply to sweet corn.

Precautions:

- Corn 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.
- After postemergence application, delay cultivation for 8 to 10 days to allow corn to overcome any temporary brittleness.

Restrictions (Field Corn and Popcorn):

- **Preharvest interval:** Do not harvest for grain or fodder within 7 days after application.

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- Do not apply more than 6.3 pt/acre of **Lo-Vol 4** per year.
- Do not make more than one preplant or preemergence application, one postemergence application, and one preharvest application per year.

Restrictions (Sweet Corn):

- **Preharvest interval:** Do not harvest within 45 days after application or permit meat or dairy animals to forage or graze treated area within 7 days after application.
- Do not make a postemergence application any less than 21 days after a prior application.
- Do not make more than one preplant or preemergence application, and one postemergence application per year.
- Do not apply more than 3.1 pt/acre of **Lo-Vol 4** per year.

Fallowland and Crop Stubble

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

Type of Weeds	Lo-Vol 4 (pt/acre)	Specific Use Directions
Annual broadleaf weeds	1 to 2	Use lower rate in rate range when weeds are small (2 to 3 inches tall) and conditions are favorable for active growth and a higher rate when weeds are larger and/or growing conditions are less favorable.
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. Use lower rates in the spring during the rosette stage and the highest rate in the fall or when flower stalks have developed.
Perennial broadleaf weeds	2 to 4	Apply when perennial weeds are in bud or bloom stage and actively growing. Do not disturb treated areas for at least 2 weeks after application or until top growth is dead.
Wild garlic and onion in crop stubble	4	Apply to new regrowth of wild garlic or onion that occurs in the fall after harvest of other crops.

Precaution: For best weed control results, do not cultivate for at least two weeks after application or until top growth is dead.

Precautions and Restrictions:

- **Preharvest Interval:** Do not cut forage or hay from treated areas for 7 days after application.
- Do not re-apply within 30 days of a previous application.
- Do not make more than 2 applications per season.
- Do not apply more than 4.0 pt/acre of **Lo-Vol 4** per application.
- Do not apply more than 8.0 pt/acre of **Lo-Vol 4** 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 specific 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 average 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 for information about susceptible crops and typical conditions in your area.

Sorghum (Grain Sorghum (Milo) and Forage Sorghum)

Application Timing/ Stage of Growth	Lo-Vol 4 (pt/acre)	Specific Use Directions
Postemergence † Crop 6 - 8 inches tall Crop 8 - 15 inches tall (directed spray only)	1/2 to 1 † 3/4 to 1	Apply when sorghum is 6 to 15 inches tall. If sorghum more than 8 inches tall (top of canopy), use drop nozzles to keep spray off foliage. Do not use with oil or other adjuvants. Do not treat during boot, flowering or dough stage.

† Temporary crop injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply **Lo-Vol 4** under these conditions, use no more than 2/3 pint per acre.

Precautions and Restrictions:

- 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.
- **Preharvest Interval:** Do not harvest grain for 30 days after application.
- Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days after application.
- Maximum of 1.0 pt/acre (0.5 lb of acid equivalent) of **Lo-Vol 4** per crop cycle.
- Do not apply more than one postemergence application per year.

Soybeans (Preplant Burndown Application Only)

(Not for Use in California)

Application Timing	Lo-Vol 4 (pt/acre)	Specific Use Directions
Preplant (Burndown)	3/4 to 1	Apply not less than 7 days before planting soybeans. See Use Precautions and Restrictions below.
	1 to 2	Apply not less than 15 days before planting soybeans. See Use Precautions and Restrictions below.
General Use Directions: Use Lo-Vol 4 to control emerged broadleaf weeds or existing cover crops. For best results, apply when weeds are small and actively growing. Use the higher rate in the respective rate range for 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 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.		

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Use Precautions, Restrictions and Limitations:

- **Important Notice:** 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 factors 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.
- Do not disturb treated soil through tillage between application and planting of soybeans.
- Do not use on sandy soils with less than 1.0% organic matter.
- In treated fields, plant soybean seed as deep as practical, but not less than 1.0 inch deep. Adjust the planter, if necessary, to ensure that planted seed is adequately covered.
- Do not make more than one application per season regardless of the application rate used.
- **Do not apply Lo-Vol 4 as a preplant application in soybeans unless you are prepared to accept the results of soybean injury, including possible stand loss and/or yield reduction.**
- During the growing season following application, do not replant treated fields with crops other than those labeled for use with **Lo-Vol 4**.
- Do not apply more than 2 pt/acre of **Lo-Vol 4** per year.

Forestry, Rangeland, Established Pasture, and Non-cropland Uses

Agricultural Use Requirements for Forests (Except Tree Injection Use): For use in forests, follow PPE and Reentry instructions in the "Agricultural Use Requirements" section of this label.

Agricultural Use Requirements for Rangeland, Pasture, Forest (Tree Injection Only) and Non-cropland Areas: When this product is applied to rangeland and established pastures not harvested for hay or seed; non-cropland areas, and when applied by tree injection method only in forest sites, follow reentry requirements given in the "Non-Agricultural Use Requirements" section of this label.

Forests

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

Treatment Site Method of Application	Lo-Vol 4	Specific Use Directions
Annual Weeds Biennial and perennial broadleaf weeds and susceptible woody plants	2 to 4 pt/acre 4 to 8 pt/acre	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 4 qt of Lo-Vol 4 plus 1 to 4 qt of Garlon® 3A herbicide per acre. For conifer release, make application in early spring before budbreak of conifers when weeds are small and actively growing.
Spot Treatment to control broadleaf weeds	1.28 fl oz / gal of spray solution (See Instructions for "Spot Treatment")	Note: To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rate recommended for this treatment site and spray to thoroughly wet all foliage. Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage. See rate

		rate conversion table and instructions for "Spot Treatment" and use of hand-held sprayers under "Application Instructions".
Conifer Release: Species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir	1 1/2 to 3 qt/acre	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 plant coverage. Because this treatment may cause occasional conifer injury, do not apply if such injury cannot be tolerated.
Directed Spray: Conifer plantations including pine	4 qt/100 gal	Apply when brush or weeds are actively growing by directing the spray so as to avoid contact with conifer foliage. 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)	8 qt/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 also with the mixture may aid in control.
Surface of Cut Stumps (May also be used in Rangeland, Pastures, and Noncropland)	2.5 fl oz/gal of water	Apply as soon as possible after cutting trees. Thoroughly wet the cambium layer of the cut surface being careful to wet the entire circumference.
Frill and Girdle (May also be used in Rangeland, Pastures, and Noncropland)		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. Saturate the freshly cut frills with the 2,4-D mixture.
Tree Injection Application (May also be used in Rangeland, Pastures, and Noncropland)	(1 to 2 ml per injection site)	To control and prevent resprouting of 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 Lo-Vol 4 per inch of trunk diameter as measured at breast height (DBH), approximately 4 1/2 ft above the ground. Injection sites, however, should be 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 Lo-Vol 4 per injection site or double the number of 1 ml injections. Note: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Precautions and Restrictions:

- Do not allow sprays to contact conifer shoot growth (current year's new growth) or injury may occur.
- Do not apply to nursery seedbeds.
- For conifer release, do not use on plantations where larch is among the desired species.
- For broadcast applications, do not apply more than 8.0 pt/acre of **Lo-Vol 4** per 12 month period.
- For basal spray, cut surface stumps, and frill applications, do not apply more than 16.84 pints of **Lo-Vol 4** (8.0 lb of acid equivalent) per 100 gallons of spray solution.

Rangeland, Established Grass Pastures (Including Perennial Grasslands not in Agricultural Production such as Conservation Reserve Program Acres)

Target Weeds or Woody Plants	Lo-Vol 4 (pt/acre)	Specific Use Directions
Annual broadleaf weeds	2	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 recommended rates, even under ideal conditions of application
Biennial and perennial broadleaf weeds	2 to 4	
Spot Treatment to control broadleaf weeds	1.28 fl oz / gal of spray solution (See Instructions for "Spot Treatment")	Note: To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rates recommended for this treatment site and spray to thoroughly wet all foliage. Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage. See rate conversion table and instructions for "Spot Treatment" and use of hand-held sprayers under "Application Instructions".
Basal spray, cut surface, frill and girdle, and tree injection application methods		Refer to the "Forestry Uses" section for specific use instructions for these application methods.
Wild garlic and wild onion	4	Make two applications per year starting in late fall or early spring.
Broadleaf weed control in newly sprigged coastal bermudagrass	2 to 4	Applications may be made postemergence. Follow "Specific Use Directions" for Rangeland and Established Grass Pastures, 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	up to 4	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	1.28 fl oz / gal of spray solution	Spot treatment: Apply when foliage is well developed. Thorough coverage is required. Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage. Two or more treatments may be required. Do not exceed 4 pt per acre per application.
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 label must be followed.	

Precautions and Restrictions:

- 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.
- **For susceptible annual and biennial weeds:** Do not apply more than 1.0 lbs ae per acre per application.
- **For moderately susceptible biennial and broadleaf weeds, difficult to control weeds and woody plants:** Do not apply more than 2.0 lbs ae per acre per application.
- **Spot treatment:** Do not apply more than 2.0 lbs ae per acre per application.
- Do not apply more than two (2) applications per year
- The maximum application rate is 4.0 lbs ae per acre per year.
- The minimum retreatment interval is 30 days.
- **Preharvest interval:** Do not harvest forage or hay from the treated areas for 7 days after application. If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.

Non-cropland

Such as fencerows, hedgerows, roadsides, rights-of way, utility power lines, railroads and other non-crop areas

Treatment Site or Method of Application	Lo-Vol 4 (pt/acre)	Specific Use Directions
<p>Annual broadleaf weeds</p> <p>Biennial and perennial broadleaf weeds</p> <p>Susceptible woody plants on rights-of-way</p>	<p>2 to 4</p> <p>4</p> <p>4 - 8</p>	<p>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 4 quarts of Lo-Vol 4 plus 1 to 4 qt of Garlon 3A per acre. Oil or wetting agent may be added to the spray, if needed for increased effectiveness.</p> <p>For ground application: For high volume sprays, apply a total spray volume of 100 to 400 gallons per acre and, for low volume sprays, apply in a total spray volume of 10 to 100 gallons per acre.</p> <p>For helicopter: Apply a total spray volume of 5 to 30 gallons per acre.</p>
<p>Spot Treatment to control broadleaf weeds</p>	<p>1.28 fl oz / gal of spray solution (See Instructions for "Spot</p>	<p>Note: To control broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rates recommended for this treatment site and spray to thoroughly wet all foliage. Mix 1.28</p>

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	Treatment")	foliage. Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage. See rate conversion table and instructions for "Spot Treatment" and use of hand-held sprayers under "Application Instructions".
Basal spray, cut surface, frill and girdle, and tree injection application methods		Refer to the "Forestry Uses" section for specific use instructions for these application methods.
Southern wild rose Broadcast application	up to 4	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	1.28 fl oz / gal of spray solution	Apply when foliage is well developed. Thorough coverage is required. Mix 1.28 fl oz per gal of spray solution and apply through pump up sprayer or backpack sprayer. Addition of a non ionic surfactant is recommended to improve coverage. Two or more treatments may be required.

Precautions and Restrictions:

- Do not apply to newly seeded areas until grass is well established.
- Bentgrass, St. Augustine, clover, legumes and dichondra may be severely injured or killed by this treatment.
- **Woody plants:** Do not apply more than 8.0 pt/acre (4 lb of acid equivalent) of **Lo-Vol 4** per year.
- Do not make more than one application per season.
- **Annual and perennial weeds:** Do not apply more than 4.0 pt/acre (2 lbs of acid equivalent) of **Lo-Vol 4** per application or make more than two applications per season.
- Do not reapply to a treated area within 30 days of a previous application.

Turf Uses

Grasses Grown for Seed or Sod

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

Treatment Site (Application Timing)	Lo-Vol 4 (pt/acre)	Specific Use Directions
Grasses Grown for Seed (Postemergence Use) Seedling grass (five-leaf stage or later)	3/4 to 1	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 more tolerant to higher rates. Do not apply to grass in the early boot through milk stage if seed production is desired. When grass is well established, higher rates of up to 4 pints/acre may be applied for control of hard-to-kill annual or perennial weeds.
Well-established grasses	1 to 4	
Sod Farms		

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(Postemergence)	2 to 4	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.
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Precautions and Restrictions:

- Do not use on creeping grasses such as bentgrass except for spot treatment.
- Do not use on susceptible 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 to a treated area within 21 days of a previous 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.
- **Preharvest Interval:** Do not cut grass for hay from treated areas for 7 days after application.
- Do not make more than two applications of **Lo-Vol 4** per year.
- Do not apply more than 8 pt/acre of **Lo-Vol 4** per year.

Ornamental Turf (Excluding Grasses Grown for Seed or Sod Farms)
 (Includes lawns, golf courses, cemeteries and parks, airfields, roadsides and vacant lots)

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)	Lo-Vol 4 (pt/acre)	Specific Use Directions
Ornamental Turf (Postemergence) Seedling grass (five-leaf stage or later)	3/4 to 1	Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth.
Well-established grasses	2 to 3	Deep-rooted perennial weeds such as bindweed and Canada thistle may require repeat applications.
Biennial and perennial broadleaf weeds	3	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.

Precautions, Restrictions:

- Do not use on creeping grasses such as bentgrass except for spot treatment.
- Do not use on susceptible 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.
- Do not make more than 2 broadcast applications per treatment site per year (does not include spot treatments).
- Do not apply more than 3 pt/acre of **Lo-Vol 4** per application.
- Do not apply more than 6 pt/acre of **Lo-Vol 4** per season, excluding spot treatments.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Tenkoz warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent permitted by law, Tenkoz MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Tenkoz or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Tenkoz' election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent permitted by law, Tenkoz shall not be liable for losses or damages resulting from handling or use of this product unless Tenkoz is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Tenkoz be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer and Inherent Risks of Use above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Tenkoz or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.