

524-376

06-02-2009

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 2 2009

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

6-2-09

Stephen Adams
Monsanto Company
1300 I (Eye) Street, NW
Suite 450 East
Washington, DC 20005

Dear Mr. Adams:

Subject: EPA Reg. No. 524-376 / Landmaster II Herbicide

The label referred to above is acceptable provided you make the following changes:

1. Change the size of the Font of "Keep out of Reach of Children" and "DANGER PELIGRO" to comply with 40 CFR 156.10.
2. Place the Active Ingredients section after the product name on 1st page of the label to comply with the Label Review Manual chapter 5.

"The ingredient statement is normally required to appear on the front panel of the label, preferably immediately below the product name, unless doing so is impracticable and the Agency grants permission to place it elsewhere. 40 CFR 156.10(g)(2)(i)."

A stamped copy of your labeling is enclosed for your records. Submit 1 copy of the final printed label. Products shipped after 18 months from the date of this Notice or the next printing of the label whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of the product constitutes acceptance of these conditions. This label supercedes all previous accepted labels. If you have any questions please call Erik Kraft at 703-308-9358 or email at Kraft.Erik@epa.gov.

Signature of Approving Official:

A handwritten signature in black ink, appearing to read "Jim Tompkins".

Jim Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

LANDMASTER® II HERBICIDE

For control or suppression of emerged weeds in CRP or set-aside acres, and in fallow and reduced tillage systems prior to planting or emergence of barley, field corn, oats, rye, sorghum (grain or forage) and wheat, and for spot treatment in barley, field corn, forage grasses, forage legumes, oats, rye, sorghum (grain or forage), and wheat.

Complete Directions for Use

EPA Reg. No. 524-376

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

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.)

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE.

HARMFUL IF SWALLOWED.

If swallowed, may cause irritation of mouth and throat.

Do not get in eyes or on clothing.

ACCEPTED
with COMMENTS
In EPA Letter Dated:

6-2-09
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

524-376

FIRST AID: Call a poison control center or doctor for treatment advice. cccc	
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. ccc • Remove contact lenses if present after the first 5 minutes then continue rinsing eye. cc
IF SWALLOWED:	<ul style="list-style-type: none"> • 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. This product is identified as Landmaster II Herbicide, EPA Registration No. 524-376 . You may also contact (314) 694-4000 , collect day or night, for emergency medical treatment information.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

Personal Protective Equipment (PPE)

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

All mixers, loaders, applicators, flaggers, and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks, and goggles or face shield. Chemical resistant gloves of waterproof materials are required when applying with any handheld nozzle or equipment. A chemical resistant apron plus chemical resistant gloves of waterproof materials are required when mixing or loading, cleaning up spills or equipment, or when otherwise exposed to this concentrated product.

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

Engineering controls statements:

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

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as spill or equipment breakdown.

<p>User Safety Recommendations</p> <p>Users should:</p> <ul style="list-style-type: none"> • 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 or 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.

In case of an emergency involving this product, call collect, day or night, (314) 694-4000.

Environmental Hazards

This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas..

This chemical has properties and characteristics associated with chemicals detected in ground water. 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.

Physical or Chemical Hazards

Spray solutions of this product should be mixed, stored and applied using only stainless steel, fiberglass, plastic and plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY

174

TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

ACTIVE INGREDIENTS

*Glyphosate, in the form of its isopropylamine salt	13.3%
**2,4-D, 2,4-dichlorophenoxyacetic acid, in the form of its isopropylamine salt	11.1%
OTHER INGREDIENTS:	<u>75.6%</u>
	100.0%

* Contains 144 grams per liter or 1.2 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt, equivalent to 108 grams per liter or 0.9 pound per U.S. gallon of the acid, glyphosate

** Contains 120 grams per liter or 1 pound per U.S. gallon of the active ingredient 2,4-D, in the form of its isopropylamine salt, equivalent to 96 grams per liter or 0.8 pound per U.S. gallon of the acid, 2,4-D.

No license granted under any non-U.S. patent(s).

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Monsanto Supplemental Labeling. Read the entire label before using product. Use only according to label instructions.

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 vs EPA C01-0132C (W.D. WA). For further information, please refer to [www.epa.gov/espp/wte/.]

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.

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS, OR FRUIT OF CROPS, DESIRABLE PLANTS, AND TREES BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

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 statement 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, are: coveralls, chemical-resistant gloves made of any waterproof material, shoes plus socks and protective eyewear.

For more product information, call toll-free 1-800-332-3111.

5
17

Storage and Disposal

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage and disposal.

PESTICIDE STORAGE: Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

STORE ABOVE 40°F to keep ingredients in solution. If product temperature falls below this temperature and crystals form, place portable containers in a warm room (72°F), allow product to reach room temperature, and roll or shake periodically until crystals have dissolved, or recirculate well before using. For non-portable containers, allow product to warm above 60°F for several days and then recirculate well before using.

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

[Alternate PESTICIDE DISPOSAL statement for transport vehicles only: Pesticide wastes may be hazardous. To avoid wastes, empty as much product from this transport vehicle as possible for repackaging or use in accordance with label directions. If wastes cannot be avoided, offer remaining product or rinsate to a waste disposal facility or pesticide disposal program. Improper disposal of excess pesticide is a violation of Federal law. All disposal must be in accordance with applicable federal, state and local regulations and procedures. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.]

CONTAINER HANDLING AND DISPOSAL: See container label for container handling and disposal statements and refilling limitations.

[CONTAINER HANDLING AND DISPOSAL STATEMENTS AND REFILLING LIMITATION FOR CONTAINER LABELS]

[CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE CONTAINERS OF LESS THAN 1-GALLON CAPACITY]

Nonrefillable container. Do not reuse or refill this container.

[Alternate container statement: Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer this container for recycling, if available. If recycling is not available, dispose of in accordance with local state and federal regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill. If not triple rinsed, this container is acute hazardous waste and must be disposed of in accordance with local state and federal regulations. If rinsate cannot be used, follow pesticide disposal instructions.

[Alternate container disposal statement: Once properly rinsed, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or Monsanto at 1-800-ROUNDUP (1-800-768-6387). If recycling is not available, dispose of in accordance with local, state and federal regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill. If not triple rinsed, this container is acute hazardous waste and must be disposed of in accordance with local, state and federal regulations. If rinsate cannot be used, follow pesticide disposal instructions.]

[CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY]

Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

[Alternate container statement: Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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.

Once properly rinsed, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or Monsanto at 1-800-ROUNDUP (1-800-768-6387). If recycling is not available, dispose of in accordance with local, state and federal regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill. If not triple rinsed, this container is acute hazardous waste and must be disposed of in accordance with local, state and federal regulations. If rinsate cannot be used, follow pesticide disposal instructions.

[Alternate container disposal statement: Then offer this container for recycling, if available. If recycling is not available, dispose of in accordance with local, state and federal regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill. If not triple rinsed, this container is acute hazardous waste and must be disposed of in accordance with local, state and federal regulations. If rinsate cannot be used, follow pesticide disposal instructions.]

[CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT CONTAINERS]

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

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

To clean this container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously

or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer the container for recycling, if available. To obtain information about recycling refillable containers, contact Monsanto Company at 1-800-ROUNDUP (1-800-768-6387).

[Optional container label statement: Return Properly Rinsed Container to Monsanto for Recycling Contact 1-800-ROUNDUP (1-800-768-6387)]

[CONTAINER HANDLING AND DISPOSAL STATEMENT FOR ALL TRANSPORT CONTAINERS AS DEFINED IN 40 CFR 156.3]

Emptied container retains vapor and product residue. Observe all precautions stated on this label until the container is cleaned, reconditioned or destroyed. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, and worn-out threads and closures. Clean thoroughly before reuse for transportation of a material of different composition or before retiring this transport vehicle from service.

GENERAL INFORMATION

Landmaster II herbicide is a postemergence herbicide for control or suppression of emerged weeds in fallow and reduced tillage systems, prior to planting or emergence of barley, field corn, oats, rye, sorghum (grain or forage), or wheat, and as a spot treatment in barley, field corn, forage grasses, forage legumes, oats, rye, sorghum, and wheat.

Do not harvest or feed treated vegetation for 8 weeks after application. Following spot treatment in forage grasses or legumes, allow 30 days before harvesting or grazing domestic livestock.

This product enters the plant through the foliage and moves throughout the plant. Visual effects of control are a gradual wilting or yellowing of the plant that advances to complete browning of above ground growth and deterioration of affected underground plant parts. Visible symptoms will usually develop on weeds listed on this label within 2 to 4 days after application, but may not occur for 7 or more days. Extremely cool or cloudy weather following treatment may slow activity of this product and delay the visual effects of control.

Application Precautions and Restrictions

- Do not plant any crop other than barley, field corn, oats, rye, sorghum (grain or forage), or wheat for 3 months after treatment.
- Application of this product after planting and prior to crop emergence may cause crop injury if rainfall or environmental conditions delay crop emergence.
- This product is recommended for control of emerged weeds prior to establishment of crops listed on this label. Large amounts of green or decaying vegetation left standing or incorporated into the seedbed may enhance the development of disease in newly planted crops. This may result in poor emergence and/or stands, especially under cool and/or wet conditions.
- Observe individual and total maximum application rates of 2,4-D (acid equivalents) listed throughout this label. These maximum rates are for the total amount of 2,4-D applied using this product and any other 2,4-D containing product applied either separately or in a tank-mix with this product.
- Spraying early to control young weeds before dense stands develop, or light cultivation to assist weed decay, will favor preparation of suitable seedbeds.
- In reduced tillage and no-till systems, ensure good seed to soil contact and proper seeding depth.
- Do not feed or forage vegetation from treated areas for 8 weeks following application.
- **DO NOT APPLY IN THE VICINITY OF 2,4-D SENSITIVE CROPS SUCH AS COTTON, GRAPES, TOMATOES AND OTHER DESIRABLE VEGETATION.**
- Application should be made only when there is no hazard from spray drift, as very small quantities of this herbicide spray, which may not be visible, can severely injure susceptible crops or desirable vegetation.

- Movement of this product on soil particles during windstorms may cause damage to susceptible plants that are contacted. This hazard is reduced if rainfall occurs shortly after application.
- Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this herbicide or other materials that are not expressly recommended in this labeling. Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance. Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

Landmaster II herbicide is subject to all state and county regulations for 2,4-D amine.

Mixing Instructions

Landmaster II Herbicide Alone

Fill the spray tank to about 75 percent of the desired volume with clean water. Add the appropriate amount of this product, then complete the filling process while maintaining agitation. Remove the hose from the mix tank immediately after filling to avoid siphoning back into the carrier source. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, terminate by-pass and return lines at the tank bottom and/or use an agriculturally approved anti-foam or defoaming agent.

Additional surfactant is not recommended for this formulation.

NOTE: Reduced control may occur if water containing soil is used, such as water from ponds and unlined ditches.

Tank Mixtures

Always predetermine the compatibility of all tank-mix products together in the carrier by mixing small proportional quantities in advance.

Prepare tank mixtures of this product in water as follows:

1. Place a 20- to 35-mesh screen or wetting basket over filling port.
2. Through the screen, fill the sprayer tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry of it with water and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add this diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add this diluted mixture SLOWLY through the screen into the tank. Continue agitation.
6. Continue filling the sprayer tank with water and add the required amount of this product near the end of the filling process.
7. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive and water soluble liquid (this product).

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying is resumed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle should be no finer than 100 mesh and in-line strainers should be no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles.

Check the label of all products used in a tank-mix for cleaning instructions. Clean equipment according to the directions for the material hardest to remove from spray and mixing equipment.

Ammonium Sulfate

The addition of 1 to 2 percent dry ammonium sulfate by weight (or liquid equivalent) may increase the performance of tank mixtures of this product on annual weeds. Add 8.5 to 17 pounds of dry ammonium

sulfate per 100 gallons of spray solution. The improvement in performance may be apparent where environmental stress is a concern. Use the higher rate of ammonium sulfate with this product when treating dense populations or large weeds. Low-quality ammonium sulfate may contain material that will not readily dissolve, which could result in nozzle tip plugging. To determine quality, perform a jar test by adding one-third cup of ammonium sulfate to 1 gallon of water and agitate for 1 minute. If undissolved sediment is observed, pre-dissolve the dry additive in water and filter prior to addition to the spray tank. If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet line. ENSURE THAT AMMONIUM SULFATE IS COMPLETELY DISSOLVED IN THE SPRAY TANK BEFORE ADDING HERBICIDES. THOROUGHLY RINSE THE SPRAY SYSTEM WITH CLEAN WATER AFTER USE TO REDUCE CORROSION. OBSERVE ALL PRECAUTIONARY STATEMENTS ON THE AMMONIUM SULFATE PRODUCT LABELS.

NOTE: Compatibility problems may occur at carrier volumes below 5 GPA.

Hand-Held Sprayers

Prepare the desired volume of spray solution by mixing the amount of this product in clean water as shown in the following table:

SPRAY SOLUTIONS

DESIRED VOLUME	AMOUNT OF LANDMASTER II HERBICIDE
1 gallon	1.3 fluid ounces
25 gallons	1 quart
100 gallons	1 gallon

2 tablespoons = 1 fluid ounce

Application Equipment

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

This product may be applied using either ground or aerial spray equipment. Use extreme care to avoid misting or drifting of herbicide solution onto foliage, green stems or fruit of desirable crops, trees, or plants during both growing and dormant periods, since even very small quantities of spray can cause severe plant injury.

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, and chemigation) can influence pesticide drift. The applicator and grower 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 10 miles per hour. 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 miles per hour, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not apply 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, 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 even be visible can 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.

Ground Application: Apply this product at the appropriate rate as specified on this label in 3 to 10 gallons of water per acre as a broadcast spray. For optimum spray distribution and coverage, use flat fan or low-volume flood nozzles. When using flood nozzles, space them no more than 40 inches apart and ensure double overlap of spray pattern. Refer to the manufacturer's recommendations for correct pressure and nozzle height above the target canopy. Avoid pressure and nozzles that produce fine droplets or mist. Apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

Use appropriate marking devices to ensure uniform spray coverage and best results from Landmaster II herbicide.

Hand-Held and High-Volume Equipment: (use coarse sprays only): Mix this product in clean water and apply to foliage of vegetation to be controlled. For application made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff. Use a 1-percent solution for field bindweed.

Aerial Application: Apply this product at the appropriate rate as specified on this label in 3 to 5 gallons of water per acre.

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 cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind side.

Sprayer Cleanup

11
17

CLEAN THE ENTIRE SPRAYER AFTER APPLICATION OF THIS PRODUCT. Failure to clean the sprayer thoroughly may result in injury to desirable crops that are subsequently sprayed with equipment used to apply this product. First, add clean water to the tank and thoroughly rinse the entire sprayer system. Second, fill the tank with clean water and 1 quart of household ammonia for every 25 gallons of water. Pump enough of this solution through the hoses, boom and nozzles to fill these parts completely. Refill the tank, close and leave for 24 hours before draining and rinsing thoroughly with clean water.

Application or use of other agricultural chemicals with the equipment used for this product may result in injury to desirable vegetation.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.

Application Instructions

Timing of Application

Apply this product postemergence to vigorously growing weeds when they have reached the size given in the "APPLICATION RATES AND WEEDS CONTROLLED" section of this label. Application should be delayed until maximum emergence of the target weeds, but before weeds exceed the maximum size indicated. For annual weeds, allow 1 day after treatment before tillage. For field bindweed, allow at least 7 days after treatment before tillage.

Reduced control may result if treatment is made under poor growing conditions such as drought stress, disease or insect damage, or if weeds have been mowed, grazed or cut. Heavy dust on foliage or an overstory canopy covering targeted weeds can also reduce control.

Rainfall or irrigation occurring within 6 hours after application can reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application will wash this product off the foliage and a repeat treatment may be required.

For field bindweed and quackgrass, do not till between harvest and fall application, or in fall or spring prior to spring application.

Application Rates and Weeds Controlled Using Landmaster II Alone

For best results, apply this product after most weed seeds have germinated but before seedhead formation in grasses or flower bud formation in broadleaves.

When applied as directed, this product will provide control or suppression of the grass and broadleaf weed species listed below. Application rates are for maximum weed height at treatment time.

ANNUAL WEED SPECIES	Rate Per Acre (Fluid Ounces)	Maximum Height (Inches)
Foxtail, green <i>Setaria viridis</i>	27	12
Barley <i>Hordeum vulgare</i>	40	6
Brome, downy* <i>Bromus tectorum</i>		
Cheat* <i>Bromus secalinus</i>		

- Foxtail**
Setaria spp.
- Kochia***
Kochia scoparia
- Lettuce, prickly***
Lactuca serriola
- Marestail/Horseweed**
Conzya canadensis
- Morningglory**
Ipomoea spp.
- Mustard, tumble**
Sisymbrium altissimum
- Oats, wild**
Avena fatua
- Puncturevine**
Tribulus terrestris
- Purslane, common**
Portulaca oleracea
- Ragweed, common**
Ambrosia artemisiifolia
- Ragweed, giant**
Ambrosia trifida
- Velvetleaf**
Abutilon theophrasti

Cocklebur 40 12
Xanthium strumarium

Lambsquarters
Chenopodium album

Mustard, tansy
Descurainia pinnata

Pigweed, redroot
Amaranthus retroflexus

Pigweed, smooth
Amaranthus hybridus

Rye
Secale cereale

Stinkgrass
Eragrostis cilianensis

Thistle, Russian
Salsola kali

Wheat, Volunteer
Triticum aestivum

13
17

Witchgrass

Panicum capillare

Barnyardgrass

Echinochloa crus-galli

54

6

Buffalobur

Solanum rostratum

Goatgrass

Aegilops cylindrica

Mustard (blue)

Chorispora tenella

Panicum (fall)

Panicum dichotomiflorum

Oats, wild

Avena fatua

54

12

Sandbur, field

Cenchrus spp

PERENNIAL WEED SPECIES	Rate Per Acre (Fluid Ounces)	Length of Vines/ Treatment Height (Inches)
Bindweed (field) ** <i>Convolvulus arvensis</i>	64 to 80 (suppression only)	6 to 18
Spurge, leafy <i>Euphorbia esula</i>	54 (suppression only)	spring flowering or postbloom

* For improved control in no-till systems or heavy infestations or overwintered stands, use 54 fluid ounces. For best results on light kochia infestations, treat after the plant has passed through the woolly stage of growth and is 3 to 6 inches in height. When treating medium to heavy infestations or plants that are in the woolly stage (1 to 3 inches in height), add 2 fluid ounces of Banvel to the application rate specified for this product. The addition of ammonium sulfate is recommended for use with tank mixtures of this product plus Banvel. Refer to the "AMMONIUM SULFATE" section for complete instructions. Read and follow all label directions for all products in the tank-mix. Refer to the Banvel label for planting, cropping and other restrictions. Follow all precautions on the Banvel label.

** Use the higher application rate within the given range for this product when treating dense, well-established stands of field bindweed and for longer-term suppression. This product may also be used as a 1-percent solution on a spray-to-wet basis for annual weed control and field bindweed suppression. Spray coverage should be uniform and complete. Do not spray to the point of runoff.

On fallow land, the maximum individual application rate of 2,4-D is 2.0 pounds (acid equivalents) per acre per application.

For wheat, barley, oats and rye, do not apply more than 1.75 pounds of 2,4-D (acid equivalents) per acre per crop cycle.

For field corn, do not apply more than 3 pounds of 2,4-D (acid equivalents) per acre per crop cycle.

For forage grasses, do not apply more than 4 pounds of 2,4-D (acid equivalents) per acre per year.

Spot Treatment

Application in growing crops must be made prior to heading of small grains and grain sorghum (milo), and prior to the silking of corn. Do not spot treat an area more than once per crop cycle.

For spot treatment in wheat, barley, oats and rye, the maximum individual application rate of 2,4-D is 1.25 pounds (acid equivalents) per acre. Wait 14 days following application before harvesting grains.

For spot treatment in sorghum, the maximum individual application rate of 2,4-D is 1.0 pound (acid equivalents) per acre.

For spot treatment in field corn, the maximum individual application rate of 2,4-D is 0.5 pounds (acid equivalents) per acre. Do not use treated crop as fodder for 7 days following application. Wait 7 days following application before harvesting grain.

For forage grasses and legumes, apply in areas where the movement of domestic livestock can be controlled. Remove domestic livestock before application and wait 30 days after application before grazing livestock or harvesting. Do not apply more than 2.0 pounds of 2,4-D (acid equivalents) per acre per application. No more than one-tenth of any acre may be treated at one time. Do not treat the same area more than once in each growing cycle. If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable. For 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.

Postharvest Applications

This product will provide control of weeds following grain harvest. Weeds should be allowed to re-grow after damage incurred during harvest operations and to recover from environmental stress before application of this product. Weeds should be treated prior to the heading stage of annual grasses and before broadleaf weeds exceed 24 inches in height. Ammonium sulfate will improve performance on annual weeds under stress conditions.

Weeds controlled with 40 fluid ounces of this product per acre include downy brome, green foxtail, stinkgrass and volunteer wheat.

Weeds controlled with 54 fluid ounces of this product per acre include kochia, lambsquarters, mustard, pigweed and Russian thistle.

Weeds controlled with 64 fluid ounces of this product per acre include barnyardgrass, sandbur, witchgrass, yellow foxtail and prickly lettuce.

Make up to 2 treatments per year, as needed, observing at least a 30-day retreatment interval. Do not plant any crop other than wheat, barley, field corn, oats, rye or sorghum (grain or forage) for 3 months after treatment.

Aid to Tillage

This product, used in conjunction with preplant and conventional fallow tillage practices, will provide control of downy brome, cheat, volunteer wheat, tansy mustard, and foxtails. Apply 27 fluid ounces of this product in 3 to 10 gallons of water per acre to weeds that are actively growing. Treat when weeds are less than 6 inches in height. Application must be followed by conventional tillage practices before re-growth of the treated plant occurs. Allow at least 1 day after application before tillage. Make no more than 2 applications per season.

Landmaster II Herbicide plus Atrazine Tank Mixture

For use only in Colorado, Iowa, Kansas, Missouri, Nebraska, Oklahoma, Oregon, South Dakota and Washington.

Tank mixtures of this product plus atrazine will provide postemergence control of listed annual weeds in fallow and reduced tillage systems. In addition, these tank mixtures will provide soil residual control of weeds listed on the atrazine labels. Ensure that the specific atrazine product is labeled for application in fallow and reduced tillage systems.

15
17

ANNUAL WEEDS CONTROLLED WITH ATRAZINE TANK MIXTURE:

- | | |
|---|--|
| Barnyardgrass
<i>Echinochloa crus-galli</i> | Pigweed, redroot
<i>Amaranthus retroflexus</i> |
| Brome, downy
<i>Bromus tectorum</i> | Sandbur, field
<i>Cenchrus spp.</i> |
| Foxtail, green
<i>Setaria viridis</i> | Stinkgrass
<i>Eragrostis ciliaris</i> |
| Kochia
<i>Kochia scoparia</i> | Thistle, Russian
<i>alsola kali</i> |
| Lambsquarters
<i>Chenopodium album</i> | Wheat, Volunteer
<i>riticum aestivum</i> |
| Lettuce, prickly
<i>Lactuca serriola</i> | Witchgrass
<i>Panicum capillare</i> |
| Mustard, tansy
<i>Descurainia pinnata</i> | |

Weeds controlled with 40 fluid ounces of this product plus 1 pound or less of the active ingredient, atrazine, per acre include downy brome, green foxtail, stinkgrass and volunteer corn.

Additional weeds controlled with 54 fluid ounces of this product plus 2 pounds or less active ingredient of atrazine per acre include kochia, lambsquarters, mustard, pigweed, prickly lettuce, and Russian thistle.

Additional weeds controlled with 64 fluid ounces of this product plus 3 pounds or less active ingredient of atrazine per acre include sandbur, witchgrass, and yellow foxtail. Barnyardgrass will be suppressed with 64 fluid ounces per acre and controlled with 86 fluid ounces per acre.

The addition of 1 to 2 percent dry ammonium sulfate by weight is recommended to increase the performance of this product in a tank-mix with atrazine.

In Oregon and Washington, do not exceed 1 pound of the active ingredient, atrazine, per acre.

Consult the atrazine label for use rates, soil type, planting, cropping and other restrictions, as well as other precautionary statements and use according to the most restrictive label.

These tank mixtures may be applied with ground or aerial equipment. See the "APPLICATION EQUIPMENT" section for instructions.

Ecofarming Systems

The Ecofarming System consists of the following rotation: winter wheat, corn/sorghum, ecofallow.

Use the following tank mixture for control of emerged annual weeds before planting field corn or sorghum in the Ecofarming System.

Make no more than one preemergence treatment with 2,4-D per season.

Tank-Mix Product	Application rate per acre
LANDMASTER II herbicide	54 to 64 fluid ounces
ATRAZINE	0.75 to 1 pound active ingredient

The above tank mixture should be applied in 28-0-0 or 32-0-0 liquid fertilizer carrier at 20 to 30 gallons per acre. The liquid fertilizer may be diluted with water to achieve the proper carrier volume.

16
17

WEEDS CONTROLLED: The following weeds, up to a maximum height of 4 inches, will be controlled by the above specified tank mixture:

Brome, downy
Bromus tectorum

Lettuce, prickly
Lactuca serriola

Cheat
Bromus secalinus

Pigweed, redroot
Amaranthus retroflexus

Foxtail, green
Setaria viridis

Thistle, Russian
Salsola kali

Foxtail, yellow
Setaria lutescens

Wheat, volunteer
Triticum aestivum

Kochia*
Kochia scoparia

* For improved control of kochia, add 4 fluid ounces per acre (0.125 pound active ingredient per acre) of Banvel to the above tank mixture.

Risk of crop injury from 2,4-D or Banvel can be reduced by applying this treatment 7 to 14 days before planting.

Refer to the label booklet for Lasso herbicide for preemergence weed control achieved by this tank mixture.

Refer to the specific product labels for crop rotation restrictions and cautionary statements for all products used in these tank mixtures.

LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirement and with the express written permission from this Company. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT

17
17

ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

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In case of an emergency involving this product, call collect, day or night, (314) 694-4000.

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