U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460	EPA Reg. Number: 5905-625	Date of Issuance: 10/20/20		
NOTICE OF PESTICIDE: <u>X</u> Registration <u>Reregistration</u>	Term of Issuance: Conditional			
(under FIFRA, as amended)	Name of Pesticide Pro HM-1603 Herbi			
D/B/A Helena Chemical Corp 225 Schilling Blvd., Suite 300 Collierville, TN 38017				
Note: Changes in labeling differing in substance from that accepted in connection with this reg Registration Division prior to use of the label in commerce. In any correspondence on this proc				
Registration Division prior to use of the label in commerce. In any correspondence on this pro- On the basis of information furnished by the registrant, the above under the Federal Insecticide, Fungicide, and Rodenticide Act ( Registration is in no way to be construed as an endorsement or Agency. In order to protect health and the environment, the Ad time suspend or cancel the registration of a pesticide in accorda name in connection with the registration of a product under this	luct always refer to the above E ve named pesticide is FIFRA). recommendation of the ministrator, on his mo- nce with the Act. The Act is not to be cons	PA registration number. hereby registered his product by the ption, may at any e acceptance of any trued as giving the		
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- 2. You are required to comply with the data requirements described in the Generic Data Call-In (GDCI) identified below:
  - a. Dicamba GDCI-029801-1659

You must comply with all of the data requirements within the established deadlines. If you have questions about the GDCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <u>http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1</u>

3. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The alternate brand name, "LATIGO BOLD" has been added to the product record.

Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 5/22/2019
- Alternate CSF 1 dated 5/22/2019

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

Enclosure

## HM-1603 HERBICIDE

(Alternate Brand Name: LATIGO BOLD)

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, Teff, Conservation Reserve Program land; Certain Non-Crop Areas; General Farmstead Areas; Forest Management; Post-Harvest, Fallow, Crop Stubble and Set Aside Acres

ACTIVE INGREDIENT(S):

Dicamba acid: 3,6-dichloromethoxybenzoic acid	18.28%
2,4-D Acid: 2,4-Dichlorophenoxyacetic acid	
OTHER INGREDIENTS:	
TOTAL	100.00%

Equivalent to: Dicamba acid equivalent 18.28%, 1.8 lbs/gal. 2,4-D acid equivalent 24.62%, 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:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice</li> </ul>
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
NOTE TO PHYS	CIAN: Probable mucosal damage may contraindicate the use of gastric lavage.
	<b>BER</b> - Have the product container or label with you when calling a poison control center of for treatment. You may also contact 1-800-424-9300 for emergency medical treatment

SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONS AND DIRECTIONS FOR USE

EPA REG. NO. 5905-625 EPA EST. NO. \_\_\_\_\_



ACCEPTED 10/20/2020 Under the Federal Insecticide, Fungicide

and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 5905-625 NET CONTENTS: \_\_\_\_\_\_ AD XXXXXX

Manufactured For: Helena Agri-Enterprises, LLC 225 Schilling Boulevard, Suite 300 Collierville, TN 38017

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### DANGER

Corrosive. Causes irreversible eve damage. Harmful if swallowed. Do not get in eves or on clothing. Wash thoroughly with soap and water after handing and before eating, drinking, chewing gum, using tobacco, or using the toilet. 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 (made of Barrier laminate, butyl rubber  $\ge$  14 mils, neoprene rubber  $\ge$  14 mils, polyethylene, polyvinyl chloride (PVC)  $\geq$  14 mils, or viton  $\geq$  14 mils
- 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 evewear (goggles or face shield)

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.

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 170.607(e)].

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 170.607(d-e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Users should:

### USER SAFETY RECOMMENDATIONS

- - Wash hands thoroughly with soap and water after handling and 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.
  - Have the product container or label with you when calling a poison control center or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment.

#### 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 an 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.

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
- Chemical resistant gloves made of Barrier laminate, butyl rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 14 mils).
- 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.

#### **RESISTANCE MANAGEMENT**

For resistance management, **HM-1603 HERBICIDE** is a Group 4 mode of action herbicide containing 2,4-D acid and dicamba acid. Any weed population may contain or develop plants naturally resistant to **HM-1603 HERBICIDE** and other Group 4 mode of action herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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

- Rotate the use of HM-1603 HERBICIDE or other Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank-mixtures with herbicides from a different group if such use is permitted; where
  information on resistance in target weed species is available, use the less resistance-prone
  partner at a rate that will control the target weed(s) equally as well as the more resistance-prone
  partner. Consult your local extension service or certified crop advisor if you are unsure as to
  which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use
  of this product, and switch to another management strategy or herbicide with a different mode of
  action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Helena Agri-Enterprises, LLC representatives at (901) 761-0050.

#### PRODUCT INFORMATION

**HM-1603 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); grass grown for seed; sugarcane; teff; wheat; conservation reserve program land; postharvest, fallow, crop stubble, set-aside acres; general farmstead areas; certain noncrop areas; and for forest management.

#### Mode of Action

HM-1603 HERBICIDE contains two active ingredients uniquely formulated to be used alone or tank mixed with other listed products as well as liquid fertilizer solutions. HM-1603 HERBICIDE is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. HM-1603 HERBICIDE 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.

#### APPLICATION INSTRUCTIONS

Apply **HM-1603 HERBICIDE** 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." **HM-1603 HERBICIDE** 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:

**HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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, and aerial) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### **Droplet Size**

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

Filename: HM-1603 Herbicide (5905-AEL) 101620 CLN .doc

When applying sprays that contain 2,4-D mixed with other active ingredients that require a medium or more fine spray, apply only as a medium or coarser spray (ASABE standard 572) 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 ontarget 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 ½ 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)	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

Weeds Controlled (including ALS – and	Rate Per Acre (according to weed growth stage)					
triazine-resistant)	1/3 pints	2/3 pints	1 pints	1 1/8 pints	1 2/3 pints	2 pints
Buckwheat, Wild		1-6"	I	7		
Buffalobur	<b>e</b> )	(-1)	(-	1-6"	1 - p	Flowering
Burdock	(+)	pre-flower	7	τ.	9	÷
Buttercup	÷.	pre-flower	1	early bloom	late bloom	- 1. XCI
Chickweed, Common		Seedling	1-3"	÷		
Cockle, Cow		< 3"	7	÷		
Cocklebur, Common	•	1-6"	6-12"	12-18"		· ·
Coreopsis, Plains	1-4"	1-6"		-		- H
Croton, Woolly	-	4-12"	12-30"		1 may 1	
Dogfennel	•			10-15"		1021
Evening Primrose	- (÷	< 2"	· · · ·	2-6"		
Flax		< 2"				
Fleabane, Annual	e <del>s</del> h.	1-4"	4-8"	8"	E	
Fixweed	1. And 1.	< 3"	-	200		
Henbit			preflower	-	flower	-
Horseweed/	ie,	2	Pre-bolt	1	Post-bolt: Up	1.1.1
Marestail					to 4"	
Knotweed Spp.		< 3" runners		> 3" runners	1. 2000	actively growing
Kochia		1-6"	6-10"	10-20"		actively
Lambsquarters, Common	÷	1-6"	6-10"	10-20"	· · ·	growing actively growing
Mallow, Common		< 3"				growing -
Morning glory, lvyleaf	÷.	pre-flower	1	-		
, Tall	2.47	pre-flower		post-flower	-	-
Mustards, Annual		Rosette		early bolt		2
, Tansy		< 3"		early bolt		-
Pennycress, Field	-			rosette		
Pepperweed, Virginia			1-3"	3-6"	after branching	-
Pigweed, Prostrate	-2	< 3"		2	- Jianching	
Redroot		< 3"	3-10"	4.2		
, Smooth		< 3"	-			
, Tumble		< 3"		mature		
Poorjoe	- 7	prior to flower		-		actively growing
Purslane, Common		< 3"	3-8"		-	- growing
Ragweed, Common				>10"		
Western, Lanceleaf	1-3"	3-6"	6-10"	actively growing	-	.÷.
Sedge <sup>1</sup>	4		-	-		2
Shepherdspurse	5	Rosette	-	-	-	-
Smartweed, Pennsylvania	-	< 4"	-		4-12"	-
Sneezeweed, Bitter	- A.	1-4"	Prior to flower	flower		
Sowthistle		Rosette		bolting	-	
Sunflower		1-3"	3-6"	6-24"		- 14-
Thistle, Russian	-			rosette		
Velvetleaf		< 6"	6-20"	> 20"	-	

#### 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 ½ the GPA of the spray solution has proven to give increase suppression or control on certain species of weeds.

and the second		Rate F	Per Acre (accord	ling to weed g	rowth stage)	10000
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		1		1 - 1 - 80 - 1 - 1		actively growing
Bittercress		2-3"	-	4	1-1-1	
Buckeye species <sup>1</sup>	÷		1	1993	full leaf	· · ·
Bullnettle <sup>2</sup>	-	-	1.4 L	flower		-
Chicory	- 191 I	12.04	her team is	4	early bolting	
Clove, Bur		in stores a	Pre-flower			
Dandelion, Common		Rosette	· · · · · ·	bolting	1.4	1
Dewberry, Southern <sup>1</sup>		1.58		1 - 29	i se a com	spring or fall
Dock, Curly	15	1	prior to bolting	-	after bolting	· •
Elderberry <sup>2</sup>		1.1.1.27	a subren mart	the second	1-38-11	actively growing
Goldenrod, Missouri		1.2.2	-	3-15"	flower	1.
Groundsel, Texas	14-11	Rosette	post-bolting	( <del>4</del> )		~
Honeysuckle, Hairy	18	i i ean a	-	- 19 <del>4</del> 0	spring or fall	
Horsenettle, Carolina <sup>1</sup>		- C.	1		1	flower or berry
Ivy, Poison		1.1.1.2		after bloom		
Knapweed, Black <sup>2</sup>		i no <del>t</del> orni	1	-	44) (1)	actively growing
, Russian <sup>2</sup>	-	÷	-		-	actively growing
, Spotted		1 (s)	-		4	actively growing
Marshelder		- E	-	<12"	12"/prebloom	
Mesquite <sup>3</sup>		1.1.1.1.1.1.1.1				45-90 days
					1	after budbreak
Milkweed, Antelopehorn <sup>2</sup>		-	1	pre-flower	1	Flower
Nightshade, Silverleaf <sup>1</sup>		1		full flower	4	
,Black <sup>1</sup>			-	full flower	···. 2.7.	actively growing
Persimmon, Eastern <sup>3</sup>		1				actively growing
Prickly, Lettuce	1811	1.191	1	rosette	1 - 1 - A - 1	actively growing
Rabbitbrush <sup>2</sup>		1.0		(+)	i i stati	
Ragwort, Tansy	1.0	1114000		rosette	- A - 1	actively growing
Redvine <sup>2</sup>			· · · · · · · · ·		47-11	actively growing
Sagebrush, Fringed <sup>2</sup>	1.41	1.1.4	-		÷.	actively growing
Smartweed	-	12.4	-			
Sorrel, Red	-	1	Rosette	bolting	flower	actively growing
Sowthistle <sup>2</sup>	- 18° 11	1104	I COMPANY I			actively growing
Spurge, Leafy <sup>2</sup>		i memo	-		i secolo	full leaf
Tallow Tree, Chinese <sup>4</sup>		1 . ÷	· · · · · · · · · · · · · · · · · · ·	10 City	÷	
Thistle, Bull		1.0	Rosette	bolting	- 1. I	actively growing
, Canada <sup>2</sup>		1.0	-	-		-
, Musk	-	•		rosette / bolting	÷	
, Plumeless		1.0.0	Rosette	bolting	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	-
Vetch, Hairy		1-4"	4-8"	8" full flower		-
Yankeeweed	14	-	-	10-18"		Rosette
Yellow Starthistle <sup>1</sup>	-	1.1.4	-	1		1 14 1 1 102

May require repeat applications

<sup>2</sup> 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 2 pints of per acre HM-1603 HERBICIDE 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, HM-1603 HERBICIDE may be tank mixed with a metsulfuron-methyl herbicide, if labeled for the use site.

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

When applying **HM-1603 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

**HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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 (gallons of water)	Amount of HM-1603 HERBICIDE® to add to the spray tank	
1 gallon	2/3 fluid ounce*	
3 gallons	2 fluid ounces	
5 gallons	3 fluid ounces	

\* 1 fluid ounce = 2 tablespoons

#### 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 **HM-1603 HERBICIDE** or **HM-1603 HERBICIDE** 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 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 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>1</sup> See manufacturer's label for specific rate specifications.

<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.

#### TANK MIXING INFORMATION

#### Tank Mix Partners/Components

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

The following active ingredients may be tank mixed with **HM-1603 HERBICIDE** according to the specific tank mixing instructions in this label and respective product labels.

Filename: HM-1603 Herbicide (5905-AEL) 101620 CLN .doc

2,4-D	diuron	picloram
alachlor	fenoxaprop-p-ethyl	pronamide
ametryn	glyphosate	prosulfuron
asulam	halosulfuron-methyl	quinclorac
atrazine	metribuzin	terbacil
bentazon	metsulfuron-methyl	thifensulfuron-methyl
carfentrazone-ethyl	MCPA	triasulfuron
clopyralid	paraquat-dichloride	tribenuron-methyl
chlorsulfuron		

See "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 HM-1603 HERBICIDE 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 specified 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.
- 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.
- Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, and suspo-emulsions)
- 5. Water-soluble products (such as HM-1603 HERBICIDE).
- 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.

\* 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.

#### **RESTRICTIONS AND LIMITATIONS**

Maximum seasonal use rate: Refer to Table 5.

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- 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	

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

\*\*Make only one Corn preplant application per crop cycle

\*\*\*Make only one Soybean preplant application for the 15 day 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 HM-1603 HERBICIDE. Higher rates of HM-1603 HERBICIDE 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 HM-1603 HERBICIDE.
- 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	Aircraft
	Per Acre	Per Acre	or Feeding <sup>1</sup>	Application

The second se	Per Application	Per Season		11
Between Crop Applications	3 2/3 pints	7-1/3 pints	Yes	Yes
Pasture, Hay, Silage	2 1/2 pints	5 pints	Yes	Yes
Grass Grown for Seed	2 pints	4 pints	Yes	Yes
Wheat	1 1/4 pints	2 pints	Yes	Yes
Sugarcane	4 pints	8 pints	Yes	Yes

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

#### FOOD/FEED CROP SPECIFIC INFORMATION

#### PASTURES, RANGELAND AND GRASS (Hay, Silage)

**HM-1603 HERBICIDE** may be used 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 (including 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 **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** will control or suppress annual sedges, broadleaf signalgrass, crabgrass, and goosegrass. Best results will be obtained if **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** used per acre before interseeding or injury may occur.

**Grazing and Feeding Non-Lactating Animals**: There is no waiting period between treatments 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.

**Pre-harvest Interval (PHI)**: 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 - HM-1603 HERBICIDE may be applied in tank mixes with one or more of the following herbicides:

Metsulfuron-methyl Triasulfuron

#### **PASTURE & RANGELAND RESTRICTIONS:**

- Do not apply more than 2-1/2 pints per acre per application.
- Rates above 2-1/2 pints of HM-1603 HERBICIDE 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.

**HM-1603 HERBICIDE** 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 acre per crop cycle.

**HM-1603 HERBICIDE** 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 ½ to 2 pints 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 **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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 2 pints 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 2 pints per acre per application.
- The retreatment interval is 30 days.
- Do not use more than 4 pints of HM-1603 HERBICIDE per acre per year.

#### SUGARCANE

Applications of **HM-1603 HERBICIDE** 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 HM-1603 HERBICIDE per treated acre.
- For suppression of listed PERENNIALS, apply 1 2 quarts of HM-1603 HERBICIDE per treated acre.

SUGARCANE Tank Mixes: HM-1603 HERBICIDE may be tank mixed with one or more of the following herbicides: ametryn, asulam, atrazine, metribuzin, terbacil

#### 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.

**HM-1603 HERBICIDE** 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.

**HM-1603 HERBICIDE** 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.

#### TEFF

HM-1603 HERBICIDE may be applied by ground or air.

For ground applications, apply in 10 to 20 gallons of total broadcast spray mix per acre. For aerial application, apply in 3 to 10 gallons of water per acre.

#### GRASS SEED CROPS

**HM-1603 HERBICIDE** application rates and spray volumes will vary with the growth stage and population of broadleaf weeds to be controlled. In general the smaller the weed, the lower use of the specified rate range will provide satisfactory control.

The larger the weed, the population and environmental conditions will require the higher end of the rate range to achieve the satisfactory control especially for many of the perennial weeds.

To control emerged broadleaf weeds, apply 0.75 – 1.25 pints of **HM-1603 HERBICIDE** per acre. Apply after the two-leaf stage and prior to the boot stage. Refer to "Plant Response" and "Livestock Feeding Restrictions" under the **GRASS PASTURES** section of the label.

#### PASTURES, RANGELAND AND GRASS (Hay, Silage)

In newly established Teff, use 0.75 to 1.25 pints of **HM-1603 HERBICIDE** per acre to control or suppress weeds after planting. Newly seeded areas including small grains grown for pasture or hay, may be injured if rates of **HM-1603 HERBICIDE** are greater than 1.25 pints per acre are applied. Apply after the two-leaf stage and prior to the boot stage.

#### SMALL GRAIN CROPS (Grains used for Gluten-Free Flour)

Apply up to 1.25 pints of **HM-1603 HERBICIDE** per acre to Teff. Apply after the two-leaf stage and prior to the boot stage. If small grains are grown for pasture or hay only, refer to Pastures, Rangeland and Grass (Hay, Silage).

#### TEFF RESTRICTIONS:

**Grazing and Feeding Non-Lactating Animals**: There is no waiting period between treatments 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.

**Pre-harvest Interval (PHI)**: Dry Hay and Silage: Treated grasses may be harvested for dry hay or silage but do not harvest within 37 days of treatment.

The Restricted Entry Interval (REI) is 48 hours.

The Pre-harvest Interval (PHI)(Not for Dry Hay and Silage) is 14 days.

Limited to one postemergence application per crop cycle.

Limited to one preharvest application per crop cycle.

#### 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 HM-1603 HERBICIDE in wheat underseeded with legumes.

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

Apply 1-1/4 pint of **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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.

#### PREHARVEST APPLICATIONS:

**HM-1603 HERBICIDE** can be used to control weeds that may interfere with harvest of wheat. Apply up to 1 1/4 pints of **HM-1603 HERBICIDE** 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.

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, **HM-1603 HERBICIDE** may be tank mixed with other herbicides such as glyphosate and metsulfuron-methyl that are registered for preharvest use in wheat.

Preharvest use of HM-1603 HERBICIDE is not registered for use in California.

#### Table 6 - Wheat Tank Mixes

HM-1603 HERBICIDE can be tank mixed with one or more of the following herbicides

Bromoxynil	Diuron	Metsulfuron-methyl	Tribenuron-methyl
Carfentrazone-ethyl	Fenoxyprop-p-ethyl	Prosulfuron	the second second second second
Chlorsulfuron	MCPA	Triasulfuron	a 11 a
Clopyralid	Metribuzin	Thifensulfuron-methyl	

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

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

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

#### Fallow Systems, Conservation Reserve Programs, and General Farmstead

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

#### WHEAT RESTRICTIONS:

- Do not graze or harvest for livestock feed prior to crop maturity.
- Do not use HM-1603 HERBICIDE in wheat underseeded with legumes.
- 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.

**HM-1603 HERBICIDE** 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 acre per crop cycle.

**HM-1603 HERBICIDE** 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.

#### 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

**HM-1603 HERBICIDE** 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 "**Restrictions and Limitations**" for the recommended interval between application and planting to prevent crop injury.

#### **Rates and Timings:**

Apply 1 - 32/3 pints of **HM-1603 HERBICIDE** per acre. Refer to Table 1 to determine use rates for specific targeted weed species. For best performance, apply **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE**. 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 1.0 - 1.25 pints of **HM-1603 HERBICIDE** per acre for control of annual weeds, or 1.25 - 4.25 pints of **HM-1603 HERBICIDE** per acre for control of biennial and perennial weeds

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

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

#### **Rates and Timings**

Apply **HM-1603 HERBICIDE** 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, **HM-1603 HERBICIDE** may be tank mixed with prometryn, paraquat, 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.

**HM-1603 HERBICIDE** 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.

**HM-1603 HERBICIDE** 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**

**HM-1603 HERBICIDE** may be used on Conservation Reserve Programs, general farmstead (noncropland 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.

**HM-1603 HERBICIDE** 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 acre per crop cycle.

For program lands, including 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.

**HM-1603 HERBICIDE** 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

**HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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% **HM-1603 HERBICIDE**, 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. HM-1603 HERBICIDE: 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.

**HM-1603 HERBICIDE** 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.

**HM-1603 HERBICIDE** 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 **HM-1603 HERBICIDE** 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 HM-1603 HERBICIDE.
- Stump Treatments: Spray or paint freshly cut surface with HM-1603 HERBICIDE. 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	Hemlock
Ash	Hickory
Aspen	Honeylocust
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	Pine
Hawthorn (Thornapple)	Plum, Sand (Wild Plum)

Poplar Rabbitbrush Redcedar, Eastern Rose, McCartney Rose, Multiflora Sagebrush, Fringe Sassafras Spruce Sumac Sweetgum Sycamore Tarbrush Willow Witchhazel Yaupon Yucca

#### 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.

#### FOREST MANAGEMENT

Do not apply under drip line of desirable trees or adjacent to desirable vegetation. Limited to one broadcast application per year.

#### Forest Site Preparation

**Budbreak Spray:** For control of alder, susceptible broadleaf weeds, and susceptible woody plants before planting forest seedlings, apply up to 2 quarts of **HM-1603 Herbicide** per acre in a minimum of 10 gallons spray mixture per acre. Apply as an oil spray (see **Mixing Instructions**) after alder buds break, but before foliage is 1/4 full size. A water spray including 2 to 4 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate may also be used.

**Foliage Spray:** To control alder and susceptible woody plants before planting forest seedlings, apply up to 2 quarts of **HM-1603 Herbicide** per acre in a minimum of 10 gallons spray mixture per acre. If desired, apply as a water spray including up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see "Mixing Instructions"). For best results, apply after alder foliage has reached full size.

**Conifer Release:** Some Conifers are more susceptible to **HM-1603 Herbicide** than others. Prior to application, consult your local Forestry agency about use pattern and history of use. To control alder, susceptible broadleaf weeds, and susceptible woody plants in young conifer stands, apply up to 2 pints per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray when 3/4 of the brush foliage has full size leaves and before new conifer growth reaches 2 inches in length. Such stages usually occur between early May and mid-June, but application timing should be based on growth stages of brush and conifers. Application may cause leader deformation and other conifer injury, but trees should overcome it during the next growing season.

To control tanoak, madrone, ceanothus, canyon live oak, and manzanita, and to release Douglas fir, hemlock, Sitka spruce or grand fir, apply up to 3 pints of **HM-1603 Herbicide** per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray including, if desired, up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see **Mixing Instructions**). Make application before new growth on Douglas fir is 2 inches long. To release ponderosa pine from the same species, treat before new pine growth begins in the spring. Addition of oil or oil concentrate may cause unacceptable injury to pines. For dormant applications in late winter or early spring for control of susceptible woody species such as alder, willow, poplars, cherry, vine maple, ceanothus, tanoak, madrone, and manzanita, apply up to 3 pints of **HM-1603 Herbicide** per acre in a minimum of 10 gallons spray mixture per acre. This dormant treatment should be applied in diesel oil, fuel oil, stove oil, or other suitable diluent such as water plus crop oil concentrate (see **Mixing Instructions**). Do not use in plantations where pine and larch are among the desired crop species.

To control hazel brush in the Lake states, apply up to 2 pints of **HM-1603 Herbicide** per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray when new shoot growth of hazel is complete (usually mid-July).

After conifer species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir crease growth and harden off and brush is still actively growing in late summer, apply up to 3 pints of **HM-1603 Herbicide** per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray to control certain competing hardwoods such as alder, aspen, birch, hazel and willow. However, if possible injury cannot be tolerated, do not use since this treatment may cause conifer injury.

**Forest Roadsides:** To control susceptible broadleaf weeds and woody plants on forest roadsides, apply 1 to 3 pints of **HM-1603 Herbicide** per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray and, if desired, include up to 3 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate (see **Mixing Instructions**). Apply when sufficient foliage is present for absorption.

#### ROADSIDES; MEDIANS; HIGHWAY, RAILROAD, UTILITY AND PIPELINE RIGHTS-OF-WAY, VACANT LOTS, AROUND UTILITY INSTALLATIONS, TRANSFORMERS, PUMP HOUSES, AND BUILDINGS, STORAGE AREAS, FENCES, GUARDRAILS, LUMBER YARDS, INDUSTRIAL SITES, AIRPORTS, TANK FARMS, FARMSTEADS, AND SIMILAR NONCROP AREAS

Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

For control of many broadleaf weeds and small woody plants, apply 2/3 to 2 pints of **HM-1603 Herbicide** per acre. Use the high rate for woody plants. Applications may be as broadcast sprays, small area sprays or spot treatments. For small areas or spot spraying, use 2 fluid ounces of **HM-1603 Herbicide** per gallon of water and spray weeds to runoff. Regardless of the method of application, use adequate spray volume for full coverage of weeds. Preferred application timing is in the early spring when sufficient weeds have emerged, and when weeds are small and actively growing, but before weeds are too mature. Summer applications to older, drought-stressed weeds are less effective. However, weeds are more susceptible again in the fall when cooler, wetter conditions support active growth before a killing frost. For fall treatment of mature weeds or perennial weed regrowth, use up to 1.0 pints of **HM-1603 Herbicide** per acre. Several seasons of spring plus fall treatments may be necessary to control certain perennials. Use of oil sprays or the addition of spray adjuvants increases the risk of damage to desirable ground covers.

**Plant Response:** Bent grass, other warm season or southern grasses, alfalfa, clover, or other legumes may be killed or injured. Do not apply when grass is in boot to milk stage, or after heading begins, if grass production is desired. Do not apply to newly seeded areas until grass is well established. Reseeding is not recommended for at least 30 days following application.

Do not apply more than 4 <sup>3</sup>/<sub>4</sub> pints of **HM-1603 Herbicide** /Acre for a single application. (Equivalent to 1.4 lbs. 2,4-D acid and 1.1 lbs. dicamba acid per acre).

#### **Non-Crop Area Restrictions:**

Postemergence (annual and perennial weeds):

- Limited to 2 applications per year.
- Minimum of 30 days between applications.
- Postemergence (woody plants)
- Limited to one application per year.

#### 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 must 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 HANDLING**: 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 ≤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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

(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 other procedures approved by state and local authorities.

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. 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.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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.

Common Name	Scientific Name	
ANNUALS		
Beebalm, Spotted	Monarda punctata	
Broomweed, Common	Gutierrezia dracunculoides	
Buckwheat, Wild	Polygonum convolvulus	
Buffalobur	Solanum rostratum	
Burdock	Arctium spp.	
Buttercup, Corn	Ranunculus arvensis	
Chickweed, Common	Stellaria media	
Cockle, Corn	Agrostemma githago	
Cocklebur, Common	Xanthium strumarium	
Coreopsis, Plains	Coreopsis tinctoria	
Croton, Woolly	Croton capitatus	
Devilsclaw,	Proboscidea Iouisianica	
Dogfennel (Cypressweed)	Eupatorium capillifolium	
Eveningprimrose, Cutleaf	Oenothera laciniata	
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	Ipomoea hederacea	
Tall	Ipomoea pupurea	
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		
Purslane, Common	Diodia teres	
Pursiane, Common	Portulaca oleracea	
Ragweed, Common,	Ambrosia artemisifolia	
Lance-leaf,	Ambrosia bidentata	
Western	Ambrosia psilostachya	
Sedge	Cyperus compressus	
Shepherdspurse	Capsella bursa-pastoris	
Smartweed, Pennsylvania	Polygonum pensylvanicum	
Sneezeweed, Bitter	Helenium amarum	
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	Cnidoscolus stimulosus	
Chicory	Cichorium intybus	
Clover, Hop	Trifolium aureum	
Dandelion	Taraxacum officinale	
Dock, Curly	Rumex crispus	
Elderberry	Sambucus canadensis	
Goldenrod, Missouri	Solidago missouriensis	
Goldenbush, Common	Isocoma coronopifolia	
Groundset	Senecio vulgaris	
Honeysuckle, Hairy	Lonicera	
Horsenettle	Solanum caroliniense	
Ivy, Poison	Rhus radicans	
Knapweed, Black	Centaurea nigra	
Russian	Centaurea repens	
Spotted	Centaurea maculosa	
Marshelder	Iva annua	
Mesquite	Prosopis juliflora	
Milkweed, Antelopehorn	Asclepius	
Nightshade, Silverleaf	Solanum elaeagnifolium	
Black	Solanum nigrum	
Persimmon, Eastern	Diospyros virginiana	
Rabbitbrush, Southwestern	Chrysothamnus pulchellus	
Ragwort, Tansy	Senecio jacobaea	
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	Centaurea 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)
- Pastures
- Grass Grown for Seed

- Rangeland
- Sugarcane
- Teff
- 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 must 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 AGRI-ENTERPRISES, LLC 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 AGRI-ENTERPRISES, LLC 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 AGRI-ENTERPRISES, LLC OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. HELENA AGRI-ENTERPRISES, LLC 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 AGRI-ENTERPRISES, LLC. No employee or agent of HELENA AGRI-ENTERPRISES. LLC or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.