

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 17, 2020

Dazhi Mao, Ph.D. Regulatory Scientist Nufarm, Inc. 4020 Aerial Center Pkwy., Ste. 101 Morrisville, NC 27560

Subject: PRIA Label Amendment – New Use on Intermediate Wheatgrass Product Name: Weedar 64 Broadleaf Herbicide EPA Registration Number: 71368-1 Application Date: February 18, 2019 Decision Number: 549196

Dear Dr. Mao:

The application referred to above, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended is acceptable under FIFRA sec 3(c)(5). You must submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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

Page 2 of 2 EPA Reg. No. 71368-1 Decision No. 549196

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

If you have any questions, please contact Julia Kerr by phone at 703-347-0386, or via email at kerr.julia@epa.gov.

Margaret Hathaway

For

Daniel Kenny, Chief Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure



ACCEPTED

12/17/2020 Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the

71368-1

46.8% <u>53.2%</u> 100.0%

pesticide registered under

EPA Reg. No.

Weedar<sup>®</sup> 64 Broadleaf Herbicide

# [ABNs: Nufarm Weedar<sup>®</sup> 64 Broadleaf Herbicide, Orchard Clean<sup>®</sup> Herbicide, Orchard Clean<sup>®</sup> Broadleaf Herbicide ]

#### THE 2,4-D AMINE WEED KILLER

FOR CONTROL OF MANY BROADLEAF WEEDS IN ASPARAGUS, BLUEBERRY, CEREAL GRAINS (WHEAT, BARLEY, MILLET, OATS AND RYE), CORN (FIELD CORN, POPCORN AND SWEET CORN), CRANBERRY, FALLOWLAND AND CROP STUBBLE, ORCHARD FLOOR (APPLE, PEAR, STONE FRUIT AND NUT), RICE, SORGHUM, SOYBEANS (Preplant Burndown Only), STRAWBERRIES, SUGARCANE, FORESTS, RANGELAND AND ESTABLISHED GRASS PASTURES (Including Conservation Reserve Programs (CRP) Acres), IN NON-CROP AREAS INCLUDING LAWNS, ORNAMENTAL TURF, DRAINAGE DITCHBANKS, FENCE ROWS, RIGHTS-OF-WAY.

ALSO FOR AQUATIC WEED CONTROL, CONTROL OF TREES BY INJECTION, AND TANK MIXES.

ACTIVE INGREDIENT:																	
2,4-Dichlorophenoxyacetic acid	J, dime	thylar	nine	salt*	 			 	 	 	 	 	 		 	 	
OTHER INGREDIENTS:																	
TOTAL																	
· · · · · · · · · · · · · · · · · · ·						~ ~	~						~ '	. ~		 	

\*2,4-Dichlorophenoxyacetic acid equivalent 38.9% by weight or 3.8 pounds per gallon. Isomer specific by AOAC method No. 978.05

## KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO

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

SEE [NEXT PAGE] [BELOW] FOR ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

	FIRST AID
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	HOT LINE NUMBER Itainer or label with you when calling a poison control center or doctor, or going for treatment. t 1-877-325-1840 for emergency medical treatment information.

#### NOTE TO PHYSICIANS

This product contains a phenoxy herbicidal chemical. There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Probable mucosal damage may contraindicate the use of gastric lavage.

EPA REG. NO.71368-1 EPA EST. NO. Manufactured For NUFARM, INC. 11901 S. Austin Ave. Alsip, IL 60803



NET CONTENTS Gals. (L) [Designation as "NONREFILLABLE" or "REFILLABLE" for containers >5]

## PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### DANGER / PELIGRO

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

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

- long-sleeved shirt and long pants,
- shoes and socks, plus

• chemical-resistant gloves including barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, or Viton ≥14 mils, when applying with any handheld nozzle or equipment, mixing loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate, and
protective eyewear.

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:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d-e)], the handler PPE (personal protective equipment) may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.607(d-e)].

#### Users Should:

## USER SAFETY RECOMMENDATIONS

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

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates and may adversely affect non-target plants.

For Terrestrial Uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product contains a chemical with 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.

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

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

## **DIRECTIONS FOR USE**

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

Read entire label before using this product.

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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls, chemical-resistant gloves made of any water-proof material, shoes plus socks, protective eyewear.

#### NON-AGRICULTURAL USE REQUIREMENTS

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

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

#### **PRODUCT INFORMATION**

INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY DO NOT USE THIS PRODUCT.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply this product only to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant for advice.

Be sure that use of this product conforms to all applicable laws, rules and regulations. Certain states have restrictions pertaining to application distances from susceptible crops. The applicator must become familiar with these laws, rules or regulations and follow them exactly.

#### **USE RESTRICTIONS**

Do not apply this product through any type of irrigation system. Do not use in or near a greenhouse. 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.

Do not contaminate water used for irrigation or domestic purposes (except as specifically listed on this label) especially in areas where grapes, cotton, tomatoes or other susceptible plants are grown.

Do not treat irrigation ditches in areas where water will be used to overhead (sprinkler) irrigate susceptible crops especially grapes, tomatoes, tobacco, and cotton.

Do not apply this product directly to, or permit to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-D herbicide. Do not apply near susceptible plants since very small quantities of the 2,4-D will cause severe injury during the growing or dormant periods. Crops contacted by this product sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

#### WEED RESISTANCE MANAGEMENT

For resistance management, this product contains a Group 4 herbicide -2,4-D. Any weed population may contain or develop plants naturally resistant to this product and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and that considers mechanical control methods, cultural (e.g., timing to favor the desirable plants and not the weeds), biological (weed-competitive varieties) and other management practices.

- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of
  possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied,
  especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3)
  surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in
  the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant
  weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or pest controls advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific types of plants and weed biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. Do not assume that each listed weed is being controlled by this mechanism of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

#### **MIXING INSTRUCTIONS**

Add about one-half the water to the mixing tank, then add this product with agitation and finally the rest of water with continuing agitation.

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

#### COMPATIBILITY

If this product is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 quart) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing.

Read and follow all directions and precautions on this label and on the labels of any products for which a tank mixture is being considered.

#### APPLICATION PROCEDURES

Apply by air or ground equipment in sufficient gallonage to obtain adequate coverage, except as otherwise directed on this label. Use 2 or more gallons of water per acre for aerial application and 10 or more gallons of water per acre for ground application.

#### 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 (ASABE standard 572).

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 (ASABE standard 572).

#### 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, 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 might 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.

Additional requirements for aerial applications:

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.

Additional requirements for ground boom application:

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

#### SMALL QUANTITY DILUTION TABLE

To spray small areas use the following dilution table.

If Dosage on Label Shows Following Rate Per Acre	Use this Amount for each Gallon of Water Per 1,000 Square Feet
2 Pints (1 quart)	0.72 ounces (4.3 teaspoons)
4 Pints (2 quarts)	1.4 ounces (2.8 tablespoons)
6 Pints (3 quarts)	2.2 ounces (4.4 tablespoons)

#### 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 this product. Apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on the application rate for an area of 1,000 sq ft. Mix the amount of this product (fl oz or ml) corresponding to the desired broadcast rate in 1 to 3 gallons of spray. To calculate the amount of this product required for larger areas, multiply the table value (fl oz or ml) by the thousands of sq ft to be treated. An area of 1000 sq ft is approximately 10.5 x 10.5 yards (strides) in size.

#### **Rate Conversion Table for Spot Treatment:**

Label Broadcast Rate (pints per acre)									
1/2	2/3	3/4	1	2	3	4	8		
	Equivalent Amount of Weedar 64 per 1000 sq ft								
1/5 fl oz*	1/4 fl oz	1/3 fl oz	3/8 fl oz	3/4 fl oz	1 fl oz	1-1/2 fl oz	3 fl oz		
(5.5 ml)	(7.3 ml)	(8.3 ml)	(11 ml)	(22 ml)	(33 ml)	(44 ml)	(88 ml)		

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

**Band Application:** Weedar 64 may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated area.

Band width in inches Row width in inches	- X	Broadcast rate per acre	=	Brand rate per treated acre
Band width in inches Row width in inches	x	Broadcast volume per acre	=	Brand volume per treated acre

#### WEED LIST

#### **Annual or Biennial Weeds**

Beggarticks (1) Bittercress, smallflowered (3) Bitterweed Broomweed, common (1) Burdock, common Buttercup, smallflowered (1)(3) Carrot, wild Carpetweed Cinquefoil, common (3) Cinquefoil, rough (3) Cocklebur, common Coffeeweed Copperleaf, Virginia (1)(3) Croton, Texas Croton, wooly Fleabane, rough Flixweed Galinsoga Geranium, Carolina (3) Hemp, wild Horseweed (marestail) (3) Jewelweed Jimsonweed

Alfalfa (1)(3) Artichoke, Jerusalem (1) Aster, many-flower (1) Austrian fieldcress (1) Bindweed, European (1) Bindweed, field (1) Bindweed, hedge(1) Blue lettuce Blueweed, Texas Broomweed Bull nettle (1)(3) Carrot, wild

Knotweed (1) Kochia Lambsquarter, common Lettuce, prickly (1) Lettuce, wild Lupines Mallow, little (1) Mallow, Venice (1) Marshelder Morningglory, annual Morningglory, common Morningglory, ivy Morningglory, woolly Mousetail (3) Mustards (except blue mustard) Parsnip, wild Pennycress (fanweed) Pepperweeds (Lepidium spp.)(1) Pigweeds (Amaranthus spp.) (2) Poorjoe Primrose, common evening Purslane, common (3) Pusley, Florida

#### **Perennial Weeds**

Catnip Chicory Clover, red (1)(3) Coffeeweed Cress, hoary (1) Dandelion Docks (1) Dogbanes (1) Eveningprimrose, cutleaf(3) Garlic, wild (1) Goldenrod (1) Hawkweed, orange (1) Healall

Radish, wild Ragweed, common Raqweed, giant Rape, wild Rocket, yellow Salsify, common (1) Salsify, western (1) Shepherd's purse Sicklepod Smartweed (annual species)(1) Sneezeweed, bitter Sowthistle, annual Sowthistle, spiny Spanish needles Sunflower Sweetclover Tansy mustard Thistle, bull Thistle, musk(1) Thistle, Russian (tumbleweed)(1) Velvetleaf Vervains(1) Vetches

Ironweed (1) Ivy, ground (1) Nettles (including stinging) (1) Onion, wild (1) Pennywort Plantains Ragwort, tansy (1) Sowthistle, perennial Speedwell Spotted catsear Thistle, Canada (1) Vervains (1) Wormwood

1- These species may require repeat applications and/or use of the higher specified rate even under ideal conditions for application.

2- Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product

3- This product may not be used to control this weed species in the State of California.

## **CROP SPECIFIC USE DIRECTIONS**

#### ASPARAGUS

APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Annual, biennial and perennial broadleaf weeds	3 to 4 pints	Apply in the spring on actively growing weeds. <b>Ground Application:</b> Apply in 50 to 60 gallons of water per acre. <b>Aerial Application:</b> Apply in 12 gallons of water per acre. Post harvest spraying should be only by ground application using drop nozzles to avoid spraying the fern. If asparagus spears are present, treat immediately after cutting. Spears contacted by the spray may be malformed and off-flavored. If spears are malformed by spray, cut immediately and discard.

#### **RESTRICTIONS FOR ASPARAGUS**

- Limited to two applications per crop cycle.
- Maximum of 4 pints (2.0 lb. ae) per acre per application.
- Minimum of 30 days between applications.
- (PHI) Do not harvest within 30 days of application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

#### APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS (EXCEPT FILBERTS) (ORCHARD FLOOR)

APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Postemergence		For application to orchard floors, use coarse, low-pressure sprays and sufficient water for thorough coverage of weeds.
Annual and biennial broadleaf weeds	1 to 2 pints	Apply to annual weeds when small and actively growing. Apply to perennial weeds from bud to bloom stage.
Perennial broadleaf weeds	Up to 4 pints	Because newly established trees or young orchards are more susceptible to 2,4-D injury, apply only to orchards that are at least one year old and well-established as indicated by vigorous plant growth.

#### RESTRICTIONS FOR USE IN APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS (EXCEPT FILBERTS)

- Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment.
- Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition.
- Do not apply during bloom.
- Do not graze or feed cover crops from treated orchards.
- Do not make more than 2 applications per crop cycle. Maximum of 4.2 pints (2.0 lbs. ae) per acre per application.
- For apples, pears and stone fruits, allow at least 75 days between applications.
- For tree nuts, allow at least 30 days between applications.
- Do not cut orchard floor forage for hay within 7 days of application.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.
- (PHI) Preharvest Intervals:
  - Apple and Pear: Do not harvest within 14 days of application.
  - Stone Fruit: Do not harvest within 40 days of application.
  - Nut Orchard and Pistachio: Do not harvest within 60 days of application.

#### **Use Precautions**

- Do not apply to bare ground as injury may result.
- Do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots as injury may result.

#### FILBERTS (ORCHARD FLOOR)

WEEDS IN CROPS	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS					
Annual broadleaf weeds	2.1 pints	Apply a maximum of 2.1 pints (1.0 lb. ae) in 100 gallons of spray solution per acre.					

#### **RESTRICTIONS FOR USE IN FILBERTS**

- Do not use on light sandy soil.
- Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment.
- Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition.
- Do not apply during bloom.
- Do not graze or feed cover crops from treated orchards.
- Do not make more than 4 applications per crop cycle. Maximum of 2.1 pints (1.0 lbs. ae) per acre per application.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.0 pounds of a.e. per acre per year.
- (PHI) Do not harvest filberts with 45 days of application.
- Allow at least 30 days between applications.
- Do not cut orchard floor forage for hay within 7 days of application.

#### **Use Precautions**

- Do not apply to bare ground as injury may result.
- Do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots as injury may result.

#### BLUEBERRIES High Bush Berries (Vegetative Strips between Rows) [For use only in the states of MA, NJ, OR, WA and WI]

APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
First Application –	3.0 pints	High Bush Berries (Vegetative Strips between Rows)
Spring.		Broadleaf weeds (Broadleaf dock, Canada thistle, Dandelion, Spotted catsear)
		Apply 3 pints of Weedar 64 in 50 gallons of water per acre using ground equipment only.
If necessary,		The first application should be made in the spring as a direct, shielded spray to the
second application		vegetative strip between blueberry rows, avoiding contact with the blueberry plant foliage.
- After Harvest.		If necessary, a second application of Weedar 64 at 3 pints in 50 gallons of water per acre
		may be made after harvest to control regrowth of broadleaf weeds.

#### **RESTRICTIONS FOR USE ON BLUEBERRIES**

• The pre-harvest interval (PHI) is 30 days.

- Limited to 2 application per year.
- Do not exceed 3.0 pints (1.4 lbs ae) per acre per application.
- Do not exceed 6.0 pints (2.8 lbs ae) per acre per year.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 2.8 pounds of a.e. per acre per year.

- Do not apply through any type of irrigation system.
- Do not apply by aerial application.
- Do not apply in or near greenhouses.
- Do not apply if the temperature is 65 degrees or higher, to avoid injury to blueberry plants.

• Do not allow pesticide to drip or touch blueberry plants in the growing or dormant period. Plants contacted by this product may be killed or suffer significant injury resulting in grade or yield loss.

#### PRECAUTIONS FOR USE ON BLUEBERRIES

- INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY DO NOT USE THIS PRODUCT ON BLUEBERRIES.
- For optimum herbicide performance, mowing between rows for at least 7 days before or after the application is not advised.
- Soil residue of this product may temporarily inhibit seed germination and plant growth.

CEREAL GRAINS
(Wheat, Barley, Intermediate Wheatgrass, Millet, Oats, Rye, Triticale and Teff[**])

CROP / APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64	ss, Millet, Oats, Rye, Triticale and Teff[**]) DIRECTIONS
	PER ACRE	Apply after crop is fully tillered (usually 4 to 8 inches tall), but
Barley, Rye, Triticale, Wheat, Millet, and		before boot stage of growth and weeds are small.
Teff[**]	1/2 to 2 pints*	Do not apply before tillering or from early boot through the
Not underseeded with legumes	1 to 2 pints*	<b>milk stage of growth.</b> Aerial application: apply this product in 3 to 10 gallons of water per
Postemergence	1 to 2 pints	acre
Annual and biennial broadleaf weeds Perennial broadleaf weeds		Ground application: apply this product in minimum of 10 to 15
		gallons of water per acre
		Apply after crop is fully tillered (usually 4 to 8 inches tall), but before boot stage of growth and weeds are small.
Oats	1/2 pint	Do not apply before tillering or from early boot through the
Not underseeded with legumes		milk stage of growth.
Postemergence	3/4 to 1-1/2	Do not apply during or immediately following cold weather.
Spring Seeded	pints*	Aerial application: apply this product in 3 to 10 gallons of water per acre
Fall Seeded Southern		Ground application: apply this product in minimum of 10 to 15
		gallons of water per acre
Intermediate Wheatgrass		Application must be made in the spring after tillering (usually 4 to 8 inches tall), but before the boot stage of growth.
Not underseeded with legumes		Do not apply before tillering or from boot through milk stage
Postemergence	1/2 – 2 pints*	of growth. Aerial application: apply this product in 3 to 10 gallons of water per
Spring application on Fall plantings		acre
		Ground application: apply this product in minimum of 10 to 15
		gallons of water per acre
		Apply after grain is 8 inches tall, but before early boot stage of growth.
		Do not apply before tillering or from early boot through the milk stage of growth.
Barley, Rye, Triticale, Wheat, Millet,	1/1 to 1/2 mint*	Do not spray alfalfa or sweet clover unless the infestation is severe
Intermediate Wheatgrass, Oats, and Teff[**] Underseeded with legumes	1/4 to 1/2 pint*	and injury to these legumes can be tolerated.
Chacibeeded with leguines		Aerial application: apply this product in 3 to 10 gallons of water per acre
		Ground application: apply this product in minimum of 10 to 15
		gallons of water per acre
		Apply when weeds are approaching bud stage, after the grain dough stage.
		Do not apply before tillering or from early boot through the
		milk stage of growth
Emergency weed control in		The 2.6 pints per acre application can produce injury to wheat. Balance the severity of your weed problem against the possibility of
Triticale, Wheat Perennial broadleaf weeds	2.6 pints	crop damage. Where perennial weeds are scattered, spot
	2.0 pinto	treatment is suggested to minimize the extent of crop injury.
		Aerial application: apply this product in 3 to 10 gallons of water
		per acre Ground application: apply this product in minimum of 10 to 15
		gallons of water per acre
		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.
Barley, Rye, Triticale, Wheat,		<b>Do not apply from early boot through the milk stage of growth.</b> Limit to one preharvest application per crop cycle.
Millet, Oats, and Teff[**]	1 pint	Maximum of 1 pint (0.5 lb. ae) per acre per application.
Preharvest application		Aerial application: apply this product in 3 to 10 gallons of water per
		acre
		Ground application: apply this product in minimum of 10 to 15
		gallons of water per acre

\*Use the lower rate if small annual and biennial weeds are the major problem. Use the higher rate if perennial weeds or annual and biennial weeds are present which are in the hard-to-kill categories as determined by local experience. The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the grain damage risk. Do not apply this product to grain in the seedling stage.

[\*\*Not for use on Teff in California]

#### **RESTRICTIONS FOR USE ON CEREAL GRAINS**

• Do not feed treated straw to livestock if an emergency treatment as described above is applied.

• (PHI) Do not harvest within 14 days of application.

• Limit to one postemergence application per crop cycle.

• Limit to one preharvest application per crop cycle to listed cereal grains except intermediate wheatgrass. Do not make

preharvest application to intermediate wheatgrass.

• **Postemergence:** Maximum of 2.6 pints (1.25 lbs. ae) per acre per application for all listed cereal grains except intermediate wheatgrass. Maximum of 2.0 pints (1.0 lbs. ae) per acre per application for intermediate wheatgrass.

• **Preharvest:** Maximum of 1 pint (0.5 lb. ae) per acre per application for all listed cereal grains except intermediate wheatgrass. Do not make preharvest application to intermediate wheatgrass.

• Limit to 3.6 pints product (1.75 lbs. ae) per acre per crop cycle to listed cereal grains except intermediate wheatgrass.

Maximum of 2 pints of product (1.0 lb. ae) per acre per crop cycle to intermediate wheatgrass.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.75 pounds of a.e. per acre per crop cycle for listed cereal grains except intermediate wheatgrass. For intermediate wheatgrass, do not exceed a combined total of 1 pounds of a.e. per acre per crop cycle.

Field Corn, Popcorn and Sweet Corn					
APPLICATION TIMING / STAGE OF GROWTH	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS			
CORN Preplant (Burndown)	1 to 2 pints	To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 7 to 14 days before planting. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth. Use high rate for less susceptible weeds or cover crops such as alfalfa.			
Preemergence	2 pints	Apply 3 to 5 days after planting but before corn emerges. Do not use on light, sandy soils or where soil moisture is low.			
Postemergence Annual broadleaf weeds Perennial broadleaf weeds	1/2 to1 pint 1 pint	Apply when weeds are small and corn is less than 8 inches tall (to top of canopy). When corn is over 8 inches tall, use drop nozzles and keep spray off foliage. Treat perennial weeds when they are in the bud to bloom stage. <b>Do not spray corn in the tassel to dough stage.</b> Corn treated with 2,4-D may become temporarily brittle. Winds or cultivation may cause stalk breakage during the period of time when the corn is brittle.			
Preharvest (Field Corn and Popcorn Only)	Up to 3 pints	Apply after corn is in hard dough (or denting) stage. Do not apply preharvest to sweet corn.			

#### CORN Field Corn, Popcorn and Sweet Corn

### CORN (FIELD CORN, POPCORN AND SWEET CORN) RESTRICTIONS

**Field Corn and Popcorn Restrictions** 

- (PHI) Do not harvest within 7 days of application.
- (PGI) Do not use treated crop as fodder for 7 days following application.
- Limited to one Preplant, one Postemergence and one Preharvest application per crop cycle.
  - Preplant or Preemergence: Maximum of 2 pints (1.0 lb. ae) per acre.
    - Postemergence: Maximum of 1 pint (0.5 lb. ae) per acre.
    - Preharvest: Maximum of 3 pints (1.5 lbs. ae) per acre.
    - Maximum of 6 pints (3.0 lbs. ae) per acre per crop cycle.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 3.0 pounds of a.e. per acre per year for field corn and popcorn.

#### Sweet Corn Restrictions

- (PHI) Do not harvest within 45 days of application.
- (PGI) Do not use treated crop as fodder for 7 days following application.
- Do not apply preharvest to sweet corn.
- Limited to one Preplant and one Postemergence application per crop cycle.
  - Preplant or Preemergence: Maximum of 2 pints (1.0 lb. ae) per acre.

- Postemergence: Maximum of 1 pint (0.5 lb. ae) per acre.
- Maximum of 3 pints (1.5 lbs. ae) per acre per crop cycle.
- Minimum of 21 days between applications.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 pounds of a.e. per acre per year for sweet corn.

**Precaution:** Corn hybrids vary in tolerance to 2,4-D. Apply this product only to varieties known to be 2,4-D tolerant. Consult your seed company representative or local Agricultural Experiment Station or Extension Service Weed Specialist for information on 2,4-D tolerance of corn varieties. Application of this product may cause temporary stem brittleness in corn. To avoid stem breakage, delay cultivation for 8 to10 days following application.

#### CRANBERRIES For Control of Tall Weeds in Cranberry Bogs [For use only in the states of MA, NJ, OR, WA and WI]

APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Best results when used in late June and July.	2.4 pints	For Control of Tall Weeds in Cranberry Bogs Apply with a wooden frame or similar device, shaped like a hockey stick, with its lower member wrapped with several thicknesses of Turkish toweling (or other suitable material). Apply by soaking the toweling in one part Weedar 64 Herbicide to two parts water. Then with swabbed portion of the stick horizontal, wave left and right above the cranberry vines, wiping small quantities of the herbicide onto tall weeds above the crop level.

#### **RESTRICTIONS FOR USE ON CRANBERRIES**

• The pre-harvest interval (PHI) is 30 days.

• Limited to 2 application per year.

• Do not exceed 2.4 pints (1.2 lbs ae) per acre per application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.2 pounds of a.e. per acre per year.

• Do not apply through any type of irrigation system.

• Do not apply by aerial application.

• Do not allow pesticide to drip or touch cranberry vines.

## Precaution: INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY DO NOT USE THIS PRODUCT ON CRANBERRIES.

#### **GRAPE VINEYARDS**

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

APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	
Apply when weeds are in the bud to early bloom stage and growing vigorously. Apply after shatter following bloom and before grape shoots reach the ground or during dormant season.	1.8 to 2.7 pints	Dilute in 10 to 100 gallons of water to treat one acre of ground to be sprayed. For band or spot treatment, calculate rates according to the actual portion of acre treated. Use a hooded boom and low pressure flooding nozzles to deliver coarse droplets.

#### **RESTRICTIONS FOR USE ON GRAPES**

• For use only in California, Oregon and Washington.

• The pre-harvest interval (PHI) is 100 days.

• Limited to 1 application per crop cycle.

- Maximum of 2.7 pints (1.36 lbs. ae) per acre per application.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.36 pounds of a.e. per acre per year.

**Precaution:** Grapes are extremely sensitive to 2,4-D. Use a direct application so no 2,4-D contacts grape leaves and young shoots or stems.

	HOPS				
WEEDS IN CROPS	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE				

Postemergence	1 pint	Make directed applications to the row middles. Make up to 3 applications at 30-day intervals with the last application before harvest.
		Hop foliage, especially new growth, is susceptible to this product. Take care to avoid spray or drift outside target area. The use of shielded or hooded sprayers, coarse sprays and low pressure (30 psi or less) will minimize contact with foliage and plant injury.

#### **RESTRICTIONS FOR HOPS**

- Limited to 3 applications per crop cycle.
- Maximum of 1 pint (0.5 lb. ae) per acre per application.
- Maximum of 3 pints (1.5 lbs. ae) per acre per crop cycle.
- Minimum of 30 days between applications.
- (PHI) Do not harvest within 28 days of application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 pounds of a.e. per acre per year.

#### RED POTATOES

#### (Only for Use on Red Potatoes Intended for Fresh Market)

APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Postemergence	2.35 fl. oz.	<b>Red Potatoes:</b> Properly timed applications of this product generally enhance red color, aid in storage retention of red color, improve skin appearance, increase tuber set, and improve tuber size uniformity (fewer jumbos). Crop response may vary depending on variety, stress factors, and local conditions. Varieties with naturally dark red color generally benefit less from treatment.
		Make first application when potatoes are in the pre-bud stage (about 7 to 10 inches high) and make a second application about 10 to 14 days later.

#### PRECAUTIONS FOR USE ON RED POTATOES

· Consult with Agricultural Extension Service and other qualified crop advisors for local recommendations.

#### **RESTRICTIONS FOR USE ON RED POTATOES**

- The preharvest interval (PHI) is 45 days.
- Minimum of 10 days between applications.
- Postemergence
  - Limited to two postemergence application per crop cycle.

- Maximum of 2.35 fluid ounces (0.07 lb 2,4-D ae) per acre per application.

 Apply 2.35 fluid ounces of this product per acre in 5 to 25 gallons of water using ground or aerial equipment. The specific spray volume selected should be sufficient for good coverage of plants.

RICE

DO NOT USE IN CALIFORNIA			
APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS	
Preplant	1 to 2 pints	Apply four or more weeks prior to planting rice.	
Postemergence	1 to 2-1/2 pints	Apply when rice is in the late tillering stage of development at the time of first joint development. Do not apply after panicle initiation, after rice internodes exceed one-half inch, at early seedling, early panicle, boot or heading stages. Consult local university or Agricultural Extension Service specialists for more specific information on rates and timing of application. Application rates of 2-1/2 pints per acre may be applied to handle difficult weed control problems. However, do not use the 2-1/2 pints per acre rate unless possible crop injury is acceptable.	

#### **RESTRICTIONS FOR USE IN RICE**

- Do not apply more than a total of 2-1/2 pints per acre of this product to rice per growing season.
- Do not use on rice in California.
- (PHI) Do not harvest within 60 days of application.
- Preplant: Limited to 1 preplant application per crop cycle. Maximum of 2 pints (1.0 lb. ae) per acre per preplant application.
- Postemergence: Limited to 1 postemergence application per crop cycle. Maximum of 3 pints (1.5 lbs. ae) per acre per postemergence application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 pounds of a.e. per acre per year.

#### WILD RICE (For Use In Minnesota Only)

WEEDS IN CROP	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Common water plantain	1/2 pint	Broadcast in 4 to 10 gallons total spray volume. Apply after water plantain has emerged from the water and when wild rice is in the 1 to 2 aerial leaf to early tillering stage. Do not spray after wild rice has reached the boot stage.

#### **RESTRICTIONS FOR USE IN WILD RICE**

- For use only on wild rice grown in commercial paddies.
- Do not apply to wild rice growing in lakes, rivers or streams.

• Water that is drained out of wild rice paddies is not to be used to irrigate other crops. In order to protect federally listed endangered or threatened species, the Minnesota Department of Agriculture has a program to pre-notify landowners where pesticide applications may affect federally listed endangered or threatened species.

- Limited to 1 application per crop cycle.
- Do not apply more than 1/2 pint per acre of 2,4-D Amine 4 (0.25 lb. ae/A) per use season.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 0.25 pounds of a.e. per acre per year.
- (PHI) Do not harvest within 60 days of application.

#### SORGHUM Grain Sorghum (Milo) and Forage Sorghum

APPLICATION TIMING / STAGE OF GROWTH	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Grain Sorghum (Milo) and Forage Sorghum Postemergence Crop 6 – 8 inches tall	1/2 to 1-1/2 pints	Apply when sorghum is 6 to 15 inches tall. If sorghum is taller than 8 inches to top of the canopy, use drop nozzles and keep spray off the foliage.
Crop 8 – 15 inches tall (Direct Spray Only)	3/4 to 1-1/2 pints	

**Use Precautions:** Temporary crop injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply Weedar 64 under these conditions, use no more than 2/3 pint per acre. Sorghum hybrids vary in 2,4-D tolerance. Apply only to varieties known to be tolerant to 2,4-D. Consult your seed company representative or local agricultural experiment station or Extension Service Weed Specialist for information on 2,4-D tolerance of sorghum varieties.

#### RESTRICTIONS FOR SORGHUM

- Do not forage or feed fodder for 7 days following application.
- Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.
- Do not use with oil or other adjuvants.
- Do not treat during boot, flowering or dough stage.
- Limited to one Postemergence application per crop cycle.
- Postemergence: Maximum of 1.5 pint (1.0 lb. ae) per acre.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.0 pounds of a.e. per acre per year.
- (PHI) Do not harvest within 30 days of application.

#### SOYBEANS\* (Preplant Only) DO NOT USE IN CALIFORNIA

APPLICATION TIMING	AMOUNT OF WEEDAR® 64 PER ACRE	DIRECTIONS
Postemergence	3/4 to 1 pint	Apply not less than 15 days prior to planting soybeans, when weeds are small and actively growing. Use the higher rate on larger weeds and when perennials are present.
	>1 to 2 pints	Apply not less than 30 days prior to planting soybeans, when weeds are actively growing.

Apply no more than 2.0 pints of this product in one season prior to planting soybeans. After applying, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter press wheel, if necessary, to ensure that planted seed is completely covered.

If desired, this product may be applied pre-plant to soybeans in tank mixtures with other herbicides Roundup®, (EPA Reg No. 524-445, active ingredient glyphosate) Gramoxone Extra® (EPA Reg No. 10182-280, active ingredient paraquat), Prowl® (EPA Reg No. 241-337, active ingredient pendimethalin), Cheetah® (EPA Reg No. 71368-112, active ingredient glufosinate), Panther® (EPA Reg No. 71368-102, active ingredient flumioxazin), Cloak® (EPA Reg No. 71368-83, active ingredient metribuzin), Credit® 41 Extra (EPA Reg No. 71368-37, active ingredient glyphosate), Credit® Xtreme (EPA Reg No. 71368-81, active ingredient glyphosate) and others that are registered for pre-plant soybean use.

**NOTE**: Unacceptable injury to soybeans planted in fields previously treated with this product may occur and the extent of injury will depend on weather and agronomic factors such as the amount of weed vegetation and previous crop residue present that may be in effect between the time of application and the emergence of the soybean plant.

#### **RESTRICTIONS FOR USE IN SOYBEANS (PREPLANT)**

- Do not apply this product when weather conditions such as temperature, air inversions, or wind favor drift from treated areas to susceptible plants.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D pre-plant use.
- Do not apply this product pre-plant to soybeans in fields having a coarse-textured soil where the percent organic matter is <1.0%.
- Only one application of this product may be made prior to planting soybeans per growing season.
- Pre-plant (2 application option):
- Do not apply more than 1 pint (0.5 lb. ae) per acre per preplant application.
- Do not apply within 15 days of planting soybeans.
- Pre-plant (1 application option):
  - Do not apply more than 2 pints (1.0 lb. ae) per acre.
  - Do not apply within 30 days of planting soybeans.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.0 pounds of a.e. per acre per year.

#### **Use Precautions**

- Do not apply this product prior to planting soybeans if you are not prepared to accept the results of soybean injury including possible loss of stand and yield.
- Do not mow or cultivate weeds prior to treating with this product as poor control may result.

STRAWBERRIES (Established Planting Only)
DO NOT USE IN CALIFORNIA OR FLORIDA

APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Established Strawberries Only Apply in early spring when strawberries are dormant or immediately after the last picking.	2 to 3 pints	Apply in 25 - 50 gallons of water per acre.

#### **RESTRICTIONS FOR STRAWBERRIES**

- Apply only in established strawberry plantings.
- Apply in early spring when strawberries are dormant or immediately after the last picking.
- Limited to 1 application per crop cycle.
- Maximum of 3 pints (1.5 lb. ae) per acre per application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 pounds of a.e. per acre per year.

#### SUGARCANE DO NOT USE IN CALIFORNIA

WEEDS IN CROP	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Preemergence	4 pints	Apply before canes appear for control of emerged broadleaf weeds.
Postemergence	1-1/2 to 4 pints	Apply after cane emerges and through lay-by.

#### **RESTRICTIONS FOR USE IN SUGARCANE**

• Do not apply more than a total of 8 pints (4.0 lb. ae) of this product to sugarcane per acre per growing season.

• Do not harvest cane prior to crop maturity.

• Preemergence: Limited to 1 application per crop cycle. Maximum of 4 pints (2.0 lb. ae) per acre per application.

• Postemergence: Limited to 1 application per crop cycle. Maximum of 4 pints (2.0 lb. ae) per acre per application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

#### FALLOWLAND AND CROP STUBBLE Idle Land, or Postharvest to Crops, or Between Crops

WEEDS	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Annual broadleaf weeds	1 to 2 pints	Use the lower rate when weeds are small (2 to 3 inches tall) and actively growing. Use a higher rate in the rate range when weeds are larger and under less favorable growth conditions.
Biennial broadleaf weeds	2 to 4 pints	Spray when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed.
Perennial broadleaf weeds	2 to 4 pints	Spray weed in the bud to bloom stage or while in good vegetative growth. Do not disturb treated areas for at least 2 weeks after treatment, or until tops are dead.
Wild garlic and onion in crop stubble	4 pints	Apply to new regrowth of wild garlic or onion which occurs in the fall following harvest of small grains, corn or grain sorghum.

#### RESTRICTIONS FOR USE IN FALLOWLAND AND CROP STUBBLE

• Limit to two applications per year.

- Maximum single rate application of 4 pints (2.0 lbs. ae) per acre.
- Maximum of 8 pints (4.0 lbs. ae) per acre per year.
- Plant only labeled crops within 29 days following application.
- Minimum of 30 days between applications.
- (PHI) Do not cut, forage or hay within 7 days of application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

#### CONSERVATION RESERVE PROGRAM AREAS Including Perennial Grasslands Not In Agricultural Production

WEEDS	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Annual broadleaf weeds In young grasses In established grasses	1/2 to 1 pint 1/2 to 2 pints	Apply to actively growing annual broadleaf weeds. Use 1/2 to 1 pint when weeds are small; use higher rates on older weeds. Do not apply to young grasses with fewer than 6 leaves or prior to tillering, as excessive injury may result. Do not apply more than 1 pint until grasses are well established as excessive injury may result.
Biennial and perennial broadleaf weeds In established grasses	2 to 4 pints	Treat when biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage. Apply to actively growing weeds.

#### RESTRICTIONS FOR USE ON CONSERVATION RESERVE PROGRAM AREAS

- Use at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground.
- Do not apply to grasses in the boot to dough stage if grass seed production is desired.
- Do not cut forage for hay within 7 days of application.
- Postemergence:
  - For susceptible annual and biennial broadleaf weeds, do not exceed 2 pints (1.0 lb. ae) per acre per application.
  - For moderately susceptible biennial and perennial broadleaf weeds and for difficult to control weeds and woody plants, do not exceed 4 pints (2.0 lbs. ae) per acre per application.
  - Spot treatments do not exceed 4 pints (2.0 lbs. ae) per acre.
  - Maximum of 2 applications per year.
  - Maximum of 8 pints (4.0 lbs. ae) per acre per year.
  - Minimum of 30 days between applications.
- Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.
- If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.
- For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

#### RANGELAND, ESTABLISHED GRASS PASTURES AND GRASS CUT FOR HAY

TREATMENT SITE METHOD OF APPLICATION	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 pints	Apply when weeds are small and actively growing and prior to bud stage. Spray while musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent.
Biennial and perennial broadleaf weeds	2 to 4 pints	The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed. Do not apply to newly seeded areas until grass is well established. Do not apply to grass in the early boot through milk stage if grass seed production is desired. Bentgrass and legumes may be injured by this treatment.
Spot Treatment to control broadleaf weeds	See Use Directions in <b>Spot</b> Treatment Section	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. See rate conversion table and instructions for "Spot Treatment" and "Hand-Held Sprayers" for use of hand-held sprayers.
Tree Injection Application	-	See instructions for tree injection application in "Forestry Uses" section.
Wild garlic and wild onion	4 pints	Make three applications (fall-spring-fall or spring-fall-spring) starting in late fall or early spring.
Broadleaf weed control in newly sprigged coastal bermudagrass	2 to 4 pints	Applications may be made either preemergence or postemergence. Follow "Specific Use Directions" for annual, biennial and perennial broadleaf weed control, above.
Sand shinnery oak /Sand sagebrush	2 pints	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. Retreatment maybe needed.
Big sagebrush /Rabbitbrush	4 pints	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.
Chamise, manzanita, buckbrush, coastal sage, coyotebrush, and chaparral species	4 pints	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		<b>Broadcast:</b> Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment.
Broadcast application	Up to 4 pints	<b>Spot Treatment:</b> Apply when foliage is well developed. Thorough coverage is required. Use 8 pints of this product plus 4 to 8 fluid ounces
Spot Treatment	8 pints / 100 gallons of spray	of an agricultural surfactant per 100 gallons of water. Two or more treatments may be required.

#### RESTRICTIONS FOR ESTABLISHED GRASS PASTURES, RANGELAND AND GRASS CUT FOR HAY

• 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.
- Do not cut forage for hay within 7 days of application.
- Postemergence:
  - For susceptible annual and biennial broadleaf weeds, do not exceed 2 pints (1.0 lb. ae) per acre per application.
  - For moderately susceptible biennial and perennial broadleaf weeds and for difficult to control weeds and woody plants, do not exceed 4 pints (2.0 lbs. ae) per acre per application.
  - Spot treatments do not exceed 4 pints (2.0 lbs. ae) per acre.
  - Maximum of 2 applications per year.
  - Maximum of 8 pints (4.0 lbs. ae) per acre per year.
  - Minimum of 30 days between applications.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

• If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.

• For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

GRASSES FOR SEED OR SOD			
AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS		
2 to 4 pints	Apply to established stands in spring from tiller to early boot stage. <b>Do not spray in boot stage</b> . New spring seedings may be treated with the lower rate after grass seedlings have at least 5 leaves. Perennial weed regrowth may be treated in the fall.		
3/4 to 1 pint	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 2/3 pt/acre. Cool season grasses are		
1 to 4 pints	tolerant of 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 2 2/3 pint/acre may be applied for control of hard-		
1/2 to 4 pints	to-kill annual or perennial weeds. Deep-rooted perennials such as bindweed and Canada thistle may require repeat applications. Avoid mowing sod farms for 1 to 2 days before or after application. Delay irrigation until the day following application. Use sufficient spray solution for thorough and uniform coverage, and no less than 2 gallons per acre.		
	AMOUNT OF WEEDAR® 64 PER ACRE 2 to 4 pints 3/4 to 1 pint 1 to 4 pints		

## GRASSES FOR SEED OR SOD

#### RESTRICTIONS FOR GRASSES FOR SEED OR SOD FARMS

• Do not use on creeping grasses such as bentgrass except as a spot treatment.

• Do not use on injury-sensitive southern grasses such as St. Augustinegrass.

- Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed.
- Reseeding: Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall

application, reseed in the spring.

• Maximum of 4 pints (2.0 lbs. ae) per acre per application.

• Limited to 2 applications per year.

• Minimum of 21 days between applications.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

Golf Courses, Cemeteries, Parks, Turfgrass, Lawns, Airfields, Roadsides, Vacant Lots and Other Grass Areas			
TREATMENT SITE APPLICATION TIMING	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS	
Annual broadleaf weeds	2 to 3 pints	Treat when weeds are young and actively growing. Perennial weeds should be near the bud stage, but not flowering at application. Do not use on susceptible southern grasses such as St. Augustine. Do not	
Biennial and perennial broadleaf weeds	3 pints	apply to newly seeded area until grass is well established. Bentgrass, clover, legumes and dichondra may be injured by this treatment.	

#### ORNAMENTAL TURF AREAS (excluding Grasses Grown for Seed or Sod Farms) olf Courses, Cemeteries, Parks, Turfgrass, Lawns, Airfields, Roadsides, Vacant Lots and Other Grass

#### RESTRICTIONS FOR ORNAMENTAL TURF AREAS

• Use sufficient gallonage for thorough and uniform coverage.

• Do not use on susceptible southern grasses such as St. Augustine.

• Do not apply more than 2 broadcast applications per year per treatment site. This does not exclude spot treatments.

<sup>•</sup> Do not apply to newly seeded area until grass is well established (five-leaf stage or later) and then use a maximum of 2/3 pint per acre.

• Maximum of 3 pints (1.5 lbs. ae) per acre per application.

• Maximum of 6 pints (3.0 lbs. ae) per acre per year, excluding spot treatments.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 3.0 pounds of a.e. per acre per year.

#### NON-CROPLAND

#### Fencerows, Hedgerows, Roadsides, Ditches, Right-of-Way, Utility Power Lines, Railroads, Airports and Industrial Sites

WEEDS	AMOUNT OF WEEDAR <sup>®</sup> 64 PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 to 4 pints	Treat when weeds are young and actively growing. Perennial weeds should be near the bud stage, but not flowering at application. Do not
Biennial and perennial broadleaf weeds	4 to 8 pints	use on susceptible southern grasses such as St. Augustine. Do not apply to newly seeded areas until grass is well established. Bentgrass, clover, legumes and dichondra may be injured by this treatment.
Spot Treatment to control broadleaf weeds	See Use Directions in <b>Spot</b> Treatment Section	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. See rate conversion table and instructions for "Spot Treatment" and "Hand-Held Sprayers" for use of hand-held sprayers.
Tree Injection Application	-	See instructions for tree injection application in "Forestry Uses" section.
Southern wild rose		<b>Broadcast:</b> Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment.
Broadcast application	Up to 8 pints	<b>Spot Treatment:</b> Apply when foliage is well developed. Thorough coverage is required. Use 8 pints of this product plus 4 to 8 fluid ounces
Spot Treatment	8 pints / 100 gallons of spray	of an agricultural surfactant per 100 gallons of water. Two or more treatments may be required.

#### **RESTRICTIONS FOR NON-CROPLAND**

- Do not apply to newly seeded areas until grass is well established.
- Use 2 or more gallons of spray solution per acre.
- Do not harvest forage or hay from treated areas for 7 days after application.
- Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.
- Postemergence (annual and perennial weeds):
  - Limit 2 applications per year.
  - Maximum of 4 pints (2.0 lbs. ae) per acre per application.
  - Minimum 30 days between applications.
- Postemergence (woody plants):
  - Limit 1 application per year.
  - Maximum of 8 pints (4.0 lbs. ae) per acre per application.

• Weedar 64 contains 3.8 pounds a.e. of 2,4-D per gallon. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

#### **Use Precautions**

• Bentgrass, St. Augustine, clover, legumes and dichondra may be severely injured or killed by this treatment.

FORESTRY USES Forest site preparation, forest roadsides, brush control, Poplar / Cottonwood for pulp, established conifer release, including Christmas trees and reforestation areas

TREATMENT SITE	AMOUNT OF WEEDAR <sup>®</sup> 64	DIRECTIONS
METHOD OF APPLICATION	PER ACRE	
Annual broadleaf weeds Biennial and perennial broadleaf weeds and susceptible woody plants	2 to 4 pints 4 to 8 pints	Apply when weeds are small and growing actively before the bud stage. Apply when biennial and perennial species are in the seedling to rosette stage and before flower stalks appear. For difficult to control perennial broadleaf weeds and woody species, use up to 8 pints of Weedar 64 and 1 to 4 quarts of Tahoe <sup>®</sup> 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	See Use Directions in <b>Spot</b> <b>Treatment</b> Section	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. See rate conversion table and instructions for "Spot Treatment" and "Hand-Held Sprayers" for use of hand-held sprayers.
Poplar / Cottonwood trees grown for pulp – broadleaf weed control	1/2 pint to 3 pints	Applied through wick applicators or conventional ground sprayers. (Excluding irrigation systems) Do not allow this product to contact leaves or green bark of the tree. Apply in enough water to provide uniform coverage prior to or after planting of Poplar/Cottonwood trees. Application during warm weather is preferred. Apply when weeds are actively growing, preferably before bud stage. Repeat treatment may be necessary for less susceptible weeds; re-apply as needed. Accord®may be mixed with this product to increase weed control. Follow both labels to determine correct rates. Two quarts or more of a spreader - activator per 100 gallons of spray solution may be added to improve herbicide performance.
Conifer Release: Species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir	3 to 8 pints	To control competing hardwood species such as alder, aspen, birch, hazel, and willow, apply from mild to late summer when growth of conifer trees has hardened off and woody plants are still actively growing. Apply with ground or air equipment, using sufficient spray volume to ensure complete coverage. Because this treatment may cause occasional conifer injury. Do not apply if such injury cannot be tolerated.
Directed Spray: Conifer plantations including pine	8 pints / 100 gallons of spray	Apply when brush or weeds are actively growing by directing the spray so as to avoid contact with conifer foliage and injurious amounts of spray. Apply in oil, oil-water, or water carrier in a spray volume of 10 to 100 gallons per acre.
Basal Spray May also be used in rangeland, pastures, and noncropland	17 pints / 100	Thoroughly wet the base and root collar of all stems until the spray begins to accumulate around the root collar at the ground line. Wetting stems with the mixture may also aid in control.
Surface of Cut Stumps May also be used in rangeland, pastures, and noncropland	gallons of spray or	Apply as soon as possible after cutting trees. Thoroughly soak the entire stump with the 2,4-D mixture including cut surface, bark and exposed roots.
Frill and Girdle May also be used in rangeland, pastures, and noncropland	2.6 fl oz / 1 gallon of spray	Cut frills (overlapping V-shaped notched cut downward through the bark in a continuous ring around the base of the tree) using and 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 forests and other non-crop areas, apply by injecting at a rate of 1 ml of undiluted Weedar 64 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. For resistant species such as hickory, injections should overlap. Maples should not be treated during the spring sap flow. For hard to control species such as ash, alder, aspen, birch, blackgum, cherry, tulip poplar, maple, and dogwood use 2 ml of undiluted Weedar 64 per injection site or double the number of 1 ml injections. For best results, injections should be made during the growing season, May 15th through October 15th. <b>For Dilute Injection:</b> Mix 1 gallon of product in 19 gallons of water for dilute injection. <b>Note:</b> No Worker Protection Standard workers entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.
---	---------------------------------	---

#### **RESTRICTIONS FOR FORESTRY USE**

- Do not make more than one broadcast application per year.
- For broadcast applications, do not apply more than 8 pints (4 lbs. ae) per acre per 12-month period.
- Basal spray, Cut Surface Stumps, and Frill:
- Limited to one application per year.
  - Maximum of 8.0 lbs ae per 100 gallons of spray solution.
- Injections:
  - Limit of one basal spray or cut surface application per year.
  - Maximum of 2.0 ml of 4.0 lbs ae per gallon formulation per injection site.

#### **BIOENERGY CROPS – GRASSES[\*]**

WEED CONTROL IN GIANT REEDGRASS (*Arundo donax*), SWITCHGRASS (*Panicum virgatum*), GIANT MISCANTHUS (*Miscanthus x giganteus*) AND OTHER NON-FOOD PERENNIAL GRASS BIOENERGY CROPS. [\*Not for use in California to Bioenergy Crops – Grasses]

#### USE INSTRUCTIONS

This product may be applied for broadleaf weed control in giant reedgrass (*Arundo donax*), switchgrass (*Panicum virgatum*) giant Miscanthus (*Miscanthus x giganteus*) and other non-food perennial grass bioenergy crops.

For perennial grasses, apply no earlier than 4-leaf stage. Apply 1/2 to 2 pints per acre to seedling grasses with ground or air equipment. A rate of 1 to 4 pints per acre should be used when grasses are well established.

#### RESTRICTIONS

- Limited to 2 broadcast applications per year.
- Maximum of 4 pints (2.0 lb. ae) per acre per application.
- Minimum of 30 days between applications.
- Apply by air or ground equipment in sufficient gallonage to obtain adequate coverage. Minimum of 2 gallons of water per acre for aerial application and 10 or more for ground application is recommended.
- Do not spray immediately before irrigation and withhold above-ground irrigation for 3 days after application.
- Treated plantings not to be consumed by human or animal.

#### BIOENERGY CROPS - TREES WEED CONTROL IN HYBRID POPLAR TREES, COTTONWOOD TREES AND WILLOW TREES GROWN AS BIOENERGY CROPS

#### **USE INSTRUCTIONS**

This product may be used in hybrid poplar trees, cottonwood trees and willow trees grown as bioenergy crops. Application during warm weather is preferred. Apply when weeds are actively growing, preferably before bud stage. Repeat treatment may be necessary for less susceptible weeds; re-apply as needed.

For hybrid poplar, cottonwood and willow make application prior to or after planting. For ground spray equipment, use 1/2 to 3 pints per acre. Apply 1 to 4 pints per acre using wick type applicators that treat weeds directly. Crop injury may result if the wick, wick solution or spray solution contact leaves or green bark of the crop trees.

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

#### TANK MIXTURES

This product may be tank mixed with Credit 41 Herbicide (EPA Reg. No. 71368-20, active ingredient glyphosate) to provide broader spectrum of control.

#### RESTRICTIONS

- Limited to 1 broadcast applications per year.
- Maximum of 4 pints (2.0 lb. ae) per acre per application.
- Minimum of 30 days between applications.
- Use sufficient spray volume for thorough and uniform coverage, but a minimum of 10 gallons per acre for broadcast application.

• Do not apply this product by air for use of weed control in hybrid poplar tree, cottonwood trees and willow tress grown as bioenergy crops.

• Do not use this product in or near greenhouses, for use of weed control in hybrid poplar tree, cottonwood trees and willow tress grown as bioenergy crops.

- Do not spray immediately before irrigation and withhold above-ground irrigation for 3 days after application.
- Treated plantings not to be consumed by human or animal.

#### AQUATIC USES

Use Requirements for Aquatic Areas: When this product is applied to aquatic areas, follow PPE and reentry instructions in the "Non-Agricultural Use Requirements" section of this label.

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

#### CONTROL OF WEEDS AND BRUSH ON BANKS OF IRRIGATION CANALS AND DITCHES

#### **Restrictions:**

• Do not apply more than 2 treatments per season or reapply within 30 days.

- Use 2 or more gallons of spray solution per acre.
- Do not apply more than 4.21 pt/acre (2.0 lb of acid equivalent) per application or more than 8.42 pt/acre (4.0 lb of acid equivalent) per use season.

Do not use on small canals with a flow rate less than 10 cubic feet per second (CF) where water will be used for drinking purposes. CFS may be estimated by using the formula below. The approximate velocity needed for the calculation can be determined by observing the length of time that it takes a floating object to travel a defined distance. Divide the distance (ft.) by the time (sec.) to estimate velocity (ft. per sec.). Repeat 3 times and use the average to calculate CFS.

Average Width (ft.) x Average Depth (ft.) x Average Velocity (ft. per sec.) = CFS

For ditchbank weeds: Do not spray cross-stream to opposite bank. Do not allow boom spray to be directed onto water.

For shoreline weeds: Boom spraying onto water surface must be held to a minimum and allow no more than 2 foot overspray onto water with an average of less than 1 foot overspray to prevent introduction of greater than negligible amounts of chemical into the water.

#### AQUATIC WEED CONTROL IN PONDS, LAKES, RESERVOIRS, MARSHES, BAYOUS, DRAINAGE DITCHES, CANALS, RIVERS AND STREAMS THAT ARE QUIESCENT OR SLOW MOVING, INCLUDING (BUT NOT EXCLUSIVE TO) PROGRAMS OF THE TENNESSEE VALLEY AUTHORITY

**Notice to Applicators:** Before application, coordination and approval of local and state authorities may be required, either by letter or agreement or issuance of special permits for aquatic applications.

#### EMERGENT AND FLOATING AQUATIC WEEDS: Including Water Hyacinth (Eichomia crassipe)

Application Rate: 2 to 4 qt/acre.

#### SPECIFIC USE DIRECTIONS

**Application Timing:** Spray weed mass only. Apply when water hyacinth plants are actively growing. Repeat application as necessary to kill regrowth and plants missed in previous operation. Use 4 qt/acre rate when plants are mature or when weed mass is dense.

**Surface Application:** Use power operated sprayers with boom or spray gun mounted on boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 100 to 400 gallons of spray mixture per acre. Special precautions such as use of low pressure, large nozzles and spray thickening agents should be taken to avoid spray drift to susceptible crops. Follow label directions for use of any drift control agent.

**Aerial Application:** Use drift control spray equipment or thickening agent mixed in the spray mixture. Apply 1 gallon of this product per acre using standard boom systems using a minimum spray volume of 5 gallons per acre. For Microfoil (r) - drift control spray systems, apply this product in a total spray volume of 12 to 15 gallons per acre.

2,4-D Acid Equivalent	1/2 pound	1 pound	2 pounds	3 pounds	4 pounds
WEEDAR <sup>®</sup> 64	1 pint	2 pints	2 quarts	3 quarts	4 quarts

#### **Restrictions for Surface Applications to Emergent Aquatic Weeds**

- Do not exceed 8.42 pt/acre (4.0 lb of acid equivalent) per surface acre per use season.
- Do not make a broadcast application within 21 days of previous broadcast application. Spot treatments are permitted.
- Limited to 2 applications per season.

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

#### WATER USE

1. Water for irrigation or sprays:

- A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as pastures, turf, or cereal grains, the treated water may be used to irrigate and/or mix sprays for these sites at anytime after the 2,4 D aquatic application.
- B. Due to potential phytotoxicity considerations, the following restrictions are applicable:

If treated water is intended to be used to irrigate or mix sprays for plants grown in commercial nurseries and greenhouses; and other plants or crops that are not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:

- i. A setback distance from functional water intake(s) of greater than or equal to 600 ft. was used for the application, or,
- ii. A waiting period of 7 days from the time of application has elapsed, or,

iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. Wait at least 3 days after application before initial sampling at water intake.

2. Drinking water (potable water):

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

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

**Text of notification:** Wait 7 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation, or sprays, unless water at functioning drinking water intakes is tested at least 3 days after application and is demonstrated by assay to contain not more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: \_\_\_\_\_ Time: \_\_\_\_\_

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

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

- E. Note: Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.
- F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.
- 3. Except as stated above, there are no restrictions on using water from treated areas for swimming, fishing, watering livestock or domestic purposes.

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

Treatment Site	Maximum Application Rate†	Specific Use Directions
Aquatic Weed Control In: Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches, Canals, Rivers and Streams that are Quiescent or Slow Moving, Including (but not exclusive to) Programs of the Tennessee Valley Authority (TVA)	2.84 gallons (10.8 lb of acid equivalent) per acre foot	<ul> <li>Application Timing: For best results, apply in spring or early summer when aquatic weeds appear. Check for weed growth in areas heavily infested the previous year. A second application may be needed when weeds show signs of recovery, but no later than mid-August in most areas.</li> <li>Subsurface Application: Apply Weedar 64 undiluted directly to the water through a boat mounted distribution system. Shoreline areas should be treated by subsurface injection application by boat to avoid aerial drift.</li> <li>Surface Application: Use power operated boat mounted boom sprayer. If rate is less than 5 gallons per acre, dilute to a minimum spray volume of 5 gallons per surface acre.</li> <li>Aerial Application: Use drift control spray equipment or thickening agents mixed with sprays to reduce drift. Apply through standard boom systems in a minimum spray volume of 12 gallons per surface acre.</li> <li>Apply to attain a concentration of 2 to 4 ppm (see table below).</li> </ul>

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

**†**Weedar 64 contains 3.8 lb of acid equivalent per gallon of product.

Table 1.         Amount of 2,4-D to Apply for a Target Subsurface Concentration							
		For typical conditions - 2 ppm	For typical conditions - 2 ppm	For difficult conditions - 4 ppm*	For difficult conditions - 4 ppm*		
Surface Area	Average Depth	(2,4-D a.e./acre)	(Weedar 64 gal/acre)	(2,4-D a.e./acre)	(Weedar 64 gal/acre)		
1 acre	1 ft.	5.4	1.42	10.8	2.84		
	2 ft.	10.8	2.84	21.6	5.68		
	3 ft.	16.2	4.26	32.4	8.53		
	4 ft.	21.6	5.68	43.2	11.37		
	5 ft.	27.0	7.10	54.0	14.21		

\*Examples include spot treatment of pioneer colonies of Eurasian Water Milfoil and certain difficult to control aquatic species.

#### RESTRICTIONS FOR AQUATIC SITES WITH SUBMERSED WEEDS

• Do not exceed 10.8 lbs. acid equivalent per acre foot.

• Do not apply within 21 days of previous application. Limited to 2 applications per season.

•When treating moving bodies of water, applications must be made while traveling upstream to prevent concentration of 2,4-D downstream from the application.

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

Fish breathe oxygen in the water and a water-oxygen ratio must be maintained. Decaying weeds use up oxygen, but during the period when applications should be made, the weed mass is fairly sparse and the weed decomposition rate is slow enough that the water-oxygen ratio is not disturbed by treating the entire area at one time. If treatments must be applied later in the season when the weed mass is dense and repeat treatments are needed, apply product in lanes, leaving buffer strips which can then be treated when vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment.

#### WATER USE

1. Water for irrigation or sprays:

- A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as pastures, turf, or cereal grains, the treated water may be used to irrigate and/or mix sprays for these sites at anytime after the 2,4 D aquatic application.
- B. Due to potential phytotoxicity and/or residue considerations, the following restrictions are applicable:

If treated water is intended to be used to irrigate or mix sprays for unlabeled crops, noncrop areas or other plants not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:

- i. A setback distance described in the Drinking Water Setback Table was used for the application, or,
- ii. A waiting period of 21 days from the time of application has elapsed, or,
- iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. See Table 3 for the waiting period after application but before taking the initial sampling at water intake.

2. Drinking water (potable water):

- A. Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The potable water use restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of 2,4-D in the water is less than the MCL (Maximum Contaminant Level) of 70 ppb. Applicators should consider the unique characteristics of the treated waters to assure that 2,4-D concentrations in potable water do not exceed 70 ppb at the time of consumption.
- B. For submersed weed applications, the drinking water setback distances from functioning potable water intakes are provided in Table 2. Drinking Water Setback Distance (below).
- C. If no setback distance from the Drinking Water Setback Distance Table (Table 2) is to be used for the application, applicators or the authorizing organization must provide a drinking water notification and an advisory to shut off all potable water intakes prior to a 2,4-D application. Notification to the party responsible for a public water supply or to individual private water users must be done in a manner to assure that the party is aware of the water use restrictions when this product is applied to potable water. The following is an example of a notification via posting, but other methods of notification which convey the above restrictions may be used and may be required in some cases under State or local law or as a condition of a permit.

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

**Text of notification:** Wait 21 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation, or sprays, unless water at functioning drinking water intakes is tested no sooner than (insert days from Table 3) and is demonstrated by assay to contain not more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: \_\_\_\_\_ Time: \_\_\_\_

- D. Following each application of this product, treated water must not be used for drinking water unless one of the following restrictions has been observed:
  - i. A setback distance described in the Drinking Water Setback Distance Table was used for the application, or
  - ii. A waiting period of at least 21 days from the time of application has elapsed, or,
  - iii. An approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) or less at the water intake. Sampling for drinking water analysis should occur no sooner than stated in Table 3. Analysis of samples must be completed by a laboratory that is certified under the Safe Drinking Water Act to perform drinking water analysis using a currently approved version of analytical Method Number 515, 555, other methods for 2,4-D as may be listed in Title 40 CFR, Part 141.24, or Method Number 4015 (immunoassay of 2,4-D) from U.S. EPA Test Methods for Evaluating Solid Waste SW-846.
- E. Note: Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.
- F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.
- 3. Except as stated above, there are no restrictions on using water from treated areas for swimming, fishing, watering livestock or domestic purposes.

APPLICATION RATE AND MINIMUM SETBACK DISTANCE (FEET) FROM FUNCTIONING POTABLE WATER INTAKE					
1 ppm*	2 ppm*	3 ppm*	4 ppm*		
600	1200	1800	2400		

MINIMUM DAYS AFTER APPLICATION BEFORE INITIAL WATER SAMPLING AT THE FUNCTIONING POTABLE WATER INTAKE					
1 ppm*	2 ppm*	3 ppm*	4 ppm*		
5	10	10	14		

#### TANK MIXES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Using this product and **Harmony**<sup>®</sup> (EPA Reg No. 279-9577, active ingredient thifensulfuron), **Treaty**<sup>®</sup> (EPA Reg No. 71368-74, active ingredient thifensulfuron), **Harmony**<sup>®</sup> **Extra** (EPA Reg No. 279-9583, active ingredient thifensulfuron), **or Treaty**<sup>®</sup> **Extra** (EPA Reg No. 71368-76, active ingredient thifensulfuron) for selective post-emergence control of certain weeds on wheat (including Durum) and barley: Use Harmony Extra plus 1/8 to 3/8 pound active ingredient 2,4-D. Surfactant may be added 0.125 to 0.25% vol/vol (1 pint to 1 quart per 100 gallons of spray volume); however, the addition of surfactant may increase the chance of crop injury. Use the 1 pint rate of surfactant with 1/4 to 3/8 pound active ingredient of 2,4-D. Higher rates of 2,4-D may be used, but do not exceed highest rate allowed on the label. Always mix Harmony, Treaty, Harmony Extra or Treaty Extra in water prior to adding 2,4-D. Always add surfactant last.

Using this product and **Ally**<sup>®</sup> (EPA Reg No. 279-9575, active ingredient metsulfuron) or **Purestand**<sup>®</sup> (EPA Reg No. 71368-38, active ingredient metsulfuron for selective weed control in wheat (including Durum), barley and in grasses in acreage enrolled in the Conservation Reserve Programs (CRP) - also for resistant weed management: Use Ally at 1/10 ounce/A plus 1/4 to 1/2 pound active ingredient 2,4-D. Surfactant may be added at one to two pints per 100 gallons of spray volume; however, the addition of surfactant may increase the chance of crop injury. Always mix Ally or Purestand in water prior to adding 2,4-D and surfactant. Always add surfactant last.

Using this product and **Express**<sup>®</sup> (EPA Reg No. 279-9578, active ingredient tribenuron-methyl) or **Victory**<sup>®</sup> (EPA Reg No. 71368-75, active ingredient tribenuron-methyl) tank mixtures for weed control in wheat and barley: Use Express plus 1/8 to 3/8 pound active ingredient 2,4-D. Surfactant may be added at 0.125 to 0.25% vol/vol (1 to 2 pints per 100 gallons of spray volume); however, the addition of surfactant may increase the chance of crop injury. Use the 1 to 2 pint rate of surfactant with 1/8 pound active ingredient of 2,4-D. Use the 1 pint rate of surfactant with 1/4 to 3/8 pound active ingredient of 2,4-D. Higher rates of 2,4-D may be used, but do not exceed highest rate allowed on the label. Always mix Express or Victory in water prior to adding 2,4-D and surfactant.

Using this product and **Glean**<sup>®</sup> (EPA Reg No. 279-9600, active ingredient chlorsulfuron) for post-emergent weed control in wheat, barley and oats: Mixtures of 2,4-D and Glean are recommended when weeds are large and/or stressed due to adverse environmental conditions (cold temperature, low soil moisture, dry, dusty field conditions) or when dense crop canopy makes it difficult to obtain thorough spray coverage. Use 1/4 to 1/2 pound active ingredients 2,4-D plus 1/6 to 1/3 ounce/A of Glean. Surfactant may be added at 1/2, but not more than 1 quart/100 gallons of spray; however, the addition of surfactant may increase the chance of crop injury. Glean should be mixed in water with agitator running prior to adding 2,4 D. For resistant weed management, see Glean label rates for different regional applications.

Using this product and **Buctril**<sup>®</sup> **4EC** (EPA Reg No. 264-540, active ingredient bromoxynil) **or Maestro**<sup>®</sup> **4EC** (EPA Reg No. 71368-78, active ingredient bromoxynil) for weed control on cereal grains (wheat, barley and rye): Buctril 4EC Broadleaf Herbicide or Maestro 4EC Selective Herbicide will control some annual weeds that are resistant to this product and may be tank mixed with this product for broader spectrum weed control on small grains. In cereal areas except Washington, Oregon and Idaho, use 1/2 to 1 pint of this product plus 1/2 to 3/4 pint of Buctril 4EC or Maestro 4EC per acre. In Washington, Oregon and Idaho: use 1/2 to 1 pint of this product plus 3/4 to 1 pint of Buctril 4EC or Maestro 4EC per acre. First mix this product in water then add the Buctril 4EC or Maestro 4EC. Use the higher rates for larger weeds or where weed growth is slow due to dry or cold weather. Apply before weeds are 6 inches high. Use 10 to 20 gallons total spray volume per acre with ground equipment or 5 to 10 gallons total spray volume with air application. Use higher volume on larger weeds. This product and Buctril 4EC or Maestro 4EC or 0 product plus 3/4 to 10 pint of Buctril 4EC or Maestro 4EC per acre. Slow due to dry or cold weather. Apply before weeds are 6 inches high. Use 10 to 20 gallons total spray volume per acre with ground equipment or 5 to 10 gallons total spray volume with air application. Use higher volume on larger weeds. This product and Buctril 4EC or Maestro 4EC can also be tank mixed for field and popcorn. See both product labels for rates of application.

Using this product and **Relegate®** (EPA Reg No. 228-521, active ingredient triclorpyr) or **Tahoe® 3A** (EPA Reg No. 228-517, active ingredient triclorpyr) tank mixtures for Non-Crop Areas: Broadleaf Weed Control - Use 2 to 4 pints of this product plus 2 to 6 pints of Relegate (or 3 to 8 pints of Tahoe 3A) per acre. For wider spectrum control of broadleaf weeds and woody plants, apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing. Woody Plant total Broadcast Foliar Spray - Use 1 gallon of this product plus 1-1/2 to 3 quarts of Relegate (or 2 to 4 quarts of Tahoe 3A) per acre. Apply as a broadcast spray in enough water to adequately wet foliage. This may require 20 to 100 gallons of water per acre. Apply when woody plants are actively growing. Woody Plant Control High Volume Leaf-Stem Treatment with Ground Equipment - Use 1 gallon of this product per acre plus 1-1/2 to 12 pints of Relegate (or 2 to 16 pints of Tahoe 3A). Mix 1 to 3 quarts of this product per acre plus 1-1/2 to 3 pints of Relegate (or 2 to 4 quarts of the brush foliage, stem and bark. This may require 100 to 400 gallons of water per acre depending on size and density of woody plants. Thoroughly wet all leaves, stems, and root collars of plants to be controlled. Woody Plant Control Aerial Application (Helicopter only) - Use 1 gallon of this product per acre plus 3 to 4 quarts of Relegate (or 4 to 6 quarts of Tahoe 3A). Thoroughly we tall leaves, stems, and root collars of plants to be controlled. Woody Plant Control Aerial Application (Helicopter only) - Use 1 gallon of this product per acre plus 3 to 4 quarts of Relegate (or 4 to 6 quarts of Tahoe 3A). Thoroughly we tal leaves, stems, and root collars of plants to be controlled. This may require 10 to 30 gallons of water per acre using drift control equipment such as Microfoil boom or an effective drift control agent such as Lo-Drift Spray Additive. Use the higher rates and volumes when plants are dense or und

Using this product and **Diablo® Herbicide** (EPA Reg No. 228-379, active ingredient dicamba) tank mixtures for Non-Crop Areas: **Annual broadleaf weeds** - Use 2 to 4 pints of this product plus 1/2 to 1-1/2 pints of Diablo. For wider spectrum control of broadleaf weeds and woody plants - Apply as a broadcast spray in enough water to wet all parts of the brush foliage, stem and bark. This may require 20 to 100 gallons of water per acre. Apply when broadleaf weeds are actively growing. Use the higher rates when treating dense or tall vegetative growth. **Perennial and Biennial Broadleaf Weeds** - Use 3 to 6 pints of this product per acre plus 1/2 to 6 pints Diablo. Apply as a broadcast spray in enough water to wet all parts of the brush foliage, stem and bark. This may require 20 to 100 gallons of water per acre. Apply when broadleaf weeds are actively growing. Use the higher rates when treating dense or tall vegetative growth. **Perennial and Biennial Broadleaf Weeds** - Use 3 to 6 pints of this product per acre plus 1/2 to 6 pints Diablo. Apply as a broadcast spray in enough water to wet all parts of the brush foliage, stem and bark. This may require 20 to 100 gallons of water per acre. Apply when broadleaf weeds are actively growing but prior to flowering. Use the lower rates for biennials less than 3 inches rosette diameter. Use the higher rates for perennial weeds or for biennial weeds past the 3 inch rosette stage. **Woody Plant Control Broadcast, High Volume, Stem Foliage or Aerial Application** - Use 1 gallon of this product plus 2 to 8 quarts of Diablo. Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre or apply as a high volume stem foliage spray in enough volume to thoroughly wet leaves, stems and root collars (100 to 400 gallons per acre) or apply aerially in enough water to wet all parts of the brush foliage, stem and bark. This may require 10 to 30 gallons of water per acre using drift control equipment such as the Microfoil Boom or an effective drift control agent such as Lo-Drift Spray Additive. Use the higher rates and volumes when plants are dense or under drought conditions.

Tank mixing 2,4-D with Diablo Herbicide will improve control of late, post-emergent applications in corn, fall and spring seeded wheat, fall seeded barley, pastures, rangelands, non-crop use, turfs and lawns.

This product may be tank mixed with **Banvel SGF**<sup>®</sup> (EPA Reg No. 66330-287, active ingredient 2,4-D and dicamba) for control of grasses or additional broadleaf weeds in fall seeded wheat and barley. This product may be tank mixed with **Veteran 720** (EPA Reg No. 228-295, active ingredient 2,4-D and dicamba) for broader spectrum control for non-crop uses (e.g. railroad, highway, pipelines, etc. including forest management applications). Add water to spray tank prior to addition of tank mix products. Do not pre-mix concentrates. Since **Veteran 720** contains 2,4-D, do not exceed 16 lbs. total 2,4-D acid equivalent per treated acre per growing season.

For control of Quackgrass and listed weeds in annual cropping systems, pastures and sods, this product may be mixed with **Ranger**<sup>®</sup> - refer to specific product label for use rates.

This product may be tank mixed with **Tordon® 22K** (EPA Reg No. 62719-6, active ingredient picloram-potassium) or **Trooper® 22K** (EPA Reg No. 228-535, active ingredient picloram-potassium). For use on areas having mixed species in non-cropland range, pasture wheat, barley, oats and fallow cropland.

Using this product and **Razor**<sup>®</sup> (EPA Reg No. 228-336, active ingredient glyphosate-isopropylammonium) will control annual grasses and broadleaf weeds listed for Razor alone plus the following broadleaf weeds: Lambsquarter, Prickly lettuce, Red root, Pigweed, Russian thistle, Velvet leaf. Fallow and reduced tillage areas only. Apply 12 to 16 ounces of Razor plus 1/2 pound acid equivalent of this product plus 1/2 to 1% nonionic surfactant by total spray volume per acre to control dense populations of the aforementioned weeds when less than 6 inches in height. Follow use directions as given in the "low-volume broadcast application" section of the Razor label.

#### For high-volume broadcast applications:

When weeds are less than 6 inches tall, increase the quantity of Razor to 1 quart; when weeds are over 6 inches tall, use 1-1/2 quarts of Razor per acre. In both instances, water volumes should be 10 to 40 gallons per acre for ground applications. If weeds have been mowed, grated, or cut, allow adequate time for new growth to recommended stages prior to treatment. These rates will also provide control of weeds listed in the low-volume broadcast application section in addition to the following: Fivehook bassia, Broom fiddleneck, Flaxleaf fleabane, Fleabane, Kochia, Prickly lettuce, Panicum, Common ragweed, Giant ragweed, Pennsylvania smartweed, Annual sowthistle, Sunflower, Russian thistle, Velvetleaf. For Balsam Apple, apply with hand-held equipment only. A tank mix of Razor and this product will also control most perennial weeds. See Razor label for specifics. For additional tank mixes in fallow and reduced tillage systems for control of annual weeds prior to emergence of crops, please see Round Up RT label.

For additional non-crop weed control benefits, up to 1-1/2 quarts per acre of this product may be added to tank mixes of Razor plus Telar<sup>®</sup>, Razor plus Spyder<sup>®</sup>, Razor plus Patriot<sup>®</sup> for the suppression of tall Fescue growth and seed heads and control, or partial control, of some annual weeds. For the suppression of Smooth brome growth and seed heads and control or partial control of some annual weeds, 1-1/2 quarts per acre this product may be added to a tank mix of Razor plus Spyder.

Using this product and Acclaim<sup>®</sup>1 EC Herbicide (EPA Reg No. 432-950, active ingredient fenoxaprop-p-ethyl) may be made to provide broadleaf weed and annual grassy weed control in Turfgrass including sod farms, commercial and residential turf. Apply before grassy weed tillering at a rate of 32 ounces of Acclaim per acre (or 0.73 ounces per 1,000 square feet) when mixing with this product at a rate of 3/4 to 3 pints per acre (or 0.9 - 1.1 ounces per 1,000 square feet). Apply by means of a pressurized hydraulic sprayer using 30 to 60 psi and 30 to 60 gpa. Thorough spray coverage is important. Flat fan nozzles are recommended. Always follow use directions in accordance with respective labels. No label dosage rates should be exceeded.

Using this product and **Patriot**<sup>®</sup>(EPA Reg No. 228-391, active ingredient metsulfuron) **Spyder**<sup>®</sup> (EPA Reg No. 228-408, active ingredient sulfometuron) and **Telar**<sup>®</sup> (EPA Reg No. 432-1561, active ingredient chlorsulfuron) To improve control of some target species, this product may also be tank mixed with Patriot, Spyder, and Telar herbicides for non-crop, post-emergent weed control. Tank mixes have shown improved control where resistant bio-types are present.

NOTE: All intended tank mix combinations should be used only in recommended areas on the same broadleaf weed species found on both labels. For application methods and other use specifications, use the most restricted limitations from labeling of both products.

This product will either kill, control or suppress the weeds listed in the label booklet for this product. Some of these species may require repeat spot applications even under ideal conditions.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container in a dry, secured storage area. Keep container tightly closed when not in use. Store at temperature above 32°F. If allowed to freeze, warm to at least 40°F and remix before using. Freezing does not alter this product.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate ground water. 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:

**[Note to Reviewer:** The following statement will be included on all Final Printed Labels bearing multiple Container Disposal (Container Handling) statements] "**NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size. **[Note to Reviewer:** The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

**Nonrefillable Containers 5 Gallons or Less:** Nonrefillable container. Do not reuse or refill this container. Triple 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by State and local authorities.

**Nonrefillable Containers Larger than 5 Gallons:** 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. 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. Turn the container over onto its other 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. Turn the container over onto its other 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. Turn the container over onto its other 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. Turn the container over onto its other 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. Turn the container over onto its other 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. Turn the container over onto its other 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. Turn the container over onto its other end and tip it back and forth several times. Turn the container use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or an ix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application eq

**Refillable Container Larger than 5 Gallons:** 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. 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by State and local authorities.

#### WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

#### LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND

MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

#### NOTICE TO BUYER

(RV021419)

Purchase of this material does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

Weedar, Orchard Clean, Cheetah, Panther, Cloak, Credit, Tahoe, Relegate, Treaty, Purestand, Victory, Maestro, Trooper, Diablo, Patriot and Spyder are Registered Trademarks of Nufarm Americas Inc. All other trademarks are the property of their respective owners.

## **Optional Marketing Claims:**

Nufarm Grow a better tomorrow. Grow a better tomorrow.

## LABEL HISTORY

FILE NAME	VERSION MARK	COMMENTS
071368-00001.20100908.MASTER	RV090810	EPA Approved.
071368-00001.20100908.MASTER	RV090810	NYSDEDC Review corrections
071368-00001.20140925.EPA Amendment	RV092514	EPA Amendment
071368-00001.20141027.EPA Amendment	RV102714	EPA Amendment – adding Potato
071368-00001.20150220.EPA Amendment	RV022015	EPA Review
071368-00001.20150319.MASTER	RV031915	EPA SAL
071368-00001.201601110.EPA Amendment	RV011116	EPA Amendment
071368-00001.20160302.EPA Amendment	RV030216	EPA Amendment
071368-00001.20160303.EPA Amendment	RV030316	EPA Amendment
071368-00001.20160609.EPA Amendment	RV060916	EPA Amendment
071368-00001.20160712.EPA Amendment	RV071216	EPA Amendment
071368-00001.20160721.MASTER	RV072116	EPA SAL
071368-00001.20170125.EPA Notification	RV012517	EPA Notification for CADPR
071368-00001.20170317.EPA Notification	RV031717	EPA Notification for CADPR
071368-00001.20170608.MASTER	RV060817	EPA Accepted Notification
071368-00001.20180319.EPA Notification	RV031918	EPA Notification – Typo Table
071368-00001.20180910.MASTER	RV091018	EPA Accepted Notification
071368-00001.20181105.EPA Notification	RV110518	EPA Notification, ABN: Orchard Clean
071368-00001.20190214.DRAFT	RV021419	Amendment to add Intermediate Wheatgrass