



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

June 22, 2020

Bill Washburn  
Registration Manager  
Helena Agri-Enterprises, LLC  
225 Schilling Boulevard, Suite 300  
Collierville, TN 38017

Subject: Label Amendment – Update resistance management language, company name,  
and tank mix statements on label  
Product Name: Helena Vision  
EPA Registration Number: 5905-576  
Application Date: July 26, 2019  
Decision Number: 553725

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.

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

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Decision No. 553725

with FIFRA section 6. If you have any questions, please contact Theresa Gerber at 703-347-8583 or by email at [gerber.theresa@epa.gov](mailto:gerber.theresa@epa.gov).

Sincerely,



Emily Schmid, Product Manager 25  
Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

**ACCEPTED**

6/22/2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 5905-576

Dicamba GROUP 4 HERBICIDE

# HELENA VISION

*Herbicide for weed control in asparagus, barley, conservation reserve programs, corn (field, pop, seed, silage), cotton (preplant), fallow croplands, general farmstead (noncropland), grass grown for seed, hay, oats, proso millet, pasture, rangeland, sorghum, soybean, sugarcane, triticale, turf and wheat.*

**ACTIVE INGREDIENT:**

Dicamba Acid\* ..... 40.0%

**OTHER INGREDIENTS:** ..... 60.0%

**TOTAL:** ..... 100.0%

\*Contains 3.8 pounds dicamba acid per gallon or 450 grams per liter.

\*CAS No. 1918-00-9

**KEEP OUT OF REACH OF CHILDREN  
DANGER / PELIGRO**

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

**FIRST AID**

<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice</li> </ul>

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

**HOT LINE NUMBER:** In case of an emergency involving this product, call CHEMTREC toll free at 1-800-424-9300.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONS AND DIRECTIONS FOR USE**

EPA Reg. No. 5905-576  
EPA Est. No. 42750-MO-001

NET CONTENTS: \_\_\_\_\_  
AD 062112



**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 EYE DAMAGE.** Harmful if swallowed. Inhaled, or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. .

**In Case of Spill:** In case of large-scale spillage regarding this product, call: CHEMTREC 1-800-424-9300.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 14 mils
- Shoes plus socks
- Protective eyewear

See “**Engineering Controls**” for additional requirements and exceptions.

Follow the manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them.

**ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use cockpits in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607].

**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 put on clean clothing.
- 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**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

**Ground and Surface Water Protection**

**Point source contamination:** To prevent point source contamination, do not mix, load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills,

equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

**Care must be taken when using this product to prevent:** a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

**Movement by surface runoff or through soil:** Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. Do not apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow application rate directions as affected by soil type in the “**Product Information**” section of this label.

**Movement by water erosion of treated soil:** Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

#### **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.

Unless otherwise directed in supplemental 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 24 hours.

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

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

#### **NONAGRICULTURAL 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 others to enter until sprays have dried.

## RESISTANCE MANAGEMENT

For resistance management, this product is a Group 4 mode of action herbicide. Any weed population may contain or develop plants naturally resistant to this product 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 this product or other Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds 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.

## I. PRODUCT INFORMATION

**VISION™** herbicide is an emulsifiable formulation intended for control or suppression of many annual, biennial, and perennial broadleaf weeds as well as woody brush and vines listed in Table 1. **VISION™** may be used for control of these weeds in asparagus, corn (field, pop, seed, silage), cotton (preplant), conservation reserve programs, fallow cropland, grass grown for seed, hay, proso millet, pasture, rangeland, general farmstead (non-cropland), small grains, sorghum, soybean, sugarcane, and turf.

### MODE OF ACTION

**VISION™** is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. **VISION™** interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

### CLEANING SPRAY EQUIPMENT

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and then triple rinsing the equipment before and after applying this product.

Table 1. General Weed List

<b>ANNUALS</b>			
Alkanet Amaranth, Palmer, Powell, Spiny Aster, Slender Bedstraw, Catchweed Beggardweed, Florida Broomweed, Common Buckwheat, Tartary, Wild Buffalobur Burclover, California Burd cucumber Buttercup, Corn, Creeping, Roughseed, Western Field Carpetweed Catchfly, Nightflowering Chamomile, Corn Chervil, Bur Chickweed, Common Clovers Cockle, Corn, Cow, White Cocklebur, Common Copperleaf, Hophornbeam	Cornflower (Bachelor Button) Croton, Tropic, Woolly Daisy, English Dragonhead, American Eveningprimrose, Cutleaf Falseflax, Smallseed Fleabane, Annual Flixweed Fumitory Goosefoot, Nettleleaf Hempnettle Henbit Jacobs-Ladder Jimsonweed Knawel (German Moss) Knotweed, Prostrate Kochia Ladysthumb Lambsquarters, Common Lettuce, Miners, Prickly Mallow, Common, Venice Marestail (Horseweed)	Mayweed Momingglory, Ivyleaf, Tall Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops Nightshade, Black, Cutleaf, Pennycress, Field (Fanweed, Frenchweed, Stinkweed) Pineappleweed Poorjoe Poppy, Red-horned Puncturevine Purslane, Common Pusley, Florida Radish, Wild Ragweed, Common, Giant (Buffaloweed), Lance-Leaf Rocket, London, Yellow Rubberweed, Bitter (Bitterweed) Salsify Senna, Coffee,	Sesbania, Hemp Shepherdspurse Sicklepod Sida, Prickly (Teaweed) Smartweed, Green, Pennsylvania Sneezeweed, Bitter Sowthistle, Annual, Spiny Spanish Needles Spikeweed, Common Spurge, Prostrate, Leafy Spurry, Corn Starbur, Bristly Starwort, Little Sumpweed, Rough Sunflower, Common (Wild), Volunteer Thistle, Russian Velvetleaf Waterhemp Waterprimrose, Winged Wormwood
<b>BIENNIALS</b>			
Burdock, Common Carrot, Wild (Queen Anne's Lace) Cockle, White	Eveningprimrose, Common Geranium, Carolina Gromwell Knapweed, Diffuse, Spotted	Mallow, Dwarf Plantain, Bracted Ragwort, Tansy Starthistle, Yellow	Sweetclover Teasel Thistle, Bull, Milk, Musk, Plumeless
<b>PERENNIALS</b>			
Alfalfa <sup>(1)</sup> Artichoke, Jerusalem Aster, Spiny, Whiteheath Bedstraw, Smooth Bindweed, Field, Hedge Blueweed, Texas Bursage, Woollyleaf <sup>(1)</sup> (Bur Ragweed, Povertyweed) Buttercup, Tall	Dock <sup>(2)</sup> , Broadleaf (Bitterdock), Curly Dogbane, Hemp Dogfennel <sup>(1)</sup> (Cypressweed) Fern, Bracken Garlic, Wild Goldenrod, Canada, Missouri	Milkweed, Climbing, Common, Honeyvine, Western Whorled Nettle, Stinging Nightshade, Silverleaf (White Horsesnettle) Onion, Wild Plantain, Broadleaf, Buckhorn Pokeweed	Sowthistle <sup>(1)</sup> , Perennial Spurge, Leafy Sundrop, Thistle, Canada, Scotch Toadflex, Dalmatian Tropical Soda Apple Trumpet creeper (Buckvine) Vetch Waterhemlock, Spotted

Campion, Bladder Chickweed, Field, Mouseear Chicory <sup>(1)</sup> Clover <sup>(1)</sup> , Hop Dandelion <sup>(1)</sup>	Goldenweed, Common Hawkweed Henbane, Black <sup>(1)</sup> Horsenettle, Carolina Ironweed Knapweed, Black, Diffuse, Russian <sup>(1)</sup> , Spotted	Ragweed, Western Redvine Sericia Lespedeza Smartweed, Swamp Snakeweed, Broom Sorrel <sup>(1)</sup> , Red (Sheep Sorrel)	Waterprimrose, Creeping Woodsorrel <sup>(1)</sup> , Creeping, Yellow Wormwood, Louisiana Yankeeweed Yarrow, Common <sup>(1)</sup>
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WOODY SPECIES			
Alder	Dewberry <sup>(2)</sup>	Locust, Black	Sassafras
Ash	Dogwood <sup>(2)</sup>	Maple	Serviceberry
Aspen	Elm	Mesquite	Spicebush
Basswood	Grape	Oak	Spruce
Beech	Hawthorn (Thornapple) <sup>(2)</sup>	Oak, Poison	Sumac
Birch	Hemlock	Olive, Russian	Sweetgum <sup>(2)</sup>
Blackberry <sup>(2)</sup>	Hickory	Persimmon, Eastern	Sycamore
Blackgum <sup>(2)</sup>	Honeylocust	Pine	Tarbrush
Cedar <sup>(2)</sup>	Honeysuckle	Plum, Sand (Wild Plum) <sup>(2)</sup>	Willow
Cherry	Hornbeam	Poplar	Witchhazel
Chinquapin	Huckleberry	Rabbitbrush	Yaupon <sup>(2)</sup>
Cottonwood	Huisache	Redcedar, Eastern <sup>(2)</sup>	Yucca <sup>(2)</sup>
Creosotebush <sup>(2)</sup>	Ivy, Poison	Rose <sup>(2)</sup> , McCartney, Multiflora	
Cucumbertree	Kudzu	Sagebrush, Fringed <sup>(2)</sup>	

<sup>(1)</sup> Noted perennials may be controlled using lower rates of **VISION™** than those listed for other listed perennial weeds.

<sup>(2)</sup> Growth suppression only

## II. APPLICATION INSTRUCTIONS

**VISION™** can be applied to actively growing weeds with aerial, broadcast, band, or spot spray applications using water or sprayable fertilizer as a carrier. For **VISION™** application rates for control or suppression by weed type and growth stage see **Table 2**. For crop-specific application rates, timing, directions use-precautions and restrictions, refer to section “**VI. Crop-Specific Information**”.

To avoid uneven spray coverage, **VISION™** must not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid off-target movement. Use extreme care when applying **VISION™** to prevent injury to desirable plants and shrubs.

### CULTIVATION

Do not cultivate within 7 days after applying **VISION™**.

### SENSITIVE CROP PRECAUTIONS

**VISION™** herbicide may cause injury or death to desirable crops and ornamental plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals (trees and shrubs), peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when their roots, stems, or foliage are exposed to low levels. These plants are most sensitive to **VISION™** during their development or growth stage.

Use coarse sprays (volume median diameter of 400 microns or more) to avoid potential herbicide drift. Select nozzles that are designed to produce minimal amounts of fine spray particles (less than 200 microns). Examples of nozzles designed to produce coarse sprays via ground applications are Delavan® Raindrops, Spraying Systems XR (excluding 110<sup>0</sup> tips) flat fans, Turbo Teejets Turbo Floodjets®, or large capacity flood nozzles such as D10, TK10, or greater capacity tips. Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gallons per acre, unless otherwise required by the manufacturer of drift-reducing nozzles. Consult your spray nozzle supplier concerning the choice of drift-reducing nozzles.

Agriculturally approved drift-reducing additives may be used.

### AERIAL APPLICATION METHODS AND EQUIPMENT

**Water Volume:** Use 1-10 gallons of water per acre for post-harvest use. Use 2-20 gallons of diluted spray per treated acre for preharvest uses. Use the higher spray volume when treating dense or tall vegetation.



## GROUND AND SURFACE WATER PROTECTION

**1. Point source contamination** – To prevent point source contamination, do not mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers and natural or impounded lakes and reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or moved across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding well-head setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

**2. Movement by surface runoff or through soil** – Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for groundwater contamination. Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. Do not apply to soils classified as *Sand* with less than 3% organic matter and where groundwater depth is shallow. To minimize the possibility of ground water contamination, carefully follow specified application rates as affected by soil type in the “*USE INFORMATION*” section of this label.

**3. Movement by water erosion of treated soil** – Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least 0.5 inch of rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

## SPRAY DRIFT MANAGEMENT

**AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.**

The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator and the grower must be familiar with and take into account the information covered in the [Aerial Drift Reduction Advisory](#).

## AERIAL DRIFT REDUCTION INFORMATION

### INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See “**Wind**”, “**Temperature and Humidity**”, and “**Temperature Inversions**”).

## CONTROLLING DROPLET SIZE

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

## BOOM LENGTH

For some use patterns, reducing the effective boom length to less than  $\frac{1}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

## APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

## SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.)

## WIND

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### Application Equipment:

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

Do not use aerial equipment if spray particles can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

### GROUND APPLICATION (BANDING)

When applying VISION™™ herbicide by banding, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{Bandwidth in inches}}{\text{Row width in inches}} \times \text{Broadcast rate per acre} = \text{Banding herbicide rate per acre}$$

$$\frac{\text{Bandwidth in inches}}{\text{Row width in inches}} \times \text{Broadcast volume per acre} = \text{Banding water volume per acre}$$

### GROUND APPLICATION (BROADCAST)

**Water Volume:** Use 3-50 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

**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.

### GROUND APPLICATION (WIPERS)

VISION™™ may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush, and vines listed on this label. Use a solution containing 1 part VISION™™ to 1 part water. Do not contact desirable vegetation with herbicide solution. Wiper application may be made to crops (but not to sorghum or soybeans) and on non-cropland areas and pasture described in this label.

## III. ADDITIVES

To improve postemergence weed control, agriculturally approved surfactants, sprayable fertilizers (urea ammonium nitrate, or ammonium sulfate), or crop oil concentrate may be added, particularly in dry growing conditions. (Refer to “Table 3, Additive Rate”.) Do not use crop oil concentrate for postemergence in-crop applications unless specifically allowed in section “VI. Crop-Specific Information” of this label.

#### Nitrogen Source

- **Urea ammonium nitrate (UAN):** Use 2-4 quarts of UAN (commonly referred to as 28%, 30%, or 32% nitrogen solution) per acre. Do not use brass or aluminum nozzles when spraying UAN.
- **Ammonium sulfate (AMS):** AMS at 2.5 pounds per acre may be substituted for UAN. Use high-quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned. Helena Agri-Enterprises, LLC does not recommend applying AMS if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience.

**Table 2. General VISION™™ Application Rates for Control or Suppression by Weed Type and Growth Stage**  
Use rate limitations are given in sections “V & VI. Crop-Specific Information”.

Weed Type and Stage	Rate Per Acre <sup>(3)</sup>
<b>Annual<sup>(1)</sup></b>	
Small, actively growing	8-16 fluid ounces
Established weed growth	16-24 fluid ounces
<b>Biennial</b>	
Rosette diameter 1-3"	8-16 fluid ounces
Rosette diameter 3" or more	16-32 fluid ounces
Bolting	32 fluid ounces
<b>Perennial</b>	
Top growth suppression	8-16 fluid ounces
Top growth control and root suppression	16-32 fluid ounces
Noted perennials (footnote 1 in Table 1).	32 fluid ounces
Other perennials <sup>(2)</sup>	32 fluid ounces
<b>Wood Brush &amp; Vines</b>	
Top growth suppression	16-32 fluid ounces
Top growth control <sup>(2)</sup>	32 fluid ounces
Stems and stem suppression <sup>(2)</sup>	32 fluid ounces
<sup>(1)</sup> Rates below 8 fluid ounces per acre may provide control or suppression but should typically be applied with other herbicides that are effective on the same species and biotype.	
<sup>(2)</sup> Species noted in Table 2 will require tank mixes for adequate control.	
<sup>(3)</sup> No more than 2 applications per year are allowed. Do not broadcast apply more than 32 fluid ounces per acre. Use the higher	

level of listed rate ranges when treating dense vegetative growth or perennial weeds with well established root growth.

### Nonionic Surfactant

The standard label recommendation is 1 pint of an 80% active nonionic spray surfactant per 100 gallons of water.

### 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 from tolerance regulation 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 and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils.

Adjuvants containing crop oil concentrates may be used in preplant, pre-emergence, and preharvest applications as well as in pastures and noncropland. Do not use crop oil concentrate for postemergence in-crop applications unless specifically allowed in section "VI. Crop-Specific Information" of this label.

**Table 3. Additive Rate Per Acre**

ADDITIVE	RATE PER ACRE
Nonionic Surfactant	1-2 pints
AMS	2.5 pounds
UAN Solution	2-4 quarts
Crop Oil Concentrate	1 quart*

\*See manufacturer's label for specific rate directions

### 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 then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

### Mixing Order

1. Water. Begin by agitating a thoroughly clean sprayer tank three-quarters 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 PVA 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 (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
5. Water based soluble concentrate products.
6. Emulsifiable concentrates
7. Water-soluble additives (such as AMS or UAN when applicable).
8. Remaining quantity of water. Maintain constant agitation during application.

## IV. GENERAL TANK MIXING INFORMATION

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.

#### Tank Mix Partners/Components

The chemicals listed below may be applied with **VISION™** herbicide according to the specific tank mixing instructions on this label and on the respective product labels.

See section “**VI. Crop-Specific Information**” for more details. Read and follow the applicable “**Restrictions**” and “**Directions For Use**” on all products involved in tank mixing. Follow the “**Directions for Use**” of the labeling of any product used in the tank mixes.

**VISION™** may also be used in tank mixtures with foliar applied insecticides including synthetic pyrethroids or with a carbamate insecticide.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **VISION™** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Helena Agri-Enterprises, LLC does not recommend using tank mixes other than those listed as follows:

2,4-D	EPTC	picloram
alachlor	fenoxaprop-ethyl	primisulfuron-methyl
acetochlor	flufenacet	prometryn
alachlor	flumetsulam	pronamide
ametryn	glufosinate	propachlor
atrazine	glyphosate	prosulfuron
bentazon	halosulfuron	pyridate
bromoxynil	imazapyr	quinclorac
butylate	imazethapyr	simazine
clopyralid	metribuzin	s-metolachlor
chlorsulfuron	metsulfuron-methyl	sulfosate
dicamba	MCPA	thifensulfuron
dimethenamid	nicosulfuron	triasulfuron
diuron	paraquat	tribenuron
EPIC	pendimethalin	triclopyr

#### V. RESTRICTIONS

- Maximum seasonal use rate: Refer to **Table 4** for crop-specific maximum seasonal use rates. Do not exceed 64 fluid ounces of **VISION™** herbicide (2.0 pounds acid equivalent) per acre, per year.
- Preharvest Interval (PHI): Refer to section “**VI. Crop-Specific Information**” for preharvest intervals.
- Restricted Entry Interval (REI): 24 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. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

CROP	MINIMUM DAYS PLANTBACK INTERVAL (Days)	MINIMUM DAYS PLANTBACK INTERVAL (Days)
	Application < 24 fl. oz. per acre	Application 24 - 32 fl. oz. per acre
Corn (field, pop, seed, silage)	0*	120
Cotton (preplant)	21**	120
Sorghum	15***	120
Soybeans	14 *** 28 ****	120
Barley, oat, wheat and other grass seedings	15 – per 8 fl. oz./ acre east of the Mississippi River 22 – per 8 fl. oz./ acre west of the Mississippi River	

	30 – per 16 fl. oz./ acre east of the Mississippi River 45 – per 16 fl. oz./ acre west of the Mississippi River	30 – per 16 fl. oz./ acre east of the Mississippi River 45 – per 16 fl. oz./ acre west of the Mississippi River
All other crops grown in areas with 30" or more of annual rainfall	120	120
All other crops grown in areas with 30" or less of annual rainfall	180	180
<p>* Up to 8 fl. oz./acre on medium to coarse textured soils containing &lt; 2.5% OM and up to 16 fl. oz. on fine to medium textured soils containing &gt; 2.5% OM  ** Per 8 fl. oz. /acre or less following application and an accumulation of 1" of rainfall and/or irrigation.  *** Up to 8 fl. oz./acre  **** More than 8 fl. oz./acre up to 16 fl. oz./acre</p>		

- Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of **VISION™**.
- Stress: Do not apply to crops under stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, insects, or widely fluctuating temperatures as injury may result.
- Do not apply through any type of irrigation equipment. Do not treat irrigation ditches or water used for crop irrigation or domestic purposes.
- Livestock may be grazed or fed after application on labeled sites. For corn, once the crop reaches the ensilage (milk) stage or later in maturity
- Aircraft application is allowed for all labeled sites.

Table 4 Crop Specific Maximum Seasonal Use Rates

Crop	Maximum Rate Per Acre Per Application	Maximum In-Crop Rate Per Acre Per Season
Asparagus	16 fluid ounces	16 fluid ounces
Barley, Fall	8 fluid ounces	12 fluid ounces
Barley, Spring	8 fluid ounces	11 fluid ounces
Corn	16 fluid ounces	24 fluid ounces
Fallow Ground	32 fluid ounces	64 fluid ounces
Grass grown for seed	32 fluid ounces	64 fluid ounces
Proso Millet	4 fluid ounces	4 fluid ounces
Pastureland	32 fluid ounces	32 fluid ounces
Conservation Reserve Program (CRP)	32 fluid ounces	64 fluid ounces
Oats	4 fluid ounces	4 fluid ounces
Sorghum	8 fluid ounces	16 fluid ounces
Soybean	32 fluid ounces	64 fluid ounces
Sugarcane	32 fluid ounces	64 fluid ounces
Turf	32 fluid ounces	32 fluid ounces
Triticale	4 fluid ounces	4 fluid ounces
Wheat	8 fluid ounces	16 fluid ounces

## VI. CROP-SPECIFIC INFORMATION

### ASPARGUS

Apply **VISION™** herbicide to emerged and actively growing weeds in 40-60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting. . If spray contacts emerged spears, crooking (twisting) of some spears may result, If such crooking occurs, discard affected spears.

**Rates:** Apply 8-16 fluid ounces of **VISION™** to asparagus to control annual sowthistle, black mustard, Canada and Russian thistle, and redroot pigweed, (carelessweed). Apply 16 fluid ounces of **VISION™** to asparagus to control common chickweed, field bindweed, nettleleaf goosefoot, and wild radish.

### ASPARGUS TANK MIXES

Apply 8-16 fluid ounces of **VISION™** with glyphosate or 2,4-D to asparagus to improve control of Canada thistle and field bindweed.

**ASPARAGUS RESTRICTIONS:**

- Do not exceed a total of 16 fluid ounces of **VISION** to asparagus per treated acre, per crop year.
- Do not harvest prior to 24 hours after treatment.
- Do not use in the Coachella Valley of California.
- Do not make more than two applications per year.
- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

**BETWEEN CROP APPLICATIONS  
PREPLANT DIRECTIONS (POSTHARVEST, FALLOW, CROP STUBBLE, CONSERVATION RESERVE  
PROGRAMS, FARMLAND) FOR BROADLEAF WEED CONTROL**

**VISION™** can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply **VISION™** as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See “**Crop Rotational Restrictions**” in section “**V. Restrictions**” for the recommended interval between application and planting to prevent crop injury.

**Rates and Timings:**

Apply 4-32 fluid ounces of **VISION™** per acre for between crop applications. Refer to **Table 2** to determine use rates for specific targeted weed species. For best performance, apply **VISION™** 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 **VISION™** 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.

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 **VISION™**. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of **VISION™**, refer to the small grain section for details.

**BETWEEN CROP TANK MIXES**

In tank mixes with one or more of the following herbicides for between crop applications, apply 4-16 fluid ounces of **VISION™** per acre for control of annual weeds, or 16-32 fluid ounces of **VISION™** per acre for control of biennial and perennial weeds:

2,4-D	atrazine	chlorsulfuron
clopyralid	dicamba	glyphosate
metribuzin	metalaxyl	metsulfuron-methyl
paraquat	paraquat dichloride	picloram
pronamide	triasulfuron	

**BETWEEN CROP RESTRICTIONS:**

- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- Make no more than two applications per year.
- Timing Restrictions for Lactating Dairy Animals Following Treatment

<b>VISION™ Rate Per Treated Acre</b>	<b>Days Before Grazing</b>	<b>Days Before Hay Harvest</b>
Up to 1 pint	7 days	37 days

Up to 2 pints	21 days	51 days
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### CORN (FIELD, POP, SEED, AND SILAGE)

Direct contact of **VISION™** with corn seed must be avoided. If corn seeds are less than 1.5" below the soil surface, delay application until corn has emerged. Applications of **VISION™** to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3-7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

#### **PREPLANT AND PRE-EMERGENCE APPLICATION IN NO TILLAGE CORN:**

**Rates:** Apply 16 fluid ounces of **VISION™** per acre for no-tillage corn on medium- or fine-textured soils containing 2.5% or greater organic matter. Use 8 fluid ounces of **VISION™** per acre for no-tillage corn on coarse soils (sand, loamy sand, and sandy loam) or medium- and fine-textured soils with less than 2.5% organic matter.

**Timing:** **VISION™** can be applied to emerged weeds before, during, or after planting a corn crop. When planting into a legume sod (e.g., alfalfa or clover), apply **VISION™** after 4-6" of regrowth has occurred.

#### **PRE-EMERGENCE APPLICATION IN CONVENTIONAL OR REDUCED TILLAGE CORN:**

**Rates:** Apply 16 fluid ounces of **VISION™** herbicide per treated acre for conventional or reduced tillage corn to medium- or fine-textured soils that contain 2.5% organic matter or more. Do not apply to coarse-textured soils (sand, loamy sand, or sandy loam) or any soil with less than 2.5% organic matter until after corn emergence (see Early Postemergence uses below).

**Timing:** **VISION™** may be applied after planting and prior to corn emergence. Pre-emergence application of **VISION™** does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if the application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) that concentrate treated soil over seed furrow, as seed damage could result.

Pre-emergence control of cocklebur, jimsonweed, and velvetleaf may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

#### **EARLY POSTEMERGENCE APPLICATION IN ALL TILLAGE SYSTEMS:**

**Rates:** Apply 16 fluid ounces of **VISION™** per treated acre to corn for early postemergence. Reduce the rate to 8 fluid ounces of **VISION™** per treated acre for corn grown on coarse textured soils (sand, loamy sand, and sandy loam).

**Timing:** Apply between corn emergence and the 5-leaf stage or 8" tall, whichever occurs first. Refer to Late Postemergence Application if the sixth true leaf is emerging from whorl or the corn is greater than 8" tall.

#### **LATE POSTEMERGENCE APPLICATION:**

**Rate:** Apply 8 fluid ounces of **VISION™** per treated acre to corn for late postemergence application.

**Timing:** Apply **VISION™** from 8-36" tall corn or 15 days before tassel emergence, whichever comes first. For best performance, apply when weeds are less than 3" tall.

Apply directed spray when corn leaves prevent proper spray coverage, sensitive crops are growing nearby, or tank mixing with 2,4-D.

Do not apply **VISION™** when soybeans are growing nearby if any of these conditions exist:

- corn is more than 24" tall
- soybean are more than 10" tall
- soybean have begun to bloom



### CORN TANK MIXES OR SEQUENTIAL USES

When using tank mix or sequential applications with **VISION™**, always follow the companion product label to determine specific use rates by soil types, weed species, and weed or crop growth stage. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products.

Apply **VISION™** prior to, in tank mix with, or after one more of the following herbicides:

alachlor	flumetsulam	pendimethalin
acetochlor	glufosinate	primisulfuron-methyl
atrazine	glyphosate	prosulfuron
bentazon	halosulfuron	pyridate
metalaxyl	imazapyr	simazine
clopyralid	imazethapyr	s-metolachlor
dicamba	metribuzin	triasulfuron
dimethenamid	nicosulfuron	2,4-D
flufenacet	paraquat	

#### NOTE:

- (1) See **Table 5** below for additional limitations or restrictions that apply for tank mix or sequential use programs with these products
- (2) Sequential use only
- (3) Use only Clearfield (imidazolinone tolerant) corn hybrids.
- (4) Includes postemergence use on Roundup Ready (glyphosate tolerant) corn hybrids.
- (5) Use only on Liberty Link (glufosinate tolerant) corn hybrids.

**Table 5. Specific Guidelines for Tank Mixes or Sequential Use Programs**

Tank Mix Partner	Rate Per Acre
Nicosulfuron or Primisulfuron-methyl	When tank mixing, applications immediately following extreme day or night temperature fluctuations or applications when daytime temperatures do not exceed 50°F may result in decreased weed control or crop injury. Delay application until the temperatures warm and both weeds and crop resume normal growth.
2,4-D	To provide maximum crop safety after corn emergence, use this tank mix only after corn is greater than 8" tall and when application can be made with drop pipes that direct spray beneath corn leaves and away from the whorl of the corn. The maximum rate of 2,4-D recommended in this tank mix is 0.25 pints per acre (0.125 pounds of acid equivalent per acre).
Clopyralid, Flumetsulam, Halosulfuron-methyl, Primisulfuron-methyl, or Prosulfuron	Use the higher rate in the range for heavier infestations of these weeds.

#### CORN PRECAUTIONS:

- Do not apply **VISION** to seed corn or popcorn without first verifying with your local seed corn company (supplier) the tolerance of your inbred line or variety of popcorn to **VISION**. This precaution will help avoid potential injury of sensitive varieties.
- Do not use crop oil concentrates in a tank mix with **VISION** after crop emergence as crop injury may result.
- Use of sprayable fluid fertilizer as the carrier is not recommended for applications of **VISION** made after corn emergence.

#### CORN RESTRICTIONS:

- Up to 2 applications of **VISION** may be made during a growing season.
- Sequential applications must be separated by 2 weeks or more.
- **VISION** is not registered for use on sweet corn.
- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- Timing Restrictions for Lactating Dairy Animals Following Treatment

VISION™ Rate Per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint	7 days	37 days
Up to 2 pints	21 days	51 days
Up to 4 pints	40 days	70 days

## COTTON

### PREPLANT APPLICATION:

Apply up to 8 fluid ounces of **VISION™** herbicide per acre to cotton to control emerged broadleaf weeds prior to planting cotton in conventional or conservation tillage systems.

For best performance, apply **VISION™** when weeds are in the 2-4 leaf stage and rosettes are less than 2" across

### COTTON TANK MIXES

For control of grasses or additional broadleaf weeds, **VISION™** may be tank mixed with paraquat, prometryn and glyphosate herbicides.

### COTTON RESTRICTIONS:

- Following application of **VISION™** to cotton and a minimum accumulation of 1" of rainfall or overhead irrigation, a waiting interval of 21 days is required per 8 fluid ounces per acre or less. These intervals must be observed prior to planting cotton.
- Do not apply preplant to cotton west of the Rockies.
- Do not make **VISION™** preplant applications to cotton in geographic areas with average annual rainfall less than 25".
- If applying a spring preplant treatment following application of a fall preplant (postharvest) treatment, then the combination of both treatments may not exceed 2 pounds acid equivalent per acre.
- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

## GRASS GROWN FOR SEED

Apply 8-16 fluid ounces of **VISION™** per treated acre on seedling grass after the crop reaches the 3-5 leaf stage. Apply up to 32 fluid ounces of **VISION™** on well-established perennial grass. For best performance, apply **VISION™** when weeds are in the 2-4 leaf stage and rosettes are less than 2" across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

To suppress annual grasses such as brome (downy and ripgut), rattail fescue, and windgrass, apply up to 32 fluid ounces of **VISION™** per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made immediately following the first irrigation when the soil is moist and before weeds have more than 2 leaves.

### GRASS SEED TANK MIXES

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

2,4-D amine	2,4-D ester	bromoxynil
clopyralid	diuron	MCPA
metribuzin	tribenuron-methyl	

### GRASS GROWN FOR SEED RESTRICTIONS:

- Do not apply **VISION** after the grass seed crop begins to joint.
- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- Do not make more than 2 applications per year.
- Refer to the Pasture, Hay, Rangeland, and General Farmstead section for grazing and feeding restrictions.

## PROSO MILLET

For use only within Colorado, Nebraska, North Dakota, South Dakota, and Wyoming.

**VISION™** combined with 2,4-D will provide control or suppression of the annual broadleaf weeds listed in **Table 1**.

Apply 4 ounces of **VISION™** with 0.375 pounds a.i. of 2,4-D. Apply the tank mix of **VISION™** + 2,4-D as a broadcast or spot treatment to emerged and actively growing weeds and when proso millet is in the 2-5 leaf stage. Use directions for 2,4-D products vary with manufacturers. Refer to a 2,4-D product with labeling consistent with the crop stage timing for **VISION™**. Some types of proso millet may be affected adversely by a tank mix of **VISION™** + 2,4-D.

Do not apply unless possible proso millet crop injury will be acceptable.

### PROSO MILLET RESTRICTIONS:

- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- Do not make more than 2 applications per year. **Restrictions for proso millet that is grazed or cut for hay are indicated in "GRASS PASTURE, HAY, AND RANGELAND AND GENERAL FARMSTEAD" section of this label.**

## PASTURE, HAY, AND RANGELAND, AND GENERAL FARMSTEAD (NONCROPLAND)

**VISION™** may be used on pasture, hay, rangeland, and general farmstead (non-cropland) (including fencerows and non-irrigation ditchbanks) for control or suppression of broadleaf weed and brush species listed in **Table 1**.

**VISION™** may also be applied to non-cropland areas to control broadleaf weeds in noxious weed control programs, districts, or areas including broadcast or spot treatment of roadsides and highways, utilities, railroad, and pipeline rights-of-way. Noxious weeds must be recognized at the state level, but programs may be administered at state, county, or other level, **VISION™** uses described in this section also pertain to small grains (forage sorghum, rye, sudangrass, or wheat) grown for pasture use only. Some perennial weeds may be controlled with lower rates of either **VISION™** or **VISION™** plus 2,4-D (refer to **Table 2**).

### Rates and Timings

Refer to **Table 2** for rate selection based on targeted weed or brush species. Some weeds will require tank mixes for adequate control.

**VISION™** herbicide can be applied using water, oil in water emulsions including invert systems, or sprayable fluid fertilizer as a carrier (refer to the "**Compatibility Test for Mix Components**").

### COMPATIBILITY TEST FOR MIX COMPONENTS

To prepare oil in water emulsions, half-fill spray tank with water, then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel oil or fuel oil) or a premix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water.

Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers. **VISION™** may be applied broadcast using either ground or aerial application equipment.

### Aerial Application:

Spray Volume: Use 2-40 gallons of diluted spray per treated acre in a water-based carrier.

### Ground Application:

**Spray Volume:** Use 3-600 gallons of diluted spray per treated acre. The volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used.

**Spot Treatments:** **VISION™** 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.

### Cut Surface Treatments:

**VISION™** may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees.

**Rate:** Mix 1 part **VISION™** with 1-3 parts water to create the application solution. Use the lower dilution rate when treating difficult-to-control species.

**For 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 the solution.

**For Stump Treatments:** Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

**Note:** For more rapid foliar effects, a 2,4-D product labeled for cut surface treatment may be added to the solution.

**APPLICATIONS FOR CONTROL OF DORMANT MULTIFLORA ROSE:**

**VISION™** can be applied when plants are dormant as an undiluted spot treatment directly to the soil or as a Lo-Oil basal bark treatment using an oil-water emulsion solution.

- Spot treatments: Spot treatment applications of **VISION™** should be applied directly to the soil as close as possible to the root crown but within 6-8" of the crown. On sloping terrain, apply **VISION™** to the uphill side of the crown. Do not apply when snow or water prevents applying **VISION™** directly to the soil. The use rate of **VISION™** depends on the canopy diameter of the multiflora rose.  
Examples: Use 0.25, 1.0, or 2.35 fluid ounces of **VISION™** respectively, for 5, 10, or 15 feet canopy diameters.
- Lo-Oil basal bark treatments: For Lo-Oil basal bark treatments, apply **VISION™** to the basal stem region from the ground line to a height of 12-18". Spray until runoff, with special emphasis on covering the root crown. For best results, apply **VISION™** when plants are dormant. Do not apply after bud break or when plants are showing signs of active growth. Do not apply when snow or water prevents applying **VISION™** to the ground line.

To prepare approximately 2 gallons of a Lo-Oil spray solution:

1. Combine 1.5 gallons of water, 1 ounce of emulsifier, 16 fluid ounces of **VISION™**, and 2.5 pints of No. 2 diesel fuel .
2. Adjust the amounts of materials used proportionately to the amount of final spray solution desired.

Do not exceed 8 gallons of spray solution mix applied per acre, per year.

**GRASS PASTURE TANK MIXES**

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

2,4-D	clopyralid	glyphosate
metalaxyl	metsulfuron-methyl	paraquat
picloram	triasulfuron	triclopyr

**PASTURE, HAY, RANGELAND, AND GENERAL FARMSTEAD (NONCROPLAND) RESTRICTIONS:**

- Do not apply more than 16 fluid ounces of **VISION** per acre to small grains grown for pasture.
- Newly seeded areas may be severely injured if more than 16 fluid ounces of **VISION** is applied per acre to small grains grown for pasture.
- Established grass crops growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Bentgrass, carpetgrass, buffalograss, and St. Augustinegrass may be injured if more than 16 fluid ounces of **VISION** is applied per acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses have the least tolerance. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes. Do not make more than 2 applications per year.
- Do not harvest hay within 7 days of last application.
- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- There are no grazing restrictions for animals other than lactating dairy animals.
- Timing Restrictions for Lactating Dairy Animals Following Treatment

VISION Rate Per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint	7 days	37 days
Up to 2 pints	21 days	51 days

## CONSERVATION RESERVE PROGRAM (CRP)

**VISION™** may be used on both newly seeded and established grasses grown on land in Conservation Reserve Programs. Treatments of **VISION™** will injure or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

### NEWLY SEEDED AREAS

**VISION™** may be applied either preplant or postemergence to newly seeded grasses or small grains including barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3-leaf stage. Rates of **VISION™** greater than 16 fluid ounces per treated acre to CRP may severely injure newly seeded grasses.

Preplant applications may injure new seedlings if the interval between application and grass planting is less than 45 days per 16 fluid ounces of **VISION™** applied per treated acre west of the Mississippi River or 20 days per 16 fluid ounces applied east of the Mississippi River.

### ESTABLISHED GRASS STANDS

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species (bentgrass, carpetgrass, smooth brome, buffalograss, or St. Augustinegrass) may be injured when treated with more than 16 fluid ounces of **VISION™** per treated acre.

When applied at specified rates, **VISION™** herbicide will control many annual and biennial weeds and provide control or suppression of many perennial weeds.

### Rates and Timings

Apply 4-32 fluid ounces of **VISION™** to established grass stands per acre. See list of weeds in **Table 2** for rates for control and suppression based on target weed species.

### CONSERVATION RESERVE PROGRAM TANK MIXES

**VISION™** may be tank mixed or applied sequentially with other products labeled for use in Conservation Reserve Programs such as atrazine, glyphosate, paraquat or generic 2,4-D labeled for Conservation Reserve Program use.

### CONSERVATION RESERVE PROGRAM (CRP) RESTRICTIONS:

Retreatments may be made as needed; however, do not exceed a total of 64 fluid ounces (4 pints) of **VISION™** per acre to established grass stands under CRP. Do not make more than 2 applications per year. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 lb a.e./acre/application.

## FALL AND SPRING-SEEDED BARLEY, OATS, TRITICALE AND WHEAT

**VISION™** combinations with listed tank mix partners will provide control or suppression of the annual broadleaf weeds listed in **Table 1**. For improved control of listed weeds, tank mix **VISION™** with one or more of the herbicides listed.

**VISION™** used in a tank mix with other herbicides offers the best spectrum of weed control and herbicide tolerant weed management. Refer to the specific section crop for **VISION™** application rate and timing.

For applications prior to weed emergence or when sulfonylurea-resistant weeds are present or suspected, tank mix a minimum of 3 fluid ounces of **VISION™** per treated acre with a non-sulfonylurea herbicide such as 2,4-D or MCPA. Tank mixing **VISION™** with these products will offer more consistent control of sulfonylurea-tolerant weeds.

**Additives:** When tank mixing **VISION™** with sulfonylurea herbicides, use 1-4 pints of an agriculturally approved surfactant (containing at least 80% active ingredient) per 100 gallons of spray or not more than 0.25-0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix or when treating more mature and difficult to control weeds or dense vegetative growth.

Refer to the specific crop sections below for use rates. When treating difficult to control weeds such as kochia, wild buckwheat, cow cockle, prostrate knotweed, Russian thistle, and prickly lettuce or when dense vegetative growth occurs, use the 4 fluid ounces of **VISION™** per acre on barley, oats, triticale and wheat.

**Timings:**

Apply **VISION™** before, during, or after planting barley, oats, triticale and wheat. See specific barley, oats, triticale and wheat crop uses below for maximum crop stage. For best performance, apply **VISION™** when weeds are in the 2-3 leaf stage and rosettes are less than 2" across. Applying **VISION™** to barley, oats, triticale and wheat during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields. Applications to barley, oats, triticale and wheat may be made with aerial applications with 1 gallon of water or more per acre. Where dense foliage is present, 2-3 gallons of water per acre should be used.

**BARLEY**  
**(Fall- and Spring- Seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 2-4 fluid ounces of **VISION™** to fall-seeded barley prior to the jointing stage. Apply 2-3 fluid ounces of **VISION™** before spring-seeded barley exceeds the 4-leaf stage.

**Note:** For spring barley varieties that are seeded during the winter months or later, follow the rates and timings given for spring-seeded barley.

Do not tank mix **VISION™** with 2,4-D in early season applications on spring-seeded barley.

**PREHARVEST APPLICATIONS:**

**VISION™** can be used to control weeds that may interfere with harvest of fall- and spring-seeded barley. Apply 8 fluid ounces of **VISION™** per acre as a broadcast or spot treatment to annual broadleaf weeds when barley is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

A waiting interval of 7 days is required before harvest. Do not use preharvest-treated barley 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, **VISION™** may be tank mixed with other herbicides, such as 2,4-D, that are labeled for preharvest uses in barley.

Do not make preharvest applications in California.

**Table 7. Barley Tank Mixes**

2,4-D amine	2,4-D ester	bromoxynil
chlorsulfuron	MCPA	metsulfuron-methyl
metribuzin	thifensulfuron-methyl	tribenuron-methyl
triasulfuron		

- (1) Do not use low rates of sulfonylureas on more mature weeds or on dense vegetative growth.
- (2) When using formulations other than 4 pounds per gallon use pounds of a.e. per acre listed.
- (3) This tank mix is for fall-seeded barley only

**OATS**  
**(Fall- and Spring- Seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 4 fluid ounces of **VISION™** herbicide per acre to fall-seeded oat prior to the jointing stage. Apply 4 fluid ounces of **VISION™** before spring-seeded oats exceed the 5-leaf stage.

**VISION™** may be tank mixed with MCPA amine or ester for applications in oat.

Do not tank mix **VISION™** with 2,4-D in oat.

Do not harvest oats within 7 days of last application.

**TRITICALE**  
**(Fall- and Spring- Seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 4 fluid ounces of **VISION™** to triticale.

Early season applications to fall-seeded triticale must be made prior to the jointing stage.

Early season applications to spring-seeded triticale must be made before triticale reaches the 6-leaf stage.

**Triticale Tank Mixes:** For best performance, should be used in tank mix combination with bromoxynil herbicide.

**WHEAT**  
**(Fall- and Spring- Seeded)**

**EARLY SEASON APPLICATIONS:**

Apply 4 fluid ounces of **VISION™** to wheat unless using one of the fall-seeded wheat specific programs below.

Early season applications to fall-seeded wheat must be made prior to the jointing stage.

Early season applications to spring-seeded wheat must be made before wheat reaches the 6-leaf stage. Early developing wheat varieties such as TAM 107, Madison, or Wakefield must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

To improve control of Russian thistle, flaxweed, gromwell, or mayweed, add 2,4-D amine or ester to a tank mix with a sulfonylurea herbicide.

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

**VISION™** may be used at 6 fluid ounces on fall-seeded wheat in Western Oregon as a spring application only. In Colorado, Kansas, New Mexico, Oklahoma, and Texas, up to 8 fluid ounces of **VISION™** may be applied on fall-seeded wheat after it exceeds the 3-leaf stage for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. **VISION™** may be tank mixed with 2,4-D amine at 8 fluid ounces after wheat begins to tiller. 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:**

**VISION™** can be used to control weeds that may interfere with harvest of wheat. Apply 8 fluid ounces **VISION™** per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

A waiting interval of 7 days is required before harvest. Do not use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better. For control of additional broadleaf weeds or grasses, **VISION™** may be tank mixed with sulfonylurea, glyphosate and 2,4-D herbicides.

Do not make preharvest applications in California.

**Table 8. Wheat Tank Mixes**

2,4-D amine or ester <sup>(5)</sup>	atrazine	bromoxynil
chlorsulfuron <sup>(1)</sup>	clethodim <sup>(2)</sup>	clopyralid
diuron <sup>(3)</sup>	fenoxaprop-P ethyl <sup>(2)</sup>	
	glyphosate <sup>(4)</sup>	MCPA amine or ester <sup>(5)</sup>
metribuzin <sup>(3)</sup>	metsulfuron-methyl <sup>(1)</sup>	prosulfuron <sup>(1)</sup>
thifensulfuron-methyl <sup>(1)</sup>	triasulfuron <sup>(1)</sup>	tribenuron-methyl <sup>(1)</sup>

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

- (2) Do not use **VISION™** as a tank mix treatment with clethodim on Durum wheat.
- (3) Tank mixes with diuron and metribuzin are for use in fall-seeded wheat only.
- (4) A tank mix of up to 4 fluid ounces of **VISION™** with any glyphosate formulation labeled for use as a preplant application to wheat may be applied with no waiting period prior to planting.
- (5) Up to 32 fluid ounces of (1.0 pound a.e.) may be used on fall-seeded wheat if crop injury is acceptable. When using formulations other than 4 pounds per gallon, use the pounds of a.e. per acre listed.

**BARLEY, OATS, TRITICALE AND WHEAT RESTRICTIONS**

- **VISION** contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- Timing Restrictions for Lactating Dairy Animals Following Treatment

<b>VISION™ Rate Per Treated Acre</b>	<b>Days Before Grazing</b>	<b>Days Before Hay Harvest</b>
Up to 1 pint	7 days	37 days
Up to 2 pints	21 days	51 days

**SORGHUM**

**VISION™** herbicide may be applied preplant, postemergence, or preharvest in sorghum to control many annual broadleaf weeds and to reduce competition from established perennial broadleaf weeds as well as control their seedlings.

Do not graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to “**Pasture, Hay, Rangeland, and General Farmstead**” section of this label for specific grazing and feeding restrictions.

Do not apply **VISION™** to sorghum grown for seed production.

**PREPLANT APPLICATION:**

Up to 8 fluid ounces of **VISION™** may be applied per acre if applied at least 15 days before sorghum planting.

**POSTEMERGENCE APPLICATION:**

Up to 8 fluid ounces of **VISION™** per acre may be applied after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15" tall. For best performance, apply **VISION™** when the sorghum crop is in the 3-5 leaf stage and weeds are small (less than 3" tall). Use drop pipes (drop nozzles) if sorghum is taller than 8". Keep the spray off the sorghum leaves and out of the whorl to reduce the likelihood of crop injury and to improve spray coverage of weed foliage. Applying **VISION™** to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10-14 days.

**Preharvest uses in Texas and Oklahoma only:** Up to 8 fluid ounces of **VISION™** per acre may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications, use at least 2 gallons of water-based carrier per treated acre. Delay harvest until 30 days after a preharvest treatment.

**SPLIT APPLICATION:**

**VISION™** may be applied in split applications: preplant followed by postemergence or preharvest; or postemergence followed by preharvest.

**SORGHUM TANK MIXES AND SEQUENTIAL TREATMENTS**

**VISION™** may be applied prior to, in a tank mix with, or after one or more of the following herbicides:

2,4-D amine	dicamba	metalaxyl
atrazine	dimethenamid-p	paraquat
bentazon	glyphosate	prosulfuron
bromoxynil	halosulfuron-methyl	s-metolachlor

**SORGHUM RESTRICTIONS:**

- Do not exceed 8 fluid ounces per acre, per application or a total of 16 ounces per acre, per season on sorghum.
- Do not make more than 2 applications per year



- VISION contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- Observe the following Pre-Harvest Intervals (PHI):
  - Sorghum Grain – 30 days
  - Sorghum Fodder – 30 days
  - Sorghum Forage – 20 days
- Timing Restrictions for Lactating Dairy Animals Following Treatment

VISION™ Rate Per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Less than 1 pint	7 days	37 days

## SOYBEAN

### PREPLANT APPLICATIONS:

Apply 4-16 fluid ounces of VISION™ per acre to soybeans to control emerged broadleaf weeds prior to planting. Use the higher rates to control perennial or large annual broadleaf weeds. Do not exceed 16 fluid ounces of VISION™ per acre in a spring application prior to planting soybeans. Following application of VISION™ to soybeans and a minimum accumulation of 1" rainfall or overhead irrigation, a waiting interval of 14 days is required for 8 fluid ounces per acre or less, and 28 days for 16 fluid ounces per acre. These intervals must be observed prior to planting soybeans or crop injury may occur. Do not make VISION™ preplant applications to soybeans in geographic areas with average annual rainfall less than 25".

### PREHARVEST APPLICATIONS:

VISION™ can be used to control many annual and perennial broadleaf weeds and control or suppress many biennial and perennial broadleaf weeds in soybean prior to harvest (refer to Table 1). Apply 8-64 fluid ounces of VISION™ to soybeans per acre as a broadcast or spot treatment to emerged and actively growing weeds after soybean pods have reached mature brown color and at least 75% leaf drop has occurred. Soybeans may be harvested 14 days or more after a preharvest application. Use the higher rates to control perennial broadleaf weeds or large annual broadleaf weeds.

Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for VISION™. For seedling control, a follow-up program or other cultural practice could be instituted.

Do not use preharvest-treated soybean for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

## SOYBEAN TANK MIXES

### PREPLANT TANK MIXES:

VISION™ may be tank mixed with other herbicides registered for early preplant use in soybeans including burndown herbicides such as glyphosate and 2,4-D or residual herbicides such as dimethenamid-p or S-metolachlor.

### PREHARVEST TANK MIXES:

VISION™ may be tank mixed with other herbicides registered for preharvest use in soybeans such as paraquat.

### SOYBEAN RESTRICTIONS:

- Do not feed soybean fodder or hay following a preharvest application of VISION.
- Do not make preharvest applications in California.
- Do not harvest seed within 7 days of last application.
- VISION contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

## SUGARCANE

Apply VISION™ herbicide for control of annual, biennial, or perennial broadleaf weeds listed in Table 1. Apply 8-24 fluid ounces of VISION™ to sugarcane per acre for control of annual weeds, 16-32 fluid ounces/acre for control of biennial weeds, and 32 fluid ounces/acre for control or suppression of perennial weeds.

Use the higher level of listed rate ranges when treating dense vegetative growth.

**Timing:** VISION™ may be applied to sugarcane any time after weeds have emerged, but before the close-in stage of sugarcane. Applications of 32 fluid ounces to sugarcane of VISION™ per acre made over the top of actively growing sugarcane may result in crop injury. When possible, direct the spray beneath the sugarcane canopy to minimize the likelihood of crop injury. Using directed sprays will also help maximize the spray coverage of weed foliage.

#### SUGARCANE TANK MIXES

VISION™ may be tank mixed with other products registered for use in sugarcane such as asulam, atrazine, ametryn, and 2,4-D.

#### SUGARCANE RESTRICTIONS:

- Do not make more than 2 applications per year.
- VISION contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.
- Do not harvest within 87 days of last application.
- Timing Restrictions for Lactating Dairy Animals Following Treatment:

VISION™ Rate Per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint	7 days	37 days
Up to 2 pints	21 days	51 days

#### TURF AND LAWNS

For use by commercial applicators on residential, recreational or institutional turf and lawns; for use in sod farms, apply 8-24 fluid ounces to turf of VISION™ per acre for control of annual weeds, 16-32 fluid ounces for control of biennial weeds, and 32 fluid ounces for suppression of perennial weeds.

VISION™ will also suppress many other listed perennial broadleaf weeds and woody brush and vine species. Refer to **Table 2** for rate specifications based on targeted weed or brush species and growth stage. Some weed species will require tank mixes for adequate control.

Apply 30-200 gallons of diluted spray per treated acre (3-17 quarts of water per 1,000 square feet), depending on density or height of weeds treated and on the type of equipment used.

To avoid injury to newly seeded grasses, delay application of VISION™ until after the second mowing. Furthermore, applying more than 16 fluid ounces of VISION™ per treated acre to turf may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustinegrass.

In areas where roots of sensitive plants extend, do not apply more than 4 fluid ounces of VISION™ per treated acre to turf on coarse-textured (sandy-type) soils, or in excess of 8 fluid ounces per treated acre on fine-textured soils. Do not make repeat applications in these areas for 30 days and until previous applications of VISION™ have been activated in the soil by rain or irrigation.

#### TURF AND LAWN TANK MIXES

Apply 3.2-8 fluid ounces of VISION™ per acre to turf in a tank mix with one of the products in Table 9 at the rates listed. Use the higher rates when treating established weeds.

**Table 9.**

Tank Mix Partner
Bromoxynil
MCPA
MCPP
2,4-D

#### TURF and LAWN RESTRICTIONS:

- Do not make more than 2 applications per year.

- VISION contains 0.475 pounds a.e. of dicamba per pint. When tank mixing with products that contain dicamba, do not exceed a combined total of 1.0 pound of a.e. per acre per application.

#### SITES OF USE ON THIS LABEL

This product may be used on the following sites:

Asparagus  
 Conservation Reserve Program (CRP) land  
 Corn (field, pop, seed and silage) (not for use on sweet corn)  
 Cotton (preplant only)  
 Fallow Cropland  
 Proso Millet  
 Pastures  
 Rangeland  
 General Farmstead  
 Barley, Oats, Triticale and Wheat  
 Sorghum  
 Soybean  
 Sugarcane  
 Turf

Look inside for complete “Restrictions” and “Application Instructions”.

#### **STORAGE AND DISPOSAL**

**Prohibitions:** Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. This product may not be mixed, loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sinkholes.

**PESTICIDE STORAGE:** Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides.

**PESTICIDE DISPOSAL:** Wastes resulting from this product must be disposed of on site or at an approved waste disposal facility. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state or local procedures under Subtitle C of the Resource Conservation and Recovery Act. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law.

**CONTAINER HANDLING : Non-Refillable containers (1, 2.5, 30 & 55 gallon):** 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.

**Non-Refillable (>5 gallons):** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**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 in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable Container (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. Empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection

system. Repeat this rinsing procedure two more times.

**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.

**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. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of Helena Agri-Enterprises, LLC or the Seller. To the extent allowed by 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 ALLOWED BY APPLICABLE LAW, Helena Agri-Enterprises, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT ALLOWED BY 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 and User accept 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 If these conditions are not acceptable, return unopened package to point of purchase for a refund.

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