

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

April 6, 2016

Mr. Bill Washburn Helena Chemical Company 225 Schilling Boulevard, Suite 300 Collierville, TN 38017

Subject: Label Amendment – Add Grass Grown for Seed and Make other minor labeling

changes

Product Name: Latigo

EPA Registration Number: 5905-564

Application Date: 08/25/2015 Decision Number: 508569

Dear Mr. Washburn:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one 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 the Federal Insecticide Fungicide and Rodenticide Act 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. 5905-564 Decision No. 508569

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 Karen Samek by phone at (703) 347-8825, or via email at <a href="mailto:samek.karen@epa.gov">samek.karen@epa.gov</a>.

Sincerely,

Kathryn Montague, Product Manager 23

axtryn V. Wontaguo

Herbicide Branch

Registration Division (7505P) Office of Pesticide Programs

Enclosure

04/06/2016

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. \_\_\_\_\_\_

5905-564





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

## ACTIVE INGREDIENT(S):

3	.6-dichloromethoxybenzoic acid	18.28%
2	4-Dichlorophenoxyacetic acid	24.62%
0	THER INGREDIENTS:	57.10%
	TOTAL	00.00%

Equivalent to: Dicamba Acid, 1.8 lbs./gal and 2,4-D Acid, 2.4 lbs./gal Isomer specific by AOAC Method 6.D01-5 (12th Ed.) Patent No. 5,877,112, other patents pending.

#### 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.).

#### 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.
- Have a person sip a glass of water if able to swallow.
- 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.

EPA REG. NO. 5905-564 EPA EST. NO. 42750-MO-001 AD NET CONTENTS:

□ 1 Gallon (3.785 Liters)

□ 2.5 Gallons (9.46 Liters)

□ 55 Gallons (208.18 Liters)

□ 250 Gallons (946.1 Liters)

Manufactured For: Helena Chemical Company 225 Schilling Boulevard, Suite 300 Collierville, TN 38017

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. 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.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- 1. Long-sleeved shirt and long pants.
- 2. Shoes and socks.
- 3. Chemical resistant gloves (such as Barrier laminate, butyl rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils)
- 4. Chemical resistant apron when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- 5. Protective eyewear (goggles or face shield)

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.

See engineering controls for additional requirements.

If this container contains over 1 gallon and less than 5 gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

#### ENGINEERING CONTROL STATEMENTS

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

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

## **USER SAFETY RECOMMENDATIONS**

## Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and change into clean clothing.
- Users should 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. 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 washwaters or rinsate. Apply this product only as directed on label.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

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.

#### AGRICULTURAL USE REQUIREMENTS

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

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

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

- 1. Coveralls worn over short-sleeved shirt and short pants.
- 2. Chemical resistant footwear plus socks
- 3. Chemical resistant gloves made of any waterproof material.
- 4. Chemical resistant headgear for overhead exposure.
- 5. Protective eyewear

Notify workers of application by warning them orally and by posting warning signs at entrances to treated area.

## 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.

USE REQUIREMENTS FOR PASTURES, PERENNIAL GRASSLANDS, GRASS GROWN FOR SEED, RANGELAND, FALLOW LAND AND NONCROP AREAS: Do not enter treated areas until spray has dried. For early entry to treated areas, wear eye protection, chemical-resistant gloves made of any waterproof material, long-sleeved shirt, long pants, shoes and socks.

#### STORAGE AND DISPOSAL

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 32°F or above 100°F. 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.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(non-refillable  $\leq 5$  gallons): 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  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(non-refillable >5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (ore 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 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle inside of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

[Optional text for refillable plastic bulk containers]

Refillable container (110 & 250 gallon & bulk): 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

To clean the container before final disposal, empty the remaining contents from the 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 process two more times.

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. PRODUCT INFORMATION

**LATIGO**® 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); grass grown for seed; sugarcane; wheat; conservation reserve program land; postharvest, fallow, crop stubble, set-aside acres; general farmstead areas; certain noncrop areas; and for forest management.

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order of Injunctive Relief in Washington Toxics Coalition et all vs. EPA CO1-132C (W.D.WA.). For information, please refer to www.epa.gov/espp/wtc/.

Mode of Action

**LATIGO**® contains two active ingredients uniquely formulated to be used alone or tank mixed with other listed products as well as liquid fertilizer solutions. **LATIGO**® is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. **LATIGO**® 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 LATIGO® 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." LATIGO® 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:

**LATIGO**® may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, 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 **LATIGO**® 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 **LATIGO®** with the roots of desirable trees and shrubs.

#### SPRAY DRIFT MANAGEMENT

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

#### **Droplet Size**

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

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

### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and 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 equipment and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

For aerial equipment, 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 in a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

For ground boom application, do not apply with a nozzle height greater than 4 feet above the crop canopy.

Table 1. Application Rate and Timing – Annual Weeds

(Applicators must follow maximum application rates in the Use Specific Information sections of the label)

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

Weeds Controlled		Rate	Per Acre (acc	ording to weed gr	owth stage)	
(including ALS – and triazine-resistant)	1/3 pints	2/3 pints	1 pints	1 1/8 pints	1 2/3 pints	2 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"	-	-	-
Dogfennel	-	-	-	10-15"	-	-
Evening Primrose	-	< 2"	-	2-6"	-	-
Flax	-	< 2"	-	-	-	-
Fleabane, Annual	-	1-4"	4-8"	8"	-	
Fixweed	-	< 3"	-	-	-	
Henbit	-	-	preflower	-	flower	-
Horseweed/ Marestail	-	-	Pre-bolt	-	Post-bolt: Up to 4"	
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, Ivyleaf	-	pre-flower	-	-	-	-
, Tall	-	pre-flower	-	post-flower	-	-
Mustards, Annual		Rosette		early bolt	-	-
, Tansy	-	< 3"			-	
Pennycress, Field	-	-	-	rosette	-	-
Pepperweed, Virginia	-	-	1-3"	3-6"	after branching	-
Pigweed, Prostrate	-	< 3"	-	-	-	-
, Redroot	-	< 3"	3-10"	-	-	-
, Smooth	-	< 3"	-	-	-	-

Weeds Controlled	Rate Per Acre (according to weed growth stage)					
(including ALS – and triazine-resistant)	1/3 pints	2/3 pints	1 pints	1 1/8 pints	1 2/3 pints	2 pints
, Tumble	-	< 3"	-	mature	-	-
Poorjoe	-	prior to flower	-	-	-	actively growing
Purslane, Common		< 3"	3-8"		-	-
Ragweed, Common				>10"	-	
Western, Lanceleaf	1-3"	3-6"	6-10"	actively growing	-	-
Sedge <sup>1</sup>	-	-	-	-	-	-
Shepherdspurse	-	Rosette	-	-	-	-
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>&</sup>lt;sup>1</sup> For use in non-food/feed crop only. Adding crop oil concentrate has shown to improve performance on actively growing annual sedge.

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

(Applicators must follow maximum application rates in the Use Specific Information sections of the label) (The addition of liquid fertilizer (28-0-0,32-0-0) at  $\frac{1}{2}$  the GPA of the spray solution has proven to give increase suppression or control on certain species of weeds.)

	Rate Per Acre (according to weed growth stage)					
Weeds Controlled	1/3 pints	2/3 pints	1 pints	1 1/8 pints	1 2/3 pints	2 - 3 1/4 pints
Bindweed, Field	-	-	-	-	-	actively
						growing
Bittercress	-	2-3"	-	-	-	-
Buckeye species <sup>1</sup>	-	-	-	-	full leaf	-
Bullnettle <sup>2</sup>	-	-	-	flower	-	-
Chicory	-	-	-	-	early bolting	-
Clove, Bur	-	-	Pre-flower	-	-	-
Dandelion, Common	-	Rosette	-	bolting	-	-
Dewberry, Southern <sup>1</sup>	-	-	-	-	-	spring or fall
Dock, Curly	-	-	prior to bolting	-	after bolting	-
Elderberry <sup>2</sup>	-	-	-	-	-	actively growing
Goldenrod, Missouri	-	-	-	3-15"	flower	-
Groundsel, Texas	-	Rosette	post-bolting	-	-	-
Honeysuckle, Hairy	-	-	-	-	spring or fall	-
Horsenettle, Carolina <sup>1</sup>	-	-	-	-	-	flower or berry
Ivy, Poison	-	-	-	after bloom	-	-
Knapweed, Black <sup>2</sup>	-	-	-	-	-	actively growing
, Russian <sup>2</sup>	-	-	-	-	-	actively

	Rate Per Acre (according to weed growth stage)					
Weeds Controlled	1/3 pints	2/3 pints	1 pints	1 1/8 pints	1 2/3 pints	2 - 3 1/4 pints
						growing
, Spotted	-	-	-	-	-	actively
						growing
Marshelder	-	-	-	<12"	12"/prebloo	
					m	
Mesquite <sup>3</sup>	-	-	-	-	-	45-90 days
						after budbreak
Milkweed,	-	-	-	pre-flower	-	Flower
Antelopehorn <sup>2</sup>				C. II Classes		
Nightshade, Silverleaf <sup>1</sup>	-	-	-	full flower	-	-
,Black <sup>1</sup>	-	-	-	full flower	-	actively
Persimmon, Eastern <sup>3</sup>						growing
Persimmon, Eastern	-	-	-	-	-	actively growing
Prickly, Lettuce	_	_		rosette	_	actively
Trickly, Lettuce				Tosette	_	growing
Rabbitbrush <sup>2</sup>	-	-	-	-	-	- g. e r
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
C 41-1-41-2						growing
Sowthistle <sup>2</sup>	-	-	-	-	-	actively
Spurge, Leafy <sup>2</sup>	-	-	_	_	-	growing full leaf
Tallow Tree, Chinese <sup>4</sup>	-	-			-	Tuil leaf
Thistle, Bull	-		Rosette	bolting	-	actively
Thistie, buil	-	-	Rosette	boiling	_	growing
, Canada <sup>2</sup>	_	_	_	_	_	- growing
, Musk	_	-	_	rosette/bolti	_	_
, wask				ng		
, Plumeless	-	-	Rosette	bolting	-	-
Vetch, Hairy	-	1-4"	4-8"	8" full flower	-	-
Yankeeweed	-	-	-	10-18"	-	Rosette
Yellow Starthistle <sup>1</sup>	-	-	-	-	-	-
1				1	l	1

<sup>&</sup>lt;sup>1</sup> May require repeat applications

<sup>&</sup>lt;sup>2</sup> Recommended rate will provide top growth suppression only.

<sup>&</sup>lt;sup>3</sup> For improved root kill or woody species such as mesquite and eastern persimmon spray 2 pints of per acre **LATIGO®** each year for 3 consecutive years.

<sup>&</sup>lt;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, **LATIGO®** may be tank mixed with Ally® herbicide (0.1-0.2 ounces per acre), if labeled for the use site.

## **Ground Application (Banding)**

When applying **LATIGO®** 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

**LATIGO**® 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 **LATIGO**® in water according to Table 3 - (assuming that the spot treatment rate equates to 40 gallons per 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>LATIGO®</b>	
(gallons of water)	to add to the spray tank	
1 gallon	2/3 fluid ounce*	
3 gallons	2 fluid ounces	
5 gallons	3 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 **LATIGO®** herbicide or **LATIGO®** 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
- · provide good mixing quality in the jar test, and
- 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), grass grown for seed, pastures, rangeland, and wheat.)

### Nitrogen Source

Sprayable liquid fertilizers: Use  $\frac{1}{2}$  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 appropriate 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 Additive 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

<sup>&</sup>lt;sup>1</sup> See manufacturer's label for specific rate recommendations.

## IV. TANK MIXING INFORMATION

## Tank Mix Partners/Components

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

Aim<sup>™</sup> EC (carfentrazone-ethyl)

Ally® XP Herbicide (metsulfuron-methyl)

Amber® (triasulfuron)

Asulox® Herbicide (asulam)

Atrazine

Basagran® (bentazon)

Cyclone® Star (paraquat dichloride)

Dakota® (fenoxaprop-p-ethyl + MCPA)

Evik® DF (ametryn)

Express® Herbicide (tribenuron-methyl)

Finesse® Cereal and Fallow Herbicide

(chlorsulfuron + metsulfuron-methyl)
Glean® XP Herbicide (chlorsulfuron)
Cha Charles (chlorsulfuron)

Gly Star<sup>™</sup> 5 Extra (glyphosate)

Gramoxone® Inteon (paraquat dichloride)

Harmony® Extra SG Herbicide (thifensulfuron-

methyl + tribenuron-methyl)

Karmex® DF (diuron)

Kerb <sup>™</sup> 50 WP (pronamide)

**MCPA** 

Paramount® Herbicide (quinclorac)

<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.

Peak® (prosulfuron)
Permit® (halosulfuron-methyl)
Roundup® Ultra (glyphosate)
Sencor® 75% Turf Herbicide (metribuzin)
Sinbar® WDG (terbacil)

Stinger TM (clopyralid) Tordon TM K (picloram) Touchdown® (glyphosate) 2,4-D1

(1) **LATIGO**® contains 0.30 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed the combined total of pounds of a.e. per acre per crop cycle of 2,4-D for the use site being applied to.

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. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture. Physical incompatibility, reduced weed control, or crop injury may result from mixing **LATIGO®** 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-emulsions)
- 5. Water-soluble products (such as **LATIGO®**).
- 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.

Filename: Latigo (5905-564) 032316 CLN.doc

13

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

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"

• Restricted entry Interval (REI): 48 Hours

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.

CROP	MINIMUM DAYS PLANT BACK INTERVAL (Areas > ½" rainfall or irrigation after application)*			MINIMUM DAYS PLANT BACK INTERVAL (Areas < 1/2" rainfall or irrigation after application)		
	2/3 – 1 pints/A	> 1 - 3 1/2 pints/A	> 3 1/2 pints/A	2/3 – 1 pints/A	> 1 – 3 1/2 pints/A	> 3 1/2 pints/A
Corn(field and pop)**	7	21	120	30	60	120
Cotton	21	45	120	30	90	120
Barley, Oats, Wheat and other small grains	14	21	120	21	60	120
Sorghum	14	21	120	30	60	120
Soybean***	15 (one application) 30 (two applications)	45	120	45	90	120
All other crops	120	120	DO NOT ROTATE	120	120	DO NOT ROTATE

<sup>\*</sup>NOTE: A cumulative 1/2 inches of rainfall or irrigation must occur in 2 or less rainfalls and/or irrigations before calculating plantback interval.

#### **Application Precautions:**

- Arid (dry) conditions: it is extremely important that the addition of a suitable Nonionic Surfactant, Oil, or sprayable fertilizer be used when applying LATIGO®. Higher rates of LATIGO® 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 **LATIGO®**.
- 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.

#### Application Restrictions:

- \*\*Make only one Corn preplant application per crop cycle
- \*\*\*Make only one Soybean preplant application for the 15 day plantback interval.
- 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	Maximum Rate	Livestock Grazing or	Aircraft Application
	Per Acre	Per Acre	Feeding <sup>1</sup>	
	Per Application	Per Season		
Between Crop	3 2/3 pints	7-1/3 pints	Yes	Yes
Applications				
Pasture, Hay,	2 1/2 pints	5 pints	Yes	Yes
Silage				
Grass Grown for	2 pints	4 pints	Yes	Yes
Seed				
Wheat	1 1/4 pints	2 pints	Yes	Yes
Sugarcane	4 pints	8 pints	Yes	Yes

<sup>&</sup>lt;sup>1</sup> Refer to "Food/Feed Crop Specific Information" for grazing and feeding restrictions.

#### VI. FOOD/FEED CROP SPECIFIC INFORMATION

PASTURES, RANGELAND AND GRASS (Hay, Silage)

**LATIGO**® is recommended for use for pasture (including pasture grown for hay), rangeland, grass grown for hay or silage, fallow systems, Conservation Reserve Programs, and general farmstead (non-cropland only).

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.

Uses described in this section also pertain to small grains (such as barley, corn, 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 **LATIGO®** are greater than 1 1/4 pints per acre are applied.

In newly established hybrid Bermudagrass, Pangolagrass, and stargrasses (*Cynodon* spp.) use 1 to 2 pints of **LATIGO®** 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 **LATIGO®** will control or suppress annual sedges, broadleaf signalgrass, crabgrass, and goosegrass. Best results will be obtained if **LATIGO®** 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 1 1/4 pints of **LATIGO®** used per acre before interseeding or injury may occur.

Grazing and Feeding Non-Lactating Animals: There is no waiting period between treatment and grazing for non-lactating animals. Do not permit meat animals being finished for slaughter to graze treated fields within 30 days of slaughter.

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 7 days of treatment.

Pasture and Rangeland Tank Mixes - LATIGO® may be applied in tank mixes with one or more of the following herbicides:

Ally® Amber®

#### PASTURE & RANGELAND RESTRICTIONS:

- Do not apply more than 2-1/2 pints per acre per application.
- Rates above 2-1/2 pints of **LATIGO®** per acre are for spot treatments only
- Do not make more than 2 applications per year.
- Minimum spray interval between applications is 30 days.
- If grass is to be cut for hay, Agricultural Use requirements for the Worker Protection Standard are applicable.
- For spot treatment, do not exceed 4.4 pints per acre per application, or 8.8 pints per acre per year.

**LATIGO**® contains 0.225 pounds a.e. of dicamba per pint. If applied with other products containing dicamba, either as a tank mix or separately during the same growing season do not exceed 2.0 lbs of dicamba a.e. per crop cycle.

**LATIGO**® contains 0.30 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

#### **GRASS GROWN FOR SEED**

To control many species of emerged broadleaf weeds, apply 8 to 32 oz per acre. Use on newly established or established stands of cool season grasses grown for seed including bentgrasses, bluegrasses, fine fescues, tall fescue, orchardgrass, annual ryegrass and perennial ryegrass.

Apply **LATIGO**® in the spring or fall when broadleaf weeds are in the 2-4 leaf stage and rosettes are less than 2" across. Larger or more difficult to control broadleaf weeds may require high rates of **LATIGO**® and a tank mix partner for optimum control.

On newly established stands, the grass must have at least reached the 1 tiller stage prior to treatment. On established stands, where at least one seed crop has been harvested, two applications separated by 30 days may be made with rates up to 32 oz per acre.

For ground applications apply in 10-20 gallons of spray solution per acre. For aerial applications apply in 5-10 gallons of spray solution per acre.

## **GRASS GROWN FOR SEED RESTRICTIONS**

- Do not make more than 2 applications per year.
- Do not apply to grasses in the boot stage of development.

- The maximum individual application rate is 32 oz per acre per application.
- The retreatment interval is 30 days.
- Do not use more than 64 oz of **LATIGO®** per acre per year.

#### **SUGARCANE**

Applications of **LATIGO®** can be made any time after the weeds have emerged and are actively growing but prior to the close-in stage of sugarcane. When possible, direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage. Application rates and timing are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

- For control of listed ANNUAL broadleaf weeds, apply 1 quart of **LATIGO®** per treated acre.
- For suppression of listed PERENNIALS, apply 1 2 quarts of **LATIGO®** per treated acre.

SUGARCANE Tank Mixes: **LATIGO®** may be tank mixed with one or more of the following herbicides: Asulox, Atrazine, Evik, Sencor, Sinbar

#### SUGARCANE RESTRICTIONS:

- Pre-emergent Application: Do not make more than one pre-emergence application per crop cycle.
- Pre-emergent Application: Do not apply more than 4 pints per application.
- Post-emergent Application: Do not make more than one post-emergence application per crop cycle.
- Post-emergent Application: Do not apply more than 4 pints per application.
- Do not harvest cane prior to crop maturity.
- Preharvest interval (PHI) is 87 days.

**LATIGO**® contains 0.225 pounds a.e. of dicamba per pint. If applied with other products containing dicamba, either as a tank mix or separately during the same growing season do not exceed 2.0 lbs of dicamba a.e. per crop cycle.

**LATIGO**® contains 0.30 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

# WHEAT (Fall and Spring-seeded)

If small grains are grown for pasture or hay only, refer to Pastures, Rangeland and Grass (Hay, Silage).

Do not graze or harvest for livestock feed prior to crop maturity.

Do not use **LATIGO®** in wheat underseeded with legumes.

EARLY SEASON POST EMERGENCE APPLICATION (Fall and Spring Seeded):

Apply 1-1/4 pint of **LATIGO®** per acre to wheat unless using one of the wheat specific programs below. Early season applications to spring-seeded wheat must be made after tillering and before wheat reaches the 6-leaf stage.

Early season applications to fall-seeded wheat must be made after tillering and prior to the jointing stage. Care should be taken in staging early developing wheat varieties such as TAM 107, Madison, or Wakefield to be certain that the application occurs prior to the jointing stage.

#### SPECIFIC USE PROGRAMS FOR FALL-SEEDED WHEAT ONLY:

Up to 3/4 pints of **LATIGO®** per acre may be applied post emergent on fall-seeded wheat after the wheat begins to tiller for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

#### PRFHARVEST APPLICATIONS:

**LATIGO**® can be used to control weeds that may interfere with harvest of wheat. Apply up to 1 1/4 pints of **LATIGO**® 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.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.

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, **LATIGO®** may be tank mixed with other herbicides such as Ally or Gly  $Star^{TM}$  Plus that are registered for preharvest use in wheat.

Preharvest use of **LATIGO®** is not registered for use in California.

Table 6 - Wheat Tank Mixes

LATIGO can be tank mixed with one or more of the following herbicides				
Bromoxynil Diuron Metsulfuron-methyl Tribenuron-methyl				
Carfentrazone-ethyl	Fenoxyprop-p-ethyl	Prosulfuron		
Chlorsulfuron	MCPA	Triasulfuron		
Clopyralid Metribuzin Thifensulfuron-methyl				

<sup>&</sup>lt;sup>1</sup> Do not use low rates of sulfonylurea herbicide on more mature weeds or on dense vegetative growth.

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.

#### WHEAT RESTRICTIONS:

- Postemergence:
  - Make no more than one application per crop cycle.
  - Do not apply more than 1-1/4 pints per acre per application.
- Preharvest:
  - Make no more than one application per crop cycle.
  - Do not apply more than 1 1/4 pints per acre per application.
  - Pre-Harvest interval is 14 days.

<sup>&</sup>lt;sup>2</sup> Do not use as a tank mix treatment with Fenoxyprop-p-ethyl or MCPA on Durum wheat.

<sup>&</sup>lt;sup>3</sup> Tank mixes with Diuron and Metribuzin are for use in fall-seeded wheat only.

**LATIGO**® contains 0.225 pounds a.e. of dicamba per pint. If applied with other products containing dicamba, either as a tank mix or separately during the same growing season do not exceed 2.0 lbs of dicamba a.e. per crop cycle.

**LATIGO**® contains 0.30 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not:

- Exceed a combined total of 1.25 pounds of a.e. per acre per crop cycle of 2,4-D for post emergent use.
- Exceed 0.5 pounds of a.e. per acre per crop cycle of 2,4-D for pre-harvest application.
- Exceed a total of 1.75 pounds of a.e. per acre per crop cycle for all uses.

## VII. NON-FOOD/FEED USE (LAND NOT HARVESTED, GRAZED OR FORAGED) – SPECIFIC INFORMATION.

#### BETWEEN CROP APPLICATIONS

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

**LATIGO**® 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. To aid in suppressing certain perennial or biennial broadleaf weeds (including cotton regrowth), this product may be applied either alone or in combination with other registered herbicides. For cotton regrowth, a minimum rate of 1 1/5 pints/acre is recommended.

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

#### Rates and Timings:

Apply 1 – 3 2/3 pints of **LATIGO®** per acre. Refer to Table 1 to determine use rates for specific targeted weed species. For best performance, apply **LATIGO®** 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 **LATIGO®** 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  $\frac{1}{2}$  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 **LATIGO®**. For seedling control, a follow-up program or other cultural practices could be instituted.

## Between Crop Tank Mixes:

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.

In tank mixes with one or more of the following herbicides, apply 1.0 - 1.25 pints of **LATIGO®** per acre for control of annual weeds, or 1.25 - 4.25 pints of **LATIGO®** per acre for control of biennial and perennial weeds

Atrazine	Glyphosate	Paraquat dichloride	Quinclorac
Carfentrazone-ethyl	Metribuzin	Picloram	Triasulfuron
Chlorsulfuron	Metsulfuron-methyl	Pronamide	

#### APPLICATIONS TO FALLOW GROUND PRIOR TO PLANTING COTTON

## **Rates and Timings**

Apply **LATIGO**® as a broadcast or spot treatment to emerged and actively growing weeds at the rate of 1 to 3-2/3 pints per acre. The most effective control of weeds occurs if application is made when weeds are in the 2-4 leaf stage and rosettes are less than 2" across

## **Cropping Restrictions**

Refer to the Crop Rotational Restrictions Table in Section V. RESTRICTIONS AND LIMITATIONS for appropriate pre-plant application intervals for cotton.

#### **Tank Mix Treatments**

For control of grasses or additional broadleaf weeds, **LATIGO®** may be tank mixed with CAPROL (R), GRAMAXONE(R) Extra, and glyphosate herbicides

#### BETWEEN CROP APPLICATION RESTRICTIONS:

- Do not apply more than 3-2/3 pints per acre per application.
- Do not make more than 2 applications per year.
- Minimum spray interval between applications is 30 days.
- Only labeled crops can be planted within 30 days of application.

**LATIGO**® contains 0.225 pounds a.e. of dicamba per pint. If applied with other products containing dicamba, either as a tank mix or separately during the same growing season do not exceed 2.0 lbs of dicamba a.e. per crop cycle.

**LATIGO**® contains 0.30 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

## CONSERVATION RESERVE PROGRAMS

**LATIGO**® 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).

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.

#### CONSERVATION RESERVE PROGRAMS RESTRICTIONS:

- Do not apply more than 4 pints per acre per application.
- Do not make more than 2 applications per year.
- Minimum spray interval between applications is 30 days.
- If grass is to be cut for hay, Agricultural Use requirements for the Worker Protection Standard are applicable.

**LATIGO®** contains 0.225 pounds a.e. of dicamba per pint. If applied with other products containing dicamba, either as a tank mix or separately during the same growing season do not exceed 2.0 lbs of dicamba a.e. per crop cycle.

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.

**LATIGO**® contains 0.30 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

#### GENERAL FARMSTEAD

Farmstead and Fence-row Treatment Application Instructions

**LATIGO**® 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 of spray solution per treated acre per application. 4 pints of **LATIGO®** in forty gallons of spray solution contains 0.9 pounds acid equivalent of dicamba and 1.2 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 1.5% **LATIGO®**, 88.5% water, 10% diesel oil, and sufficient emulsifier (to mix the diesel and emulsifier). The diesel oil in this tank mix will damage or kill desirable grasses and should not be used in pastures or where damage to desirable species cannot be tolerated.

- 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.
- 3. **LATIGO®**: add 1.5 gallons per 100 gallons of total intended solution.
- 4. Diesel Oil: Add 10 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.

## 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. Increase diesel oil content to 15% or 15 gallons of diesel oil per 100 gallons of total solution.
- 2. Spray in late winter and early spring before plants break dormancy.
- 3. Spray the bottom 24" of the target stem to wet on all sides.
- 4. 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.
- 5. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

### FARMSTEAD AND FENCEROW RESTRICTIONS:

- Postemergence (annual & perennial weeds):
  - Do not make more than 2 applications per year.
  - Do not apply more than 4 pints per acre per application.
  - Minimum spray interval between applications is 30 days.
- Postemergence (woody plants):
  - Do not make more than 1 application per year.
  - Do not apply more than 4 pints per acre per 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.

**LATIGO**® contains 0.225 pounds a.e. of dicamba per pint. If applied with other products containing dicamba, either as a tank mix or separately during the same growing season do not exceed 2.0 lbs of dicamba a.e. per crop cycle.

**LATIGO**® contains 0.30 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year.

## FOR CUT SURFACE TREATMENTS:

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

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

22

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

Alder Hemlock Ash Hickory Honeylocust Aspen Basswood Honeysuckle Beech Hornbeam Blackberry Huckleberry Blackgum Huisache Cedar Ivy, Poison Cherry Kudzu Chinquapin Locust, Black Cottonwood Maple Creosotebush Mesquite Dewberry Oak Dogwood Oak, Poison Elm Olive, Russian Grape Persimmon, Eastern

Greenbriar Pin

Hawthorn (Thornapple) Plum, Sand (Wild Plum)

**CUT SURFACE RESTRICTIONS:** 

• Do not make more than one cut surface application per year.

Do not use more than 8.8 pints per 100 gallons of spray solution.

Poplar Rabbitbrush Redcedar, Eastern Rose, McCartney Rose, Multiflora Sagebrush, Fringe

Sassafras Spruce Sumac Sweetgum Sycamore Tarbrush Willow Witchhazel Yaupon 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, Corn	Rannculus arvensis
Chickweed, Common	Stellaria media
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
Horseweed/Marestail	Conyza canadensis
Mornigglory, Ivyleaf	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
Purslane, 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

Filename: Latigo (5905-564) 032316 CLN.doc

24

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
Black	Solanum nigrum
Persimmon, Eastern	Diospyros virginiana
Rabbitbrush	Chrysanthemus pulchellus
Ragwort, Tansy	Senecio jacobia
Redvine	Brunnichia ovata
Sagebrush, Fringed	Artemisia frigida
Smartweed, Swamp	Polygonum coccineum
Sorrel, Red (Sheep Sorrel)	Rumex acetosella
Sowthistle, Perennial	Sonchus arvensis
Spurge, Leafy	Euphorbia esula
Starthistle, Yellow	Centauria solstitialis
Tallow Tree, Chinese	Sapium sebiferum
Thistle, Bull	Cirsium vulgare
Canada	Cirsium arvense
Musk	Carduus nutans
Plumeless	Carduus acanthoides
Vetch	Vicia spp.
Yankeeweed	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)
- Grass Grown for Seed

- Pastures
- Rangeland
- Sugarcane
- Wheat

Look inside for complete Restrictions and Limitations and Application Instructions

These crops are considered Food/Feed crops only when harvested, grazed, or foraged. Otherwise, they are considered non-Food/Feed uses.

#### 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.

HELENA CHEMICAL COMPANY warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, HELENA CHEMICAL COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. When Buyer suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), Buyer must promptly notify Seller in writing of any claims to be eligible to receive either remedy stated above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL HELENA CHEMICAL COMPANY OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. HELENA CHEMICAL COMPANY and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of HELENA CHEMICAL COMPANY. No employee or agent of HELENA CHEMICAL COMPANY or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.

Latigo® is a registered trademark of Helena Holding Company.

Ally®, Express®, Finesse®, Glean®, Harmony®, Karmex®, and Sinbar® are registered trademarks of E. I. du Pont de Nemours & Company.

Banvel®, Clarity®, Distinct®, Fallowmaster®, and Paramount® are registered trademarks of BASF Corporation.

Basagran® is a registered trademarks of BASF AG.

Asulox®, Dakota®, Tiller® are registered trademarks of Bayer CropScience.

Amber®, Evik®, Cyclone®, Sencor®, Gramoxone®, Peak®, Rave™ and Touchdown® are trademarks and/or registered trademarks of Syngenta Crop Protection.

Landmaster®, Permit® and Roundup® Ultra are registered trademarks of Monsanto Company. Curtail™, Stinger™, Grazon™, Kerb™ and Tordon™ are trademarks of Dow AgroSciences LLC.

Aim™ is a trademark of FMC Corporation.

Fallow Star<sup>™</sup> and Gly Star<sup>™</sup> Plus are trademarks of Albaugh, Inc.