

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

AUG 1 9 2010

Helena Chemical Company c/o Cheryl Wagner Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707

Subject: Notification: Revised Container Disposal Instructions per PR Notice 2007-4

Helena Outlaw

EPA Reg. No. 5905-574

Your Application Dated July 6, 2010, as Amended by Email August 18, 2010

Dear Ms. Wagner:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 for the subject product.

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and finds that the label changes requested fall within the scope of PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please call me directly at (703) 305-1243 or Susan Stanton of my staff at (703) 305-5218.

Sincerely,

Kathryn Montague, Product Manager 23

Susan I. Stanton for

Herbicide Branch

Registration Division (7505P)

Office of Pesticide Program

_Please read instructions on revers	e before complating form.		Forn	Approved OMB No	. 2070-0060. Approval expires 05-31-98
				X agistra	opp Identifier Number
o mba	United S	States			)
<b>⊕EPA</b> ₽	nvironmental Pro	otection A	Agency	Amendi	nent / /ユハ
	Washington,	DC 20460		Other	
<u> </u>	Applic	ation for	Pesticide - Se	<u> </u>	
1. Company/Product Number	7,70		2. EPA Product I		3. Proposed Classification
5905-574			K. Montague	<b></b>	
4. Company/Product (Name)	· · · · · · · · · · · · · · · · · · ·		PM#		
Helena Outlaw			23		X None Restricted     ■
	:	-1			
5. Name and Address of Appl	icant ( <i>include Zip Code</i>	<del>?</del> )			ce with FIFRA Section 3(c)(3)
Helena Chemical Company			ιυ.	AGAIL	The compassition and labeling
c/o Wagner Regulatory As P.O. Box 640	sociates, Inc.		EPA Reg. No. Product Name	ALC	1 9 2010
Hockessin, DE 19707			FloudelName	700	10 2010
☐ Check i	f this is a new address				
		Sec	tion - II		
Amendment - Explain be	low.		Final printe	ed labels in response	to
Resubmission in respons	se to Agency letter dated			Application.	
Notification - Explain belo	ow.		Other - Ex	plain below.	
Explanation: Use additional					
Notification of label change per PI 156.10, 154.140, 156.144, 156.14	R Notice 2007-4. This noti .6. and 156.156. No other	fication is cons	istent with the provisi been made to the lab	ons of PR Notice 200 eling or the confident	17-4 and EPA Regulations at 40 CFR ial statement of formula of this product.
I understand that it is a violation o	f 18 U.S.C. Sec. 1001 to v	willfully make a	ny false statement to	EPA. I further unders	stand that if this notification is not
consistent with the requirements 4 enforcement action and penalties			46, and 156.156, this	product may be in vi	olation of FIFRA and I may be subject to
			tion - III	<del></del>	
1. Material This Product Wil	l Be Packaged In:				
Child-Resistant Packaging	Unit Packaging	W	ater Soluble Pack	aging 2. Type o	f Container
Yes*	Yes		Yes	X	Metal
X No	X No		X No	X	Plastic
	]	· · · · · · · · · · · · · · · · · · ·		. per	Glass
* Certification must	Unit Packaging wgt.	container Pa	ackage wgt co	ntainer	Paper
be submitted					Other (Specify) HDPE lined bags
Location of Net Contents Ir	nformation	4. Size(s) Re	etail Container	5. Location of	of Label Directions
	tainer		, 5 gal., 30 gal., 55	·	_abel
		gal., 250 gal.			
				On 1	abeling accompanying product
6. Manner in Which Label is A	Affixed to Product	Lith	ograph	Other ac	hesive backed lanel
C. Mariner in Willer Eaber 137	Mixed to 1 roddet		er glued		incore backed 14-7-7
			nciled		
Section - IV					
1. Contact Point (Complete it	ems directly below for i				sary, to process this application.)
Name	Title	0 4 fo 1 l -	-1011-0-		none No (Include Area Code)
Cheryl Wagner Agent for H  Certification			elena Chemical Co	mpany   (302)	234 8551 6 Date Application
I certify that the statements I have made on this form and all attachments thereto are tru					Received
I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.  (Stamped)					
2. Signature 3. Title					(Stamped)
Col			elena Chemical Co	ompany	
4. Typed Name	agner	5. Date	2.2.0 0.10111001 00		-
1	•		,		
Cheryl Wagner		July 6, 2010	J		1

July 6, 2010

Document Processing Desk (NOTIF) ATTN: Ms. Kathryn Montague, PM 23 Registration Division (7504P) U.S. Environmental Protection Agency Room S-4900, One Potomac Yard 2777 South Crystal Drive Arlington, Virginia 22202-4501 Wagner Regulatory Associates Inc.

Wagner Regulatory Associates, Inc. P.O. Box 640 7460 Lancaster Pike, Suite 9 Hockessin, Delaware 19707

Corrected label for this notification submitted by email 8/18/10. SLS

Dear Ms. Montague:

Re: Helena Outlaw

EPA Registration Number 5905-574

Notice of Revised Storage & Disposal Label Language

Wagner Regulatory Associates, Inc., on behalf of Helena Chemical Company, hereby notifies the Agency that the storage and disposal section of the subject label as been revised in accordance with PR Notice 2007-4. Enclosed for the Agency's file is:

- Letter from Helena Chemical Company authorizing Wagner Regulatory to serve as Agent
- EPA Notification form (EPA Form 8570-1)
- One copy of revised labeling

Please feel free to contact me at (302) 234-8551 if you have any questions or require additional information.

Respectfully submitted,

Cheryl Wagner

Agent for Helena Chemical Company

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# NOTIFICATION AUG 1 9 2010

For control of a wide-spectrum of annual, biennial, and perennial broadleaf weeds and brush in Pastures, Rangeland, and Grass (Hay, Silage); Wheat; Conservation Reserve Program land; General Farmstead Areas; Post-Harvest, Fallow, Crop Stubble and Set Aside Acres

ACTIVE INGREDIENT(S):
3 6-dichlorometh

 3,6-dichloromethoxybenzoic acid
 12.18%

 2-Ethylhexyl Ester of 2,4-Dichlorophenoxyacetic Acid
 24.28%

 INERT INGREDIENTS:
 63.54%

 TOTAL
 100.00%

Equivalent to:

12.18% Dicamba Acid, 1.09 lbs./gal 16.10% 2.4-D Acid or 1.45 lbs./gal

Isomer specific by AOAC Method 6.D01-5 (12th Ed.)

# 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 you in detail.).

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# **FIRST AID**

# IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice

# IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Do not give any liquid to the person.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious or convulsing person.

# IF ON SKIN OR CLOTHING:

- · Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for further treatment advice.

# **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage

# SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONS AND DIRECTIONS FOR USE

EPA REG. NO. 5905-574 EPA EST. NO. 42750-MO-1 NET CONTENTS: SN 091708/0310

MANUFACTURED FOR
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300
COLLIERVILLE, TN 38017

Page 1 of 17 (page numbers for reference only - will not appear on final printed label)

# PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are butyl rubber, nitrile rubber, neoprene rubber, or viton. If you
want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

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

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

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be re-used until it has been cleaned.

#### **Engineering Controls**

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

# **USER SAFETY RECOMMENDATIONS**

#### Users should:

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

# **ENVIRONMENTAL HAZARDS**

This product is toxic to fish and aquatic invertebrates. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated area. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target area. Do not contaminate water by cleaning of equipment or disposing of equipment washwaters or rinsate.

The chemicals in this product have properties and characteristics associated with chemicals detected in groundwater. The use of these chemicals 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.

**Groundwater Contamination:** Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing 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 groundwater contamination.

#### **Endangered Species Concerns:**

The use of any pesticide in a manner that may kill or otherwise harm and endangered species or adversely modify their habitat is a violation of federal law.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area-during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Unless otherwise directed in supplemented labeling, all applicable directions, restrictions, precautions and Conditions of Sale and Warranty are to be followed. This labeling must be in the user's possession during application. Spray equipment used in applying this product should be thoroughly cleaned before using for any other purpose. Use repeated flushing with soap and warm water or suitable chemical cleaner. It is best to use a separate sprayer for application of insecticides and fungicides.

# **Application Restrictions:**

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.

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# 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, nursenes, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of **24 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 wom over short-sleeve shirt and short pants
- Chemical-resistant gloves Category C, such as butyl rubber ≥ 14 mils, or nitrile rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils or viton ≥ 14 mils
- Chemical-resistant Shoes plus socks
- Protective Evewear
- Chemical-resistant headgear for overhead exposure

# **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 allow people or pets to enter treated area until spray had dried.

#### STORAGE AND DISAPOSAL

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal. Do not store under conditions that might adversely affect the container or its ability to function properly.

Pesticide Storage: Do not store below temperature of 32F or above 100F. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength.

Pesticide Disposal: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

NONREFILLABLE METAL CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NONREFILLABLE METAL CONTAINER (GREATER THAN 5 GALLONS): 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. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NONREFILLABLE PLASTIC CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or incineration if allowed by state and local authorities, by burning. If burned, stay out of smoke.

NONREFILLABLE PLASTIC CONTAINER (GREATER THAN 5 GALLONS): 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. Fill the

container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and torth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or incineration if allowed by state and local authorities, by burning. If burned, stay out of smoke.

REFILLABLE CONTAINER: Refill this container with pesticide only. Do not reuse this container for any other purpose. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions, and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. 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 mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. If the container is not being refilled, return to the point of purchase or designated location.

In Case of Spill: In case of large-scale spillage regarding this product, call ChemTrec 800-424-9300.

# Steps to be taken in case material is released or spilled:

Dike and contain the spill with inert material (sand, earth, etc) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.

# I. GENERAL INFORMATION

OUTLAW™ herbicide is a postemergence herbicide for controlling a wide spectrum of annual, biennial, and perennial broadleaf weeds and brush in pastures, rangeland, and grass (hay, silage); wheat; conservation reserve program land; postharvest, fallow, crop stubble, set-aside acres; and general farmstead areas.

#### Mode of Action

OUTLAW™ contains two active ingredients uniquely formulated to be used alone or tank mixed with other listed products as well as liquid fertilizer solutions. OUTLAW™ is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. OUTLAW™ interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

For best results, thoroughly clean sprayer equipment (tank, lines and nozzles) immediately after use by flushing system with water and heavy duty detergent or other suitable tank cleaner.

# II. APPLICATION INSTRUCTIONS

Apply OUTLAW<sup>TM</sup> at the rates and growth stages listed in Tables 1 and 2 as follows unless instructed differently by section on "Food/Feed Crop Specific Information" or "Non-Food/Feed Use (Land not Harvested, Grazed or Foraged)-Specific Information." OUTLAW<sup>TM</sup> may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in preplant or pre-emergence use for all crops listed on this label. Postemergence uses with sprayable fluid fertilizer may be made on pasture, hayland, or wheat crops only. The most effective application rate and timing varies based on the target weed species (refer to Table I). In mixed populations of weeds the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size and will prevent adequate control. For certain specified applications liquid fertilizer or oil may replace part or all of the water as diluent. If dry flowable (DF), wettable powder (WP) or flowable (F) tank mix products are to be used, these should generally be added to the spray tank first. Refer to the mixing directions on the labels of the tank mix products.

#### Irrigation:

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

# **Chemigation Prohibition**

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

# Spray Coverage:

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and prevent adequate spray coverage.

**Sensitive Crop Precautions:** 

OUTLAW<sup>TM</sup> may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit rees, grapes, omamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. At high temperatures (about 85 degrees or higher), vapors from this product may cause injury to the aforementioned susceptible crops. These plants are most sensitive to OUTLAW<sup>TM</sup> during their development or growing stage. Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of OUTLAW<sup>TM</sup> with the roots of desirable trees and shrubs.

#### **Drift Reduction Information:**

The following information may be helpful in reducing possible spray drift from ground or aerial applications. Avoid making applications when spray particle may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if the wind is gusty or in excess of 5 mph and moving in the direction of nearby sensitive crops or if a temperature inversion exists. Always determine the direction and distance of possible spray drift prior to application. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays. Properly maintain and calibrate all spray equipment. The use of agriculturally accepted drift retardants are acceptable and advised. Avoid applications within the vicinity of susceptible plants when at all possible. Do not apply in greenhouses.

# **AERIAL APPLICATION METHODS AND EQUIPMENT**

Water Volume: Use 3-10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Make applications at the lowest stage height to reduce the exposure of spray droplets to evaporation and wind. The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in the this labeling as well as applicable state and local regulations and ordinances.

#### 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, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### **Droplet Size**

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

When apply sprays that contain 2,4-D mixed with other active ingredients that require a medium or more fine spray, apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### Wind Speed

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

#### **Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if:

- a) conditions of temperature inversion exist, or
- b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetable 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 Applicators**

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

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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 Applications

Do not apply with a nozzle height greater than 4 feet above the crop canopy. 2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

Table 1. Application Rate and Timing – Annual Weeds

(For use in non-food/feed crops only: the addition of liquid fertilizer (28-0-0,32-0-0) solutions at 1/2 the GPA spray solution has shown to give increased efficacy.)

Weeds Controlled	Rate Per Acre (according to weed growth stage)						
(including ALS – and triazine- resistant)	0.5 pints	1.0 pints	1.5 pints	1.75 pints	2.75 pints	3.5 pints	
Beebalm, Spotted	. •	-	-	pre-bloom	post-bloom	-	
Broomweed	1-3"	3" branching	-	branching	•	after branching	
Buckwheat, Wild	-	1-6"	-	-	-	-	
Buffalobur	-	-	-	1-6"		Flowering	
Burdock	•	pre-flower	-	-	-	-	
Buttercup	-	pre-flower	-	early bloom	late bloom	-	
Chickweed, Common	-	Seedling	1-3"		-	-	
Cockle, Cow	-	< 3"	-	-	-	-	
Cocklebur, Common	-	1-6"	6-12"	12-18"	-	-	
Coreopsis, Plains	1-4"	1-6"	-		-	-	
Croton, Woolly	•	4-12"	12-30"	-	<u>-</u>	-	
Dogfennel	-	_		10-15"	-	-	
Evening Primrose		< 2"	_	2-6"	<del> </del>		
Flax	•	< 2"	<del>-</del>		<del></del>	-	
Fleabane, Annual		1-4"	4-8*	8".	<del>-</del>		
Fixweed		< 3"		-	-		
Henbit	-	- 1	preflower	<u>:</u>	flower	-	
Knotweed Spp.		< 3" runners	· · · · · ·	> 3" runners	-	actively growing	
Kochia	-	1-6"	6-10"	10-20*	-	actively growing	
Lambsquarters, Common	-	1-6"	6-10"	10-20"		actively growing	
Mallow, Common	-	< 3"	-	-	-	-	
Morning glory, lvyleaf	-	pre-flower	-	-	-	-	
, Tall	-	pre-flower		post-flower	-	-	
Mustards, Annual		Rosette		early bolt	-	-	
, Tansy	•	< 3"			<del>-</del>		
Pennycress, Field	-	-	-	rosette	-		
Pepperweed, Virginia	-	-	1-3*	3-6"	after branching	-	
Pigweed, Prostrate	-	< 3"	· · · · · · · · · · · · · · · · · · ·	<u>.</u>	<u> </u>	_	
Redroot		< 3"	3-10"	-	_		
Smooth	-	< 3"	-	-	<u>.</u>		
Tumble	•	< 3"	· · · · · · · · · · · · · · · · · · ·	mature	-	_	
Poorjoe	-	prior to flower	-	-	-	actively growing	
Purslane, Common		< 3"	3-8"		-	-	
Ragweed, Common		<del>                                     </del>		>10"	-		
Western, Lanceleaf	1-3"	3-6"	6-10"	actively growing		_	

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Sedge <sup>1</sup>	-	1 -	-	-	-	-
Shepherdspurse	-	Rosette	-		<del>-</del>	-
Smartweed, Pennsylvania	-	< 4"	-	•	4-12"	-
Sneezeweed, Bitter	-	1-4"	prior to flower	flower	-	-
Sowthistle	•	Rosette		bolting	-	-
Sunflower	-	1-3"	3-6"	6-24"	-	-
Thistle, Russian	•	-	-	rosette	· -	-
Velvetleaf	-	< 6"	6-20"	> 20"	-	-
<sup>1</sup> For use in non-food/feed crop only.	Adding crop oil c	oncentrate has sho	wn to improve performance	on actively growing annual	sedge.	

Table 2. Application Rate and Timing – Biennial and Perennial Weeds.

(The addition of liquid fertilizer (28-0-0,32-0-0) at ½ the GPA of the spray solution has proven to give increase suppression or control on certain species of weeds.)

	<u></u>		Rate Per Acre (accor			
Weeds Controlled	0.5 pints	1.0 pints	1.5 pints	1.75 pints	2.75 pints	3.5-5.25 pints
Bindweed, Field	-	-	-	-	-	actively growing
Bittercress	-	2-3"	-		-	<del>-</del>
Buckeye species <sup>1</sup>	-	-	-	•	full leaf	•
Bullnettle <sup>2</sup>	-	-	-	flower	-	-
Chircory	-	-	-	-	early bolting	<u>-</u>
Clove, Bur	-	-	Pre-flower	,-	-	-
Dandelion, Common	-	rosette	-	bolting	-	-
Dewberry, Southem <sup>1</sup>	-	-	-	-	<b>-</b> .	spring or fall
Dock, Curly	-	-	prior to bolting	-	after bolting	-
Elderberry <sup>2</sup>	-	-		-	<u>.</u>	actively growing
Goldenrod, Missouri	-	-	-	3-15"	flower	-
Groundsel, Texas	· -	rosette	post-boiting		-	•
Honeysuckle, Hairy	-		-	-	spring or fall	-
Horsenettle, Carolina1	-	-	-	-	-	flower or berry
vy, Poison	-	-	-	after bloom	-	-
Knapweed, Black <sup>2</sup>	-	-	-	-	-	actively growing
, Russian²	-	-		-		actively growing
, Spotted	-	-	-	-	-	actively growing
Marshelder	-	-	-	<12"	12"/prebloom	
Mesquite <sup>3</sup>	-	-	-		-	45-90 days
			·			after budbreak
Milkweed, Antelopehom <sup>2</sup>	-	-	-	pre-flower	-	Flower
Nightshade, Silverleaf1	-	-	*	full flower	-	-
,Black1	-	-	-	full flower	-	actively growing
Persimmon, Eastern <sup>3</sup>	-	-	-	-	-	actively growing
Prickly, Lettuce	-	-	-	rosette	-	actively growing
Rabbitbrush²	-	-	-	-	-	-
Ragwort, Tansy			-	rosette	-	actively growing
Redvine <sup>2</sup>	-	-	-	-	-	actively growing
Sagebrush, Fringed <sup>2</sup>	-	-	-	-	-	actively growing
Smartweed	-	-	-	-	-	-
Sorrel, Red	-	-	Rosette	bolting	flower	actively growing
Sowthistle <sup>2</sup>	-	-	<del> </del>		-	actively growing
Spurge, Leafy <sup>2</sup>	-		<del> </del>	-	-	full leaf
Tallow Tree, Chinese4			-	-	<del></del>	_
Thistle, Bull	<del></del>	· · · · · · · · · · · · · · · · · · ·	Rosette	bolting	-	actively growing
, Canada <sup>2</sup>	<u> </u>	-	-	-	-	-
, Musk	<u> </u>		<u> </u>	rosette/bolting	<u> </u>	
, Plumeless		<del>                                       </del>	Rosette	bolting	<u>-</u>	-

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Vetch, Hairy	-	1-4"	4-8"	8" full flower	-	-
Yankeeweed	-	-	-	10-18"	-	Rosette
Yellow Starthistle <sup>1</sup>	-	-	-	-	-	-

May require repeat applications

#### **Ground Application (Banding)**

When applying OUTLAW<sup>TM</sup> herbicide by banding, determine the amount of herbicide and water volume needed using the following formula:

Bandwidth in inches x Broadcast rate = Banding herbicide
Row width in inches per acre rate per acre

Bandwidth in inches x Broadcast rate = Banding water
Row width in inches volume per acre volume per acre

# **Ground Application (Broadcast)**

Water volume: Use 10-25 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzle design to produce minimal amounts of fine spray particles. Spray nozzles as close to the weeds as is practical for good weed coverage.

# Spot or Small Area Application

OUTLAW™ may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack or other small capacity sprayers, prepare a solution of OUTLAW™ in water according to Table 3 (assuming that the spot treatment rate equates to 40 gallons pre acre on the broadcast basis.) Adding a surfactant (0.5% by volume) can help improve control.

Do not make spot treatments in addition to broadcast or band treatments.

Application equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

Table 3. - Knapsack Sprayer Dilution Instructions

Sprayer Capacity	Amount of <b>OUTLAW™</b>	
(gallons of water)	to add to the spray tank	
1 gallon	1 fluid ounce*	
3 gallons	3 fluid ounces	
5 gailons	5 fluid ounces	

<sup>\* 1</sup> fluid ounce = 2 tablespoons

#### III. Additives

To improve burndown of emerged weeds, surfactants and/or low use rates of liquid fertilizers (28-0-0; 32-0-0), or crop oil concentrate may be used with OUTLAW<sup>TM</sup> herbicide or OUTLAW<sup>TM</sup> tank mixes applied after the weeds have emerged. Crop oil concentrate is for non-food/feed crop uses only. Do not apply tank mixes that include Ammonium Sulfate or Crop Oil Concentrate to any food/feed crop use listed on this label. For food/feed crop use, do not use liquid fertilizers that contain Ammonium Sulfate (AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances.

#### Oil Concentrate

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be non-phytotoxic
- contain only EPA-exempt ingredients

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Specified rate will provide top growth suppression only.

<sup>3</sup> For improved root kill or woody species such as mesquite and eastern persimmon spray 3.5 pints of per acre OUTLAW™ each year for 3 consecutive years.

<sup>4</sup> Under dense populations, a second application may be needed the following growing season.

For increased control of weeds such as blackberry and dewberry, OUTLAWTM may be tank mixed with Ally® herbicide (0.1-0.2 ounces per acre), if labeled for the use site.

• be successful in local experience

The exact composition of suitable products will vary; however, vegetable oil and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see Compatibility Test for Mix Components.

Adjuvants containing crop oil concentrates may be used for preplant, pre-emergence and between cropping applications. Do not use crop oil concentrate for postemergence applications in food/feed crops (i.e. grass (hay or silage), pastures, rangeland, and wheat.)

#### Nitrogen Source

• Sprayable liquid fertilizers: Use ½ GPA of sprayable liquid fertilizers (28-0-0; 32-0-0) per acre. Do not use brass or aluminum nozzles when spraying fertilizers.

#### Non-ionic Surfactant

The standard label recommendation is 2-4 pints of an 80% active non-ionic spray surfactant per 100 gallons of water. (Rate will vary with the size and condition of weeds to be controlled. Use lowest rate per 100 gallons when weeds are small and actively growing. As weeds increase in size and or become hardened off, the rate of non-ionic surfactant will have to be increased to give optimum coverage and control.)

Table 4. Additive Rate Per Acre.

Additive <sup>1</sup>	Rate OUTLAW™ Per Acre
Non-ionic Surfactant	2-4 pints per 100 gallons <sup>2</sup>
Sprayable Liquid Fertilizers (28-0-0; 32-0-0)	1/2 GPA of spray solution
Crop Oil Concentrate	1 quart

See manufacturer's label for specific rate recommendations.

# IV. General Tank Mixing Information

# **Tank Mix Partners/Components**

The following products may be tank mixed with OUTLAW™ according to the specific tank mixing instructions in this label and respective product labels.

- Aim™ (carfentrazone-ethyl)
- Aliv® (metsulfuron-methyl)
- Amber® (triasulfuron)
- Asulox® (asulam)
- Atrazine
- Banvel® (dicamba)
- Clarity® (dicamba)
- Curtail™ (clopyralid + 2,4-D)
- Cyclone® (paraquat)
- Dicamba DMA (dicamba)
- Distinct® (diflufenzopyr + dicamba)
- Evik® (ametryn)
- Fallowmaster® (glyphosate + dicamba)
- Fallow Star™ (glyphosate + dicamba)
- Finesse® (chlorsulfuron + metsulfuron-methyl)
- Gly Star™ Plus (glyphosate)
- Gramoxone® Extra (paraquat)
- Grazon™ P+D (picloram + 2,4-D)
- Kerb ™ (pronamide)
- Landmaster® (glyphosate + 2,4-D)
- MCPA

<sup>&</sup>lt;sup>2</sup> Use lowest rate per 100 gallons when weeds are small and actively growing. As weeds increase in size and or become hardened off, the rate of non-ionic surfactant will have to be increased to give optimum coverage and control.



- Rave™ (dicamba + triasulfuron)
- Roundup® Ultra (glyphosate)
- Sencor® (metribuzin)
- Sinbar® (terbacil)
- Tordon™ (picloram)
- Touchdown® (glyphosate)
- 2.4-D

See "VI. Food/Feed Crop Specific Information" section for more information for more details. Read and follow the applicable Restrictions and Limitations and Directions for Use on all products involved in tank mixing. The most restrictive labeling applies to tank mixes. Physical incompatibility, reduced weed control, or crop injury may result from mixing OUTLAW™ with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers.

#### **Compatibility Test for Mix Components**

Before mixing components, always perform a compatibility jar test.

For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is still incompatible, do not mix the ingredients in the same tank.

#### Mixing Order

If an inductor is used, rinse it thoroughly after each component has been added. Maintain constant agitation during application.

- 1. Water Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2. Agitation. Maintain constant agitation throughout mixing and application.
- 3. Products in PVA bags. Place any product contained in water-soluble bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4. Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, and suspo-emulsoins)
- Water-soluble products (such as OUTLAW<sup>TM</sup>).
- 6. Emulsifiable concentrates (such as oil concentrate, when applicable).
- 7. Water-soluble additives (such as liquid fertilizers (28-0-0; 32-0-0), when applicable).\*
- 8. Remaining quantity of water.

Always perform the **Compatibility Test** before mixing into the spray tank. Also, when using a sprayable fluid fertilizer as the carrier, any product contained in PVA bags must first be completely dissolved in water before the contents can be added to the fertilizer mix.

# V. Restrictions and Limitations

- Maximum seasonal use rate: Refer to Table 5.
- Preharvest Interval (PHI): Refer to "Food/Feed Crop Specific Information"
- Crop Rotational Restrictions:
- The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil.
- Planting/replanting restrictions for OUTLAW™ applications of 6 pints per acre or less: No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including sorghum, follow the preplant use directions under "VI. Food/Feed Crop Specific Information." For barley, oat, wheat, and other grass seedlings, the interval between application and planting is 10 days per pint per acre.

<sup>\*</sup> If sprayable fluid fertilizer is used as the carrier.

- Planting/replanting restrictions for applications of more than 6 pints and up to 8 pints of OUTLAW™ per acre/season: Com, sorghum, cotton (east of the Rocky Mountains) and all other crops grown in areas with 30" or more of annual rain fall may be planted 120 days or more after application. Barley, oat, wheat and other grass seedlings may be planted, if the interval from application to planting is 10 days per pint per acre east of the Mississippi River and 15 days per pint per acre west of the Mississippi River. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.
- Arid (dry) conditions: it is extremely important that the addition of a suitable Nonionic Surfactant, Oil, or sprayable fertilizer be used when applying OUTLAW™. Higher rates of OUTLAW™ may be needed to control susceptible weeds in this environment.
- Rainfast Period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce
  effectiveness of OUTLAW™.
- Stress: Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result.
- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.
- Do not apply this product though any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.
- This product cannot be used to formulate or reformulate another pesticide product.

Table 5. Crop Specific Restrictions and Limitations.

Crop	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding <sup>1</sup>	Aircraft Application
Between Crop Applications	6 pints	8 pints	Yes	Yes
Pasture, Hay, Silage	4 pints	8 pints	Yes	Yes
Wheat	2 pints	3.33 pints	Yes	Yes
<sup>1</sup> Refer to "Food/Feed C	rop Specific Information" f	or grazing and feeding restri	ctions.	

# VI. Food/Feed Crop Specific Information

# Pastures, Rangeland and Grass (Hay, Silage)

**OUTLAW™** is to be used for pasture (including pasture grown for hay), rangeland, grass grown for hay or silage, between crop applications/fallow systems, Conservation Reserve Programs, and general farmstead (non-cropland only). Maximum of 2 applications per year. Minimum of 30 days between applications.

Refer to Tables 1 and 2 for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Retreatments may be made as needed; however, do not exceed a total of 8 pints of OUTLAW™ per treated acre during a growing season.

Uses described in this section also pertain to small grains (such as barley, com, forage sorghum, oats, rye, sudangrass, or wheat) grown for pasture, hay, and silage only. Newly seeded areas including small grains grown for pasture or hay, may be injured if rates of **OUTLAW™** are greater than 2 pints per acre are applied.

In newly established hybrid Bermudagrass, Pangolagrass, and stargrasses (*Cynodon* spp.) use 1.75 to 3.5 pints of **OUTLAW**<sup>TM</sup> per acre to control or suppress weeds after planting vegetative propagules (stolens) of hybrid bermudagrasses. In addition to the weeds listed in **Tables 1** and **2**, this rate of **OUTLAW**<sup>TM</sup> will control or suppress annual sedges, broadleaf signalgrass, crabgrass, and goosegrass. Best results will be obtained if **OUTLAW**<sup>TM</sup> is applied at the germinating stage of weeds. Under favorable conditions, this is usually 7-10 days after planting these grasses. Reduced control can be expected if weeds are allowed to reach 1" in height before application or if germination of weeds occurs 10 days after application.

Do not use on bentgrass, susceptible grass pastures (such as carpetgrass, buffalograss, or St. Augustine grass), lezpedeza, wild winter peas, vetch, clover, and alfalfa pastures as injury will occur.

When perennial weeds are reaching maturity, mowing and allowing some regrowth will enhance control. Difficult to control weeds may require a repeat application.

For pasture renovations, wait 3 weeks per quart (2 pints) of OUTLAW™ used per acre before interseeding or injury may occur.

If grasses are grown for seed or for seed-down purposes, do not apply after grass reaches joint stage.

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Grazing and Feeding Non-Lactating Animals: There is no waiting period between treatment and grazing for non-lactating animals.

Grazing and Feeding Lactating Animals: Do not graze lactating dairy animals within 7 days of treatment.

Dry hay and Silage: Treated grasses may be harvested for dry hay or silage but do not harvest within 37 days of treatment.

#### **Pasture and Rangeland Tank Mixes**

OUTLAW™ may be applied in tank mixes with one or more of the following herbicides:

Ally® Amber® Banvel®

Dicamba DMA

2,4-D

Clarity®

Rave™

# Wheat

# **PREHARVEST APPLICATIONS:**

OUTLAW™ can be used to control weeds that may interfere with harvest of wheat. Apply up to 2 pints of OUTLAW™ per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy. A waiting interval of 7 days is required before harvest. Do not use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better. For control of additional broadleaf weeds or grasses, OUTLAW™ may be tank mixed with other herbicides such as Ally or Gly Star™ Plus that are registered for preharvest use in wheat.

Preharvest use of OUTLAW™ is not registered for use in California.

# Between Crop Applications/Fallow Systems, Conservation Reserve Programs, and General Farmstead

These uses are considered Food/Feed Crops when harvested, grazed or foraged. Consult section on "General Tank Mixing Information" for adjuvant restrictions and section on "Additives" for specific use directions.

The Preharvest interval (PHI) is 14 days.

# Postemergence:

Limited to one postemergence application per crop cycle.

#### Preharvest:

Limited to one preharvest application per crop cycle.

Limited to 1.75 lbs ae 2,4-D per acre per crop cycle.

# VII. Between Crop Applications

#### **Between Crop Applications**

# PREPLANT DIRECTIONS (POSTHARVEST, FALLOW, CROP STUBBLE, SET-ASIDE) FOR BROADLEAF WEED CONTROL

**OUTLAW™** can be applied postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply to weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer. Plant only labeled crops within 29 days following application. Limited to 2 applications per year.

See "V. Restrictions and Limitations" for the specified interval between application and planting to prevent crop injury.

#### Rates and Timings:

Apply 1.5-6 pints of OUTLAW<sup>TM</sup> per acre. Refer to Table 1 to determine use rates for specific targeted weed species. Retreatments may be made as needed; however, do not exceed a total of 8 pints of OUTLAW<sup>TM</sup> (3.33 pints for wheat) per treated acre during a growing season. There is a minimum of 30 days between applications. For best performance, apply OUTLAW<sup>TM</sup> when annual weeds are less than 6" tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if OUTLAW<sup>TM</sup> is applied when the majority of weeds have at least 4-6" of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage. The addition of liquid fertilizers (28-0-0,32-0-0) at ½ GPA has shown to increase efficacy.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for OUTLAW<sup>TM</sup>. For seedling control, a follow-up program or other cultural practices could be instituted.

#### **Between Crop Tank Mixes:**

In tank mixes with one or more of the following herbicides, apply 1.5-1.75 pints of **OUTLAW**<sup>TM</sup> per acre for control of annual weeds, or 1.75-7.25 pints of **OUTLAW**<sup>TM</sup> per acre for control of biennial and perennial weeds

- Aim™
- Ally<sup>®</sup>
- Amber<sup>®</sup>
- Atrazine
- Curtail™
- Cyclone<sup>®</sup>
- Distinct®
- Fallowmaster<sup>®</sup>
- Fallow Star™
- Finesse<sup>®</sup>
- Glyphosate (Gly Star™ Plus)
- Gramoxone<sup>®</sup> Extra
- Kerb<sup>TM</sup>
- Landmaster® BW
- Paramount<sup>®</sup>
- Sencor<sup>®</sup>
- Tordon™ 22K
- Touchdown<sup>®</sup>
- 2,4-D

Restriction: When tank mixing with products that contain either 2,4-D or dicamba, do nto exceed the lowest annual application rate/A for each active ingredient for that crop/use.

#### **Conservation Reserve Programs and General Farmstead**

**OUTLAW™** is recommended for use for Conservation Reserve Programs, general farmstead (non-cropland only), weed and brush control, or use in State Recognized Noxious Weed areas (non-cropland areas). Maximum of 2 applications per year.

Refer to Tables 1 and 2 for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Retreatments may be made as needed; however, do not exceed a total of 8 pints of OUTLAW™ per treated acre during a growing season. There is a minimum of 30 days between applications.

#### Farmstead and Fence-row Treatment Application Instructions

OUTLAW<sup>TM</sup> may be applied using water or oil and water emulsions in spot application to control undesirable vegetation using handgun or similar types of application equipment. In addition to weed species listed in Tables 1 and 2, these treatments may be used to control or suppress woody plant species listed in Table 7.

To prepare soil and water emulsions, mix in the order and proportions indicated below.

The solution should remain milky colored without an oily layer on top when under agitation. If an oily layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

Do not exceed 40 gallons (not to exceed 8 pings of OUTLAW<sup>TM</sup>/A) of spray solution per treated acre per application. One gallon of OUTLAW<sup>TM</sup> in forty gallons of spray solution contains 1.09 pounds acid equivalent of dicamba and 1.45 pounds acid equivalent of 2,4-D. Spray plants to wet. Do not allow this spray mix to contact desirable vegetation.

To control brush, briars, and weeds along fence-rows surrounding pasture and ranch lands, and fallow fields, use a tank mix of 2.5% OUTLAW™, 87.5% water, and sufficient emulsifier (to mix the emulsifier).

- 1) Water: Begin by agitating a thoroughly clean sprayer tank with the desired quantity of clean water. Maintain constant agitation during complete mixing procedure.
- 2) Emulsifier: Add 0.5% volume to volume of water.
- OUTLAW™: add 2.5 gallons per 100 gallons of total intended solution.

Maintain constant agitation during application. Under good agitation, the spray solution should be milky white with no oil layer on top. If oil layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

# Postemergence (annual and perennial weeds):

Limited to 2 applications per year.

Minimum of 30 days between applications.

# Postemergence (woody plants):

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#### FOR SPRAYING FOLIAR APPLICATIONS:

- 1. Spray when leaves have reached full size but have not hardened due to drought or maturity.
- 2. Spray individual plants to wet with handgun.
- 3. For larger stems (up to 3" in diameter) and hard to control species, direct spray stream to base of stems to wet the stem at soil surface in addition to wetting the foliage.
- 4. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

# **FOR DORMANT BASAL APPLICATIONS:**

- 1. Spray in late winter and early spring before plants break dormancy.
- 2. Spray the bottom 24" of the target stem to wet on all sides.
- 3. For larger stems (up to 3" in diameter) and hard to kill species direct the spray solution to the base of target stems to wet the soil at the stem/soil junction in addition to wetting the stem.
- 4. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

# **FOR CUT SURFACE TREATMENTS:**

Apply OUTLAWIM in an undiluted state as a cut surface treatment to control unwanted trees and prevent sprouts of cut trees.

- <u>Frill or Girdle Treatments:</u> Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with **OUTLAW™**.
- <u>Stump Treatments:</u> Spray or paint freshly cut surface with **OUTLAW**<sup>TM</sup>. The cambium layer (the area adjacent to the bark) should be thoroughly wet. Treat stumps within 6 hours after cutting.

Table 7. The following list of trees and vines can be controlled on farmsteads and fencerows as foliar, basal, or cut surface treatments:

Alder	Kudzu		
Ash	Locust, Black		
Aspen	Maple		
Basswood	Mesquite		
Beech	Oak		
Blackberry	Oak, Poison		
Blackgum	Olive, Russian		
Cedar	Persimmon, Eastern		
Cherry	Pine .		
Chinquapin	Plum, Sand (Wild Plum)		
Cottonwood	Poplar		
Creosotebush	Rabbitbrush		
Dewberry	Redcedar, Eastern		
Dogwood	Rose, McCartney		
Elm	Rose, Multiflora		
Grape	Sagebrush, Fringe		
Greenbriar	Sassafras		
Hawthorn (Thomapple)	Spruce		
Hemlock	Sumac		
Hickory	Sweetgum		
Honeylocust	Sycamore		
Honeysuckle	Tarbrush		
Hornbeam	Willow		
Huckleberry	Witchhazel		
Huisache	Yaupon		
Ivy, Poison	Yucca		

#### Weeds listed in this label:

Common Name	Scientific Name		
ANNUALS			
Beebalm, Spotted	Monarda punctata		
Broomweed, Common	Gutierezia dracunculoides		
Buckwheat, Wild	Polygonum convulvulus		
Buffalobur	Solanum rostratum		
Burdock	Arctium spp.		
Buttercup, Com	Rannculus arvensis		
Chickweed, Common	Stellaria media		

Common Name	Scientific Name
Cockle, Corn	Agrostemma githago
Cocklebur, Common	Xanthium strumarium
Coreopsis, Plains	Coreopsis tinctoria
Croton, Woolly	Croton capitatus
Devilsclaw,	proboscidea luisianica
Dogfennel (Cypressweed)	Eupatorium capillifolium
Eveningprimrose, Cutleaf	Oenothera lacinata
Flax	Linum catharticum
Fleabane, Annual	Erigeron annuus
Flixweed	Descurainia sophia
Henbit	Lamium amplexicaule
Knotweed, Prostrate	Polygonum aviculare
Kochia	Kochia scoparia
Lambsquarters, Common	Chenopodium album
Lettuce, Prickly	Lactuca serriola
Mallow, Common	Maalva neglecta
Mornigglory, lyyleaf	Ipomea hederacea
Tall	Ipomea purupurea
Mustard, Annual	Brassica spp.
Tansy	Descurainia pinnata
Pennycress, Field	Thlaspi arvense
Pepperweed, Virginia	Lepidium virginicum
Pigweed, Prostrate,	Amaranthus blitoides
Redroot.	Amaranthus retroflexus
Smooth.	Amaranthus hybridus
Tumble	Amaranthus albus
Poorjoe	Diodia teres
Pursiane, Common	Portulaca oleracea
Ragweed, Common,	Ambrosia ariemisiifolia
Lance-leaf,	Ambrosia bidentata
Western	Ambrosia psilostachya
Sedge	Cyperus compressus
Shepherdspurse	Capsella bursa-pastoris
Smartweed, Pennsylvania	Polygonum pensylvanicum
Sneezeweed, Bitter	Helenium amurum
Sunflower, Common (wild)	Helianthus annuus
Thistle, Russian	Salsola iberica

Common Name Scientific Name	
BIENNALS AND PERENNIALS	
Bindweed, field	Convolvulus arvensis
Bittercress	Cardamine spp.
Buckeye	Aesculus spp.
Bullnettle	Cnidosculus stimulosus
Chicory	Cichorium intybus
Clover, Hop	Trifoleum aureum
Dandelion-	Taraxacum officinale
Dock, Curly	Rumex crispus
Elderberry	Sambucus canadensis
Goldenrod, Missouri	Solidago missouriensis
Goldenweed, Common	Isocp,a cprpmopifolia
Groundset	Senecio vulgaris
Honeysuckle, Hairy	Lonicera
Horsenettle	Solanum caroliniense
Ivy, Poison	Rhus radicans
Knapweed, Black	Centaurea nigra
Russian	Centaurea repens
Spotted	Centaurea maculosus
Marshelder	Ina annua
Mesquite	Prosopis juliflora
Milkweed, Antelopehorn	Asciepius
Nightshade, Silverleaf	Solanum elaeagnifolium

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Black Persimmon, Eastern Rabbitbrush Ragwort, Tansy Redvine Sagebrush, Fringed Smartweed, Swamp Sorrel, Red (Sheep Sorrel) Sowthistle, Perennial Spurge, Leafy Starthistle, Yellow Tallow Tree, Chinese Thistle, Bull Canada Musk **Plumeless** Vetch Yankeeweed

Solanum niarum Diospyros virginiana Chrysanthemus pulchellus Senecio jacobia Brunnichia ovata Artemisia frigida Polygonum coccineum Rumex acetosella Sonchus arvensis Euphorbia esula Centauria solstitialis Sapium sebiferum Cirsium vulgare Cirsium arvense Carduus nutans Carduus acanthoides Vicia spp.

Eupatorium compositifolium

Food/Feed Crop Uses

This product can be used on the following:

- Conservation Reserve Program Land
- Fallow Systems (Between Crop Application)
- General Farmstead

Grass (Hay or Silage)

**Pastures** 

Rangeland

Wheat

Look inside for complete Restrictions and Limitations and Application Instructions

#### CONDITIONS OF SALE AND WARRANTY

The **DIRECTIONS FOR USE** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions or presence of other materials. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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

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