



Herbicide for Weed Control in Corn, Cotton, Sorghum, Soybean, Small Grains, Pasture, Hay, Rangeland, Farmstead (Non-cropland), Fallow, Sugarcane, Asparagus, Turf and Grass

#### **ACTIVE INGREDIENT:**

Dimethylamine salt of dicamba (3,6-dichloro-O-anisic acid)*	50.2%
OTHER INGREDIENTS:	49.8%
TOTAL:	00.0%
*This product contains 41.7% 3,6-dichloro-o-anisic acid (dicamba) or 4 pounds per gallon (480 g/L	).
EPA Reg. No.: 91234-148	

# KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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

See below for additional Precautionary Statements.

FIRST AID		
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
HOT LINE NUMBER		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may als contact SafetyCall at 1-844-685-9173.		

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)



# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO

Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Avoid breathing spray mist. Harmful if absorbed through skin.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material.

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

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Goggles or faceshield, and
- Waterproof gloves.

See engineering controls for additional requirements.

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

#### **ENGINEERING CONTROLS STATEMENTS**

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

#### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and 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 highwater mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate.

Apply this product only as directed on label.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow coming into contact with oxidizing agents, hazardous chemical reaction may occur.

#### **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.

#### **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-sleeve shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to the 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, in nurseries, in forests, or in greenhouses.

Do not enter or allow others to enter the treated areas until the spray has dried.

Before applying **Doleac DMA**, read all directions, restrictions, and precautions appearing on the container label and in this booklet. Failure to follow all directions, restrictions, and precautions may result in unsatisfactory weed control, crop injury, or illegal residues.

#### PRODUCT INFORMATION

The following directions apply to all uses of **Doleac DMA**. Additional precautions and restrictions will be found in each specific use section.

#### **RESTRICTIONS:**

- Do not treat irrigation ditches or water used for crop irrigation or domestic uses.
- Do not apply this product through any type of irrigation system.
- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA per acre with no more than 2 applications per year.

#### MIXING AND APPLICATION

UNLESS OTHERWISE SPECIFIED UNDER THE INDIVIDUAL USE HEADINGS OF THIS BOOKLET, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF **DOLEAC DMA**. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES AND TIMINGS.

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.



**Doleac DMA** is a water-soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (See **COMPATIBILITY TEST**) should be made prior to tank mixing.

Ground or aerial application equipment, which will give good spray coverage of weed foliage, should be used. HOWEVER, DO NOT USE AERIAL APPLICATION EQUIPMENT IF SPRAY PARTICLES CAN BE CARRIED BY WIND INTO AREAS WHERE SENSITIVE CROPS OR PLANTS ARE GROWING OR WHEN TEMPERATURE INVERSIONS EXIST.

Apply 3 to 50 gallons of diluted spray per treated acre when using ground application equipment or 1 to 10 gallons of diluted spray per treated acre (2 to 20 gallons of diluted spray per acre for preharvest uses) in a water-based carrier when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation. Use coarse sprays.

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.

To avoid uneven spray coverage, **Doleac DMA** should not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid disturbing (e.g., cultivating or mowing) treated areas for at least 7 days following application.

#### **BEST STEWARDSHIP PRACTICES**

**Doleac DMA** provides effective broadleaf weed and brush control when properly applied. Best stewardship practices in all mixing, loading, and application operations not only maximize weed control, but also protect ground and surface waters and minimize off-target movement.

This chemical is known to leach through the 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 groundwater contamination.

#### WEED RESISTANCE MANAGEMENT

Dicamba, the active ingredient in this product, is a Group 4 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain or develop plants naturally resistant to **Doleac DMA** and other Group 4 herbicides. Weeds resistant to Group 4 herbicides may be effectively managed utilizing another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

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

- Rotate the use of **Doleac DMA** 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 or 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 for example 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 a Atticus, LLC representative at (984) 465-4754 or at AtticusLLC.com. In addition to the guidance above, registrants are encouraged to incorporate the appropriate elements of Best Management Practices from HRAC and WSSA on the label.

#### **GROUND AND SURFACE WATERS 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 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 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 wellhead setbacks and operational containment that must be followed.

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 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 (less than 8 feet in Arizona). To minimize the possibility of ground water contamination, carefully follow the labeled application rates as affected by soil type in the **PRODUCT 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 one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.



#### **SENSITIVE CROP PRECAUTIONS**

**Doleac DMA** may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to **Doleac DMA** during their development or growing stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING DICAMBA 4 DMA.

- Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of **Doleac DMA** with the roots of desirable plants such as trees and shrubs
- Avoid making applications when air currents may carry spray particles to areas where sensitive crops and plants are growing, or when temperature inversions exist. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of adjacent sensitive crops. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles, which are designed to produce minimal amounts of fine spray particles. Examples of nozzles designed to produce coarse sprays via ground application are Delavan Rain-drops, Spraying Systems XR flat fans, 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 GPA, 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.
- Do not apply Doleac DMA adjacent to sensitive crops when the temperature on the day of application is expected to exceed 85°F as drift is more likely to occur.
- To avoid injury to desirable plants, equipment used to apply Doleac DMA should be thoroughly cleaned (See PROCEDURE FOR CLEANING SPRAY EQUIPMENT) before reusing to apply any other chemicals.

All crop uses of **Doleac DMA** are intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crop has occurred. If this interval is shortened, such as in cover crops that will be plowed under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage due to hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations. Tank mix directions are for use only in states where the tank mix product and application site are registered.

#### **BAND TREATMENTS**

**Doleac DMA** may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

Band width in inches	v	Broadcast RATE	_	Band RATE
Row width in inches	λ	per treated acre	-	per treated acre
Band width in inches	v	Broadcast VOLUME	_	Band VOLUME
Row width in inches	Х	per treated acre	=	per treated acre

#### **COMPATIBILITY TEST**

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Herbicide to Add to One Pint of Spray Carrier (Assuming Volume is 25 Gallons

Herbicide Formulations	Rate per Acre	Level Teaspoons
Dry	1 lb.	1 1/2
Liquid	1 pt.	1/2

If herbicide(s) do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the above-described forms will occur with 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Rerun the above **COMPATIBILITY TEST** with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer).

#### PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of **Doleac DMA** or tank mixes of **Doleac DMA** or tank mixes of **Doleac DMA** plus 2,4-D amine.

- Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the rinse water.
- 2) Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3) Flush the solution out of the spray tank through the boom.
- 4) Remove the nozzles and screens and flush the system with two full tanks of water. The steps listed below are suggested for thorough cleaning of spray equipment used to apply **Doleac DMA** as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water-dispersible formulations. **Doleac DMA** tank mixes with water-dispersible formulations require the use of a water/detergent rinse.
- 5) Complete step 1.

per Acre)

- 6) Fill tank with water while adding 2 lbs. of detergent for every 40 gallons of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3 and 4.



#### **WEED LIST**

This is a general list of weeds which may be treated with **Doleac DMA** in accordance with this label as found under the rates and timing sections of the Individual Use headings. Proper usage of this product will give control or growth suppression of many annual, biennial, and perennial broadleaf weeds, and many woody brush and vine species including:

Annual	
Amaranth, Spiny (Spiny Pigweed)	Lambsquarters Common
Aster, Slender	Lambsquarters (triazine resistant)
Bedstraw	Lettuce, Prickly
Beggarweed, Florida	Mallow, Common
Broomweed, Common	Mallow, Venice
Buckwheat, Wild	Mare's Tail (Horseweed)
Buffalobur	Mayweed
Burclover, California	Morning-glory, lvyleaf
Burcucumber	Morning-glory, Tall
Buttercup, Roughseed	Mustard, Tansy
Carpetweed	Mustard, Wild
Catchfly, Nightflowering	Mustard (Yellowtops)
Chamomile, Corn	Nightshade, Black
Chickweed, Common	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)
Clovers (Annual)	Pepperweed, Virginia (Peppergrass)
Cockle, Corn	Pigweed, Prostrate
Cockle, Cow	Pigweed, Redroot (Carelessweed)
Cocklebur, Common	Pigweed, Rough
Croton, Tropic	Pigweed, Smooth
Croton, Woolly	Pigweed (triazine resistant)
Daisy, English	Pigweed, Tumble
Evening Primrose, Cutleaf	Poorjoe
Fleabane, Annual	Puncturevine
Goosefoot, Nettleleaf	Purslane, Common
Henbit	Pusley, Florida
Jimsonweed	Radish, Wild
Knotweed	Ragweed, Common
Kochia	Ragweed, Giant (Buffaloweed)
Ladysthumb	Ragweed, Lance-Leaf

Rubberweed, bitter (Bitterweed)  Sesbania, Hemp  Spurry, Corn  Shepherdspurse  Starbur, Bristly  Sicklepod  Sumpweed, Rough  Sida, Prickly (Teaweed)  Sunflower, Common (Wild)  Smartweed, Green  Smartweed, Pennsylvania  Thistle, Russian  Sneezeweed, Bitter  Velvetleaf  Sowthistle, Annual  Sowthistle, Spiny  Waterprimrose, Winged  Spikeweed, Common  Wormwood, Annual  Biennials  Burdock, Common  Plantain, Bracted  Carrot, Wild (Queen Anne's Lace)  Ragwort, Tansy
Shepherdspurse Starbur, Bristly  Sicklepod Sumpweed, Rough  Sida, Prickly (Teaweed) Sunflower, Common (Wild)  Smartweed, Green Sunflower, Volunteer  Smartweed, Pennsylvania Thistle, Russian  Sneezeweed, Bitter Velvetleaf  Sowthistle, Annual Waterhemp  Sowthistle, Spiny Waterprimrose, Winged  Spikeweed, Common Wormwood, Annual  Biennials  Burdock, Common Plantain, Bracted
Sicklepod Sumpweed, Rough  Sida, Prickly (Teaweed) Sunflower, Common (Wild)  Smartweed, Green Sunflower, Volunteer  Smartweed, Pennsylvania Thistle, Russian  Sneezeweed, Bitter Velvetleaf  Sowthistle, Annual Waterhemp  Sowthistle, Spiny Waterprimrose, Winged  Spikeweed, Common Wormwood, Annual  Biennials  Burdock, Common Plantain, Bracted
Sida, Prickly (Teaweed)  Sunflower, Common (Wild)  Smartweed, Green  Sunflower, Volunteer  Thistle, Russian  Sneezeweed, Bitter  Velvetleaf  Sowthistle, Annual  Sowthistle, Spiny  Waterprimrose, Winged  Spikeweed, Common  Wormwood, Annual  Biennials  Burdock, Common  Plantain, Bracted
Smartweed, Green Sunflower, Volunteer Smartweed, Pennsylvania Thistle, Russian Sneezeweed, Bitter Velvetleaf Sowthistle, Annual Waterhemp Sowthistle, Spiny Waterprimrose, Winged Spikeweed, Common Wormwood, Annual  Biennials Burdock, Common Plantain, Bracted
Smartweed, Pennsylvania  Sneezeweed, Bitter  Velvetleaf  Sowthistle, Annual  Sowthistle, Spiny  Waterprimrose, Winged  Spikeweed, Common  Wormwood, Annual  Biennials  Burdock, Common  Plantain, Bracted
Sneezeweed, Bitter  Sowthistle, Annual  Sowthistle, Spiny  Waterprimrose, Winged  Spikeweed, Common  Wormwood, Annual  Biennials  Burdock, Common  Plantain, Bracted
Sowthistle, Annual Waterhemp  Sowthistle, Spiny Waterprimrose, Winged  Spikeweed, Common Wormwood, Annual  Biennials  Burdock, Common Plantain, Bracted
Sowthistle, Spiny  Spikeweed, Common  Wormwood, Annual  Biennials  Burdock, Common  Plantain, Bracted
Spikeweed, Common Wormwood, Annual  Biennials  Burdock, Common Plantain, Bracted
Biennials  Burdock, Common Plantain, Bracted
Burdock, Common Plantain, Bracted
Carrot, Wild (Queen Anne's Lace) Ragwort, Tansy
Cockle, White Starthistle, Yellow
Evening Primrose, Common Sweetclover
Geranium, Carolina Teasel
Gromwell Thistle, Bull
Knapweed, Diffuse Thistle, Milk
Knapweed, Spotted Thistle, Musk
Mallow, Dwarf Thistle, Plumeless
Perennials
*Alfalfa Chickweed, Field
Artichoke, Jerusalem Chickweed (Mouseear, Canada)
Aster, Spiny Chicory
Aster, Whiteheath * Clover, Hop
Beadstraw, Smooth * Dandelion, Common
Bindweed, Field * Dock Broadleaf (Bitterdock)
Bindweed, Hedge * Dock, Curly
Blueweed, Texas Dogbane, Hemp
*Bursage * Dogfennel (Cypressweed)  (Bur Ragweed, Lakeweed, Povertyweed)
Buttercup, Tall Fern, Bracken
Campion, Bladder Garlic, Wild

(continued)



Perennials (continued)	
Goldenrod, Canada	Sericia Lespedeza
Goldenrod, Missouri	Smartweed, Swamp
Goldenweed, Common	Snakeweed, Broom
Hawkweed	* Sorrel, Red (Sheep Sorrel)
Henbane, Black	Sowthistle
Horsenettle, Carolina	Sowthistle, Perennial
Ironweed	Spurge, Leafy
Knapweed, Black	Sundrop, Halfshrub (Evening Primrose)
Knapweed, Russian	Thistle, Canada
Milkweed, Climbing	Toadflex, Dalmation
Milkweed, Common	Tropical Soda Apple
Milkweed, Honeyvine	Trumpetcreeper (Buckvine)
Milkweed, Western Whorled	Vetch
Nettle, Stinging	Waterhemlock
Nightshade, Silverleaf (White Horsenettle)	Waterprimrose, Creeping
Onion, Wild	*Woodsorrel, Creeping Common Yellow
* Plantain, Broadleaf	Wormwood, Common
* Plantain, Buckhorn	Wormwood, Louisiana
Pokeweed	* Yankeeweed
Ragweed, Western	Yarrow, Common
Redvine	

\* Labeled perennials may be controlled using **Doleac DMA** at rates lower than those labeled for other listed perennial weeds. (See **APPLICATION RATES AND TIMING** sections in this label.)

Woody	
Alder	Cherry
Ash	Chinquapin
Aspen	Cottonwood
Basswood	* Creosotebush
Beech	Cucumbertree
Birch	* Dewberry
* Blackberry	* Dogwood
* Blackgum	Elm
* Cedar	Grape

(continued)

Woody (continued)	
* Hawthorn (Thornapple)	Poplar
Hemlock	Rabbitbrush
Hickory	* Redcedar, Eastern
Honeylocust	* Rose, McCartney
Honeysuckle	* Rose, Multiflora
Hornbeam	Sagebrush, Fringed
Huckleberry	Sassafras
Huisache	Serviceberry
Ivy, Poison	Spicebush
Kudzu	Spruce
Locust, Black	Sumac
Maple	* Sweetgum
Mesquite	Sycamore
Oak	Tarbush
Oak, Poison	Willow
Olive, Russian	Witchhazel
Persimmon, Eastern	* Yaupon
Pine	* Yucca
* Plum, Sand (Wild Plum)	

<sup>\*</sup> Growth suppression

#### FIELD, SEED, POPCORN AND SILAGE CORN

 $\textbf{IMPORTANT:} \ Observe \ all \ restrictions, \ precautions, \ mixing, \ and \ application \ instructions.$ 

#### **RESTRICTIONS:**

- Do not apply Doleac DMA to seed corn or popcorn without first verifying with your local seed corn company (supplier) the Dicamba selectivity on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.
- **Doleac DMA** is not registered for use on sweet corn.
- Do not use adjuvants containing penetrants such as petroleum-based oils after crop emergence or crop injury may result.
- Do not exceed a total of 1 1/2 pints of **Doleac DMA** per treated acre per crop year.
- Do not make more than 2 applications of **Doleac DMA** during a growing season.
   Allow two weeks or more between applications of **Doleac DMA**.

#### PRECAUTIONS:

- Direct contact of Doleac DMA with corn seed must be avoided. If corn seeds are less than 1 1/2 inches below the surface, delay application until corn has emerged.
- Applications of Doleac DMA to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.
- Do not use adjuvants containing penetrants such as petroleum-based oils after crop emergence or crop injury may result.



See appropriate section for rate information. For combination options or sequential treatments, refer to appropriate section.

Agriculturally approved surfactants or sprayable fertilizers (1/2 to 1 gallon per acre of 28%, 30% or 32% urea ammonium nitrate or 2.5 pounds per acre spray grade ammonium sulfate') may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.

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

Several synthetic pyrethroid insecticides are labeled for tank mix applications of dicamba. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **WEEDS CONTROLLED**

**Doleac DMA** will control many annual broadleaf weeds or give growth suppression of many perennial broadleaf weeds commonly found in corn. (Refer to the **WEED LIST**). For best performance, make application when weeds have emerged and are actively growing.

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

#### PREPLANT/PREEMERGENCE IN NO-TILLAGE CORN

Applications of **Doleac DMA** may be made before, during, or after planting to emerged and actively growing broadleaf weeds. Apply **Doleac DMA** at 1 pint per treated acre on medium or fine textured soils containing 2% or greater organic matter. Use 1/2 pint per treated acre on coarse textured soils (sand, sandy loam, and loamy sand) or medium and fine textured soils with less than 2% organic matter.

When planting into a legume sod (e.g., alfalfa or clover), apply **Doleac DMA** after 4 to 6 inches of regrowth has occurred.

#### PREEMERGENCE IN CONVENTIONAL OR REDUCED TILLAGE CORN

**Doleac DMA** may be applied after planting and prior to corn emergence. Application at 1 pint per treated acre may be made to medium or fine textured soils, which contain 2% or greater organic matter. DO NOT apply to coarse textured soils (sand, sandy loam, and loamy sand) until after crop emergence (see **EARLY POSTEMERGENCE** uses below).

Preemergence application of **Doleac DMA** does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrates treated soil over seed furrow.

## EARLY POSTEMERGENCE (ALL TILLAGE SYSTEMS) (Spike through 8-inch tall corn)

**Doleac DMA** at 1 pint per treated acre may be applied during the period from corn emergence through the five leaf stage or 8 inches tall, whichever comes first. Reduce the rate to 1/2 pint per treated acre if corn is growing on coarse textured soils (sand, sandy loam, and loamy sand). See **LATE POSTEMERGENCE APPLICATIONS** given below if the 6th true leaf is emerging from whorl or corn is greater than 8 inches tall.

## LATE POSTEMERGENCE (ALL TILLAGE SYSTEMS) (8 to 36 inch tall corn)

Application of **Doleac DMA** at 1 /2 pint per treated acre may be made from 8 to 36 inch tall corn or 15 days before tassel emergence, whichever comes first. For best performance, make applications when weeds are less than 3 inches tall.

Make directed spray application when (1) corn leaves prevent proper spray coverage; (2) sensitive crops are growing nearby; (3) tank mixing with 2,4-D. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **RESTRICTIONS:**

DO NOT apply **Doleac DMA** when soybeans are growing nearby if any of these conditions exist:

- Corn is more than 24 inches tall.
- Soybeans are more than 10 inches tall.
- Soybeans have begun to bloom.

#### **OVERLAY (SEQUENTIAL) TREATMENTS**

**Doleac DMA** may be applied to ground previously treated with one or more of the following herbicides registered for use in corn:

acetochlor	glyphosate
alachlor	halosulfuron
atrazine	metolachlor
Broadstrike <sup>®</sup>	paraquat
butylate	pendimethalin
dimethenamid	propachlor
EPTC	simazine

READ AND FOLLOW LABEL DIRECTIONS FOR EACH OF THE ABOVE PRODUCTS.

#### TANK MIX TREATMENTS FOR CORN

**Doleac DMA** may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

2,4-D	metolachlor
acetochlor	nicosulfuron
alachlor	paraquat
atrazine	pendimethalin
clopyralid	primsulfuron
dimethenamid	pyridate
glyphosate	simazine



#### COTTON (EXCEPT CALIFORNIA)

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions. **PREPLANT APPLICATION:** Apply up to 8 fluid ounces of **Doleac DMA** per acre to control emerged broadleaf weeds prior to planting cotton in conventional or conservation tillage systems.

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

Following application of **Doleac DMA** 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.

#### RESTRICTIONS:

- Do not apply preplant to cotton west of the Rockies.
- Do not make Doleac DMA preplant applications to 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.

#### **COTTON TANK MIXES**

For control of grasses or additional broadleaf weeds, **Doleac DMA** may be tank mixed with prometryn, paraquat, and glyphosate herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **SORGHUM (MILO)**

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions.

#### **RESTRICTIONS:**

Preharvest Interval (PHI):

Grain sorghum (PHI): 30 days Fodder (PHI): 30 days Forage (PHI): 20 days

- 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 the pasture use section of this label.
- Do not apply Doleac DMA to sorghum grown for seed production.
- Do not make more than one application per growing season.

Applications of **Doleac DMA** 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 to 14 days.

#### **WEEDS CONTROLLED**

**Doleac DMA**, when applied at the labeled rate for sorghum, will control many actively growing annual broadleaf weeds and will reduce competition from established perennial broadleaf weeds as well as control their seedlings. (Refer to **WEED LIST**).

#### **RATES AND TIMINGS**

**Doleac DMA** may be applied to emerged and actively growing weeds at least 15 days prior to planting. Postemergence application of **Doleac DMA** must be made after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15 inches tall. For best performance, make applications when sorghum is in the 3 to 5 leaf stage and weeds are small (less than 3 inches tall). Use drop pipes (drop nozzles) if sorghum is

taller than 8 inches. Keeping the spray off the sorghum leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of weed foliage.

#### **Broadcast Rate per Treated Acre:**

Apply 1/2 pint (1/4 lb. a.i.) Doleac DMA.

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with the products listed below. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

**Doleac DMA plus Atrazine:** For improved control of emerged, actively growing broadleaf weeds including triazine resistant species and added suppression of perennial broadleaf weeds, tank mix 1/2 pint **Doleac DMA** with the labeled rate of atrazine per treated acre. For control of grasses (less than 1.5 inches tall), tank mix 1/2 pint **Doleac DMA** with the labeled rate of atrazine per treated acre. For best performance and minimal crop injury, make application when sorghum is 3 - 8 inches tall and when broadleaf weeds are small (less than 6 inches tall). Application of atrazine must be made before sorghum is beyond 12 inches tall. The atrazine rate will depend upon soil texture and length of residual weed control desired. Follow all state and Federal restrictions pertaining to atrazine applications.

**Doleac DMA plus bromoxynil:** For improved control of broadleaf weeds, tank mix 1/2 pint **Doleac DMA** with the labeled rate of bromoxynil herbicide per treated acre. Make application at 4 leaf to 15-inch tall sorghum. Use drop nozzles to direct spray beneath sorghum leaves when sorghum is greater than 8 inches tall.

#### **OVERLAY (SEQUENTIAL) TREATMENTS**

**Doleac DMA** may be applied to ground previously treated with one or more of the following herbicides.

alachlor	metolachlor
atrazine	propachlor

#### PREHARVEST USES

FOR USE ONLY IN THE STATES OF TEXAS AND OKLAHOMA

**Doleac DMA** 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 treatment.

#### **Broadcast Rate per Treated Acre:**

Apply 1/2 pint (1/4 lb. a.i.) Doleac DMA.



# SMALL GRAINS (WHEAT, BARLEY AND OATS) (NOT UNDERSEEDED TO LEGUMES)

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions.

#### **RESTRICTIONS:**

• Preharvest interval (PHI):

Grain (PHI): 7 days

- If small grains are used for pasture or hay, the following restrictions apply:
- 1. Animals cannot be removed from treated area for slaughter prior to 30 days after last application.
- There is no waiting period between treatment and grazing for non-lactating dairy animals.
- Treated areas may not be grazed by lactating dairy animals before 7 days after treatment.
- 4. Do not harvest hay from treated areas before 37 days after treatment.

#### **WEEDS CONTROLLED**

**Doleac DMA** or combinations with listed tank mix partners will provide control or suppression of the annual broadleaf weeds listed below. For improved control of listed weeds, it is recommended that **Doleac DMA** be applied in a tank mix with other herbicides. Refer to specific crop for tank mix options.

Alkanet <sup>1</sup>	Flixweed <sup>1</sup>	
Bedstraw, Catchweed <sup>1</sup>	Fumitory <sup>1</sup>	
Bindweed, Field <sup>2</sup>	Gromwell, Corn <sup>1</sup>	
Buckwheat Tartary	Groundsel, Common <sup>1</sup>	
Buckwheat, Wild	Hempnettle <sup>1</sup>	
Carpetweed <sup>1</sup>	Henbit	
Chamomile, Corn	Jacobs Ladder <sup>1</sup>	
Chervil, Bur <sup>1</sup>	Knawel (German Moss)	
Chickweed, Common <sup>1</sup>	Knotweed, Prostrate	
Cockle, Corn	Kochia	
Cockle, Cow	Ladysthumb	
Cocklebur, Common	Lambsquarters, Common	
Cornflower (Bachelorbutton) <sup>1</sup>	Lettuce, Miners <sup>1</sup>	
Dandelion, Common <sup>2</sup>	Lettuce, Prickly	
Dock, Curly <sup>2</sup>	Mallow, Common	
Dragonhead, American <sup>1</sup>	Mayweed, Chamomile (Dogfennel) <sup>1</sup>	
Evening Primrose, Cutleaf <sup>1</sup>	Mustard, Blue (Purple) <sup>1</sup>	
Falseflax, Smallseeded <sup>1</sup>	Mustard, Tansy	
Fiddleneck, (Tarweed) <sup>1</sup>	Mustard Treacle <sup>1</sup>	

(continued)

Mustard, Tumble (Jim Hill) <sup>1</sup>	Ragweed, Giant (Buffaloweed) <sup>1</sup>	
Mustard, Wild <sup>1</sup>	Rocket, London <sup>1</sup>	
Nightshade, Black	Rocket, Yellow <sup>1</sup>	
Nightshade, Cutleaf <sup>1</sup>	Salsify (Goatsbeard) <sup>1</sup>	
Nightshade Silverleaf <sup>2</sup> (White Horsenettle)	Shepherdspurse <sup>1</sup>	
Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Smartweed, Green	
Pepperweed, Peppergrass <sup>1</sup>	Smartweed, Pennsylvania	
Pigweed, Redroot (Carelessweed)	Sorrel, Red (Sheep Sorrel) <sup>1</sup>	
Pigweed, Rough	Sowthistle, Annual	
Pigweed, Tumble	Starthistle, Yellow <sup>1</sup>	
Pineappleweed <sup>1</sup>	Sunflower, Common (Wild)	
Plantain, Broadleaf <sup>2</sup>	Thistle, Canada <sup>2</sup>	
Poppy, Red Horned <sup>1</sup>	Thistle, Russian	
Puncturevine <sup>1</sup>	Velvetleaf	
Purslane, Common	Vetch <sup>1</sup>	
Radish, Wild <sup>1</sup>	Yarrow, Common <sup>2</sup>	
Ragweed, Common		

<sup>&</sup>lt;sup>1</sup>These weeds will be controlled with **Doleac DMA** tank mixtures. Refer to tank mix label for specific weeds controlled.

#### **RATES AND TIMINGS**

Application of **Doleac DMA** may be made before, during or after planting small grains. For best performance, make applications when weeds are in the 2 - 3 leaf stage and rosettes are less than 2 inches across. Application of **Doleac DMA** to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Use **Doleac DMA** at 2 to 4 fluid ounces per treated acre in wheat, fall seeded barley, and oats, and at 2 to 3 fluid ounces per treated acre in spring seeded barley. Use the higher level of listed rate ranges 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.

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



<sup>&</sup>lt;sup>2</sup> Doleac DMA tank mixes will provide suppression of established broadleaf weeds and control their seedlings.

For applications prior to the emergence of weeds or when sulfonylurea resistant weeds are present or suspected, use a minimum of 3 fluid ounces per treated acre of **Doleac DMA** with a tank mix herbicide. Non-sulfonylurea herbicides such as 2,4-D or MCPA tank mixed with **Doleac DMA** will offer more consistent control of sulfonylurea resistant weeds.

When tank mixing with sulfonylurea herbicides, use an agriculturally approved surfactant of at least 80% active ingredient at the rate of 1 - 4 pints/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 and/or when treating more mature and difficult to control weeds or dense vegetative growth.

#### **FALL AND SPRING SEEDED WHEAT**

**DOLEAC DMA** MUST BE APPLIED TO FALL SEEDED WHEAT PRIOR TO THE JOINTING STAGE. APPLICATIONS TO SPRING SEEDED WHEAT MUST BE MADE BEFORE WHEAT REACHES THE 6 LEAF STAGE.

**NOTE:** 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.

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with one or more of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **Broadcast Rate per Treated Acre:**

Apply 2 - 4 fluid ounces Doleac DMA with:

The state of the s		
2,4-D amine or ester	fenoxaprop-ethyl + MCPA	
bromoxynil	fenoxaprop-ethyl + MCPA + 2,4-D	
bromoxynil + MCPA	MCPA amine or ester	
chlorsulfuron	metribuzin	
chlorsulfuron + metsulfuron-methyl	metsulfuron-methyl	
clopyralid	triasulfuron	
clopyralid + 2,4-D	thifensulfuron + tribenuron-methyl	
diuron		

### SPECIAL USE TANK MIXES FOR SPRING AND FALL SEEDED WHEAT (See Footnotes for Applicable Uses)

**Doleac DMA** may be tank mixed with one or more of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **Broadcast Rate per Treated Acre:**

Apply 3 - 41 fluid ounces **Doleac DMA** with:

2,4-D Amine or Ester <sup>2</sup>	MCPA amine or ester <sup>2</sup>	
chlorsulfuron	metsulfuron-methyl	
chlorsulfuron + metsulfuron-methyl	triasulfuron	
glyphosate <sup>3</sup>	thifensulfuron + tribenuron-methyl	

<sup>1</sup> **Doleac DMA** may be used at 6 fluid ounces on fall seeded wheat in Western Oregon as a spring application <u>only</u>. In CO, KS, NM, OK and TX up to 8 fluid ounces of **Doleac DMA** 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. **Doleac DMA** may be tank mixed with 2,4-D amine 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.

2 NOTE: For use on fall seeded wheat only. Do not use unless potential crop injury will be acceptable.

<sup>3</sup> Doleac DMA may be applied at 2 fluid ounces with any glyphosate formulation labeled for use as a preplant application to small grains with no waiting period prior to planting. Read and follow label directions of the tank mix product for adjuvant uses.

#### **FALL SEEDED BARLEY**

**DOLEAC DMA** MUST BE APPLIED TO FALL SEEDED BARLEY PRIOR TO THE JOINTING 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.

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with one or more, but not limited to, of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **Broadcast Rate per Treated Acre:**

Apply 2 - 4 fluid ounces **Doleac DMA** with:

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

#### SPRING SEEDED BARLEY

**DOLEAC DMA** MUST BE APPLIED BEFORE SPRING SEEDED BARLEY EXCEEDS THE 4 LEAF STAGE.

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with one or more of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and



precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **Broadcast Rate per Treated Acre:**

Apply 2 - 4 fluid ounces Doleac DMA with:

bromoxynil	metribuzin
chlorsulfuron	metsulfuron-methyl
chlorsulfuron + metsulfuron-methyl	triasulfuron
MCPA amine or ester	thifensulfuron + tribenuron-methyl

#### **FALL AND SPRING SEEDED OATS**

**DOLEAC DMA** MUST BE APPLIED BEFORE SPRING SEEDED OATS EXCEED THE 5 LEAF STAGE. APPLICATIONS TO FALL SEEDED OATS MUST BE MADE PRIOR TO THE JOINTING STAGE.

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with one or more of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **Broadcast Rate per Treated Acre:**

Apply 2 - 4 fluid ounces **Doleac DMA** with:

MCPA Amine or Ester

#### FALL AND SPRING SEEDED TRITICALE (EXCEPT CALIFORNIA)

#### **EARLY SEASON APPLICATIONS**

Apply 2 - 4 fluid ounces of **Doleac DMA** to triticale.

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

#### TANK MIXES

**Doleac DMA** may be tank mixed with bromoxynil. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **SUGARCANE**

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions. Consult your local or state authorities for possible application restrictions, especially concerning aerial applications and advice concerning special local use situations.

Application made over the top of actively growing sugarcane may result in crop injury. When possible, direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage.

#### **RESTRICTION:**

Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA
per acre with no more than 2 applications per year.

#### **WEEDS CONTROLLED**

**Doleac DMA**, when applied at specified rates, will control many annual, biennial and perennial broadleaf weeds commonly found in sugarcane. (Refer to **WEED LIST**).

#### **RATES AND TIMINGS**

Application of **Doleac DMA** may be made any time after weeds have emerged and are actively growing but before the close-in stage of sugarcane. Application rates and timing of **Doleac DMA** are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

	Broadcast Rate per Treated Acre		
Weed Stage and Type	Amount of Formulated Doleac DMA (pints)	Equivalent Lbs. a.i.	PHI
Annual - Small, actively growing - Established weed growth	1/2 - 1 1 - 1 1/2	1/4 - 1/2 1/2 - 3/4	87 days
Biennial	1 - 2	1/2 - 1	
Perennial	2	1 <sup>1</sup>	

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

2,4-D	asulam
ametryn	atrazine

## PASTURE, HAY, RANGELAND, AND FARMSTEAD (NON-CROPLAND)

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions. **Doleac DMA** is registered for use for pasture, hay, rangeland, farmstead (non-cropland) (including fence rows and non-irrigation ditchbanks) for broadleaf weed and brush control. **Doleac DMA** uses described in this section also pertain to small grains (including barley, forage sorghum, oats, rye, sudangrass or wheat) grown for pasture use only.

**Doleac DMA** may also be applied to non-cropland areas for the control of 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.

#### **PRECAUTIONS:**

- NEWLY SEEDED AREAS, including small grains grown for pasture may be severely injured if rates of **Doleac DMA** greater than 1 pint/A are applied.
- 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. Augustine grass may be injured at rates
  exceeding 1 pint Doleac DMA (1/2 lb. a.i.) per treated acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured.
  Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch and
  other legumes.



#### **RESTRICTIONS:**

- DO NOT REMOVE ANIMALS FROM TREATED AREA FOR SLAUGHTER PRIOR TO 30 Days After Last Application.
- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA per acre with no more than 2 applications per year.

THERE IS NO WAITING PERIOD BETWEEN TREATMENT AND GRAZING FOR NON-LACTATING ANIMALS.

#### TIMING RESTRICTION FOR LACTATING DAIRY ANIMALS FOLLOWING TREATMENT:

Doleac DMA Rate per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint (1/2 lb. a.i.)	7 days	37 days
Up to 2 pints (1 lb. a.i.)	21 days	51 days

#### MIXING AND APPLICATION

**Doleac DMA** can be applied using water, oil in water emulsions including invert systems, or sprayable fluid fertilizer as a carrier. A compatibility test (see **COMPATIBILITY TEST** section) should be made prior to tank mixing.

To prepare oil in water emulsions, half-fill spray tank with water, then add 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.

**Doleac DMA** may be applied broadcast using either ground or aerial application equipment. When using ground equipment, apply 3 to 600 gallons of diluted spray per treated acre. 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. When using aerial equipment apply 2 to 40 gallons of diluted spray per treated acre in a water-based carrier. **Doleac DMA** may be applied to individual clumps or small areas (spot treatment) of undesirable vegetation using handgun or similar types of application equipment. Apply

Herbicide adjuvants or other spray additives (emulsifiers, surfactants, wetting agents, drift control agents, or penetrants) may be used for wetting, penetration, or drift control. Spray additives must be agriculturally approved when used in pasture applications. If spray additives are used, read and follow all use directions, restrictions, and precautions on product label.

diluted sprays to allow complete wetting (up to run off) of foliage and stems.

#### **WEEDS CONTROLLED**

**Doleac DMA**, when applied at specified rates, will give control many annual, biennial, and perennial broadleaf weeds, and many woody brush and vine species commonly found in pasture, hay, rangeland, and farmstead (non-cropland) areas. (Refer to **WEED LIST**). Labeled (\*) perennial weeds may be controlled with lower rates of either **Doleac DMA** or **Doleac DMA** plus 2,4-D. See the following **RATES AND TIMINGS** section.

#### RATES AND TIMINGS

Application rates and timing of **Doleac DMA** are given below. Use the higher level of listed rate ranges when treating dense or tall vegetative growth.

	Broadcast Rate per Treated Acre		
Weed Stage and Type	Amount of Formulated Doleac DMA (pints)	Equivalent Lbs. a.i.	
Annual			
- Small, actively growing	1/2 - 1	1/4 - 1/2	
- Established weed growth	1 - 1 1/2	1/2 - 3/4	
Biennial 1			
Rosette diameter			
- Less than 3 inches	1/2 - 1	1/4 - 1/2	
- 3 inches or more	2	1	
- Bolting	2	1	
Perennial			
- Suppression or top growth control	1 - 2	1/2 - 1	
- Labeled (*) Perennials	2	1	
- Other Perennials	2	1	
Woody Brush & Vines			
- Top Growth Suppression	1 - 2	1/2 - 1	
- Top Growth Control <sup>2</sup>	2	1	
- Stems and Stem Suppression	2	1	

<sup>&</sup>lt;sup>1</sup> For best performance, make application when biennial weeds are in the rosette stage.

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with one or more of the following herbicides for control of grasses, additional broadleaf weeds, and woody brush and vines. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Due to the variations that may occur in formulated products and specific use ingredients (e.g. water supplies), a compatibility test is recommended prior to actual tank mixing. Pasture, hay, rangeland and farmstead (non-cropland) use:

2,4-D	paraquat
glyphosate	picloram
metsulfuron-methyl	triclopyr

#### **CUT SURFACE TREE TREATMENTS**

**Doleac DMA** may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees. A mix of 1 part **Doleac DMA** with 1 to 3 parts water should be used in application. Use the lower dilution when treating difficult-to-control species.

**FRILL OR GIRDLE TREATMENTS:** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint cut surface with the **Doleac DMA**/ water mix.



<sup>&</sup>lt;sup>2</sup> Species labeled in **WEED LIST** section will require tank mixtures for adequate control.

<sup>\*</sup> Rates above 1.0 lb. a.i./A are spot treatments only.

**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, 2,4-D may be added to the Doleac DMA/water mix.

#### DORMANT APPLICATIONS FOR CONTROL OF MULTIFLORA ROSE

**Doleac DMA** can be applied when plants are dormant as an undiluted SPOT-CONCENTRATE directly to the soil or as a LO-OIL BASAL BARK treatment using an oil-water emulsion solution.

SPOT-CONCENTRATE applications of **Doleac DMA** should be applied directly to the soil as close as possible to the root crown but within 6-8 inches of the crown. On sloping terrain, application should be made to the uphill side of the crown. Do not make application when snow or water prevents applying **Doleac DMA** directly to the soil. The use rate of **Doleac DMA** is dependent on the canopy diameter of the multiflora rose. Examples: Use **Doleac DMA** at 1/4, 1 or 2 1/4 fluid ounces of product respectively, for 5, 10 or 15 feet canopy diameters. Do not exceed a total of 2 quarts **Doleac DMA** per acre per year.

LO-OIL BASAL BARK applications of **Doleac DMA** should be applied to the basal stem region from the ground line up to a height of 12 to 18 inches. Spray until runoff, with special emphasis on covering the root crown. For best results, make application when plants are dormant. Do not make application after bud break or when plants are showing signs of active growth. Do not make application when snow or water prevents applying **Doleac DMA** to the ground line. Refer to Mixing and Applications above in this section for method of preparing oil-in-water emulsion. Example for making approximately 2 gallons of a LO-OIL spray solution mixture: combine 1 1/2 gallons water plus 1 ounce emulsifier plus 1 pint **Doleac DMA** plus 2 1/2 pints of No. 2 diesel fuel. Adjust 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.

#### **CONSERVATION RESERVE PROGRAM (CRP) ACRES**

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions. **Doleac DMA** can be used on both newly seeded and established grasses grown in Conservation Reserve or Federal Set-Aside Programs. For program lands, including Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

**Doleac DMA** treatment will injure or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

Agriculturally approved surfactants may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.

Do not use adjuvants containing penetrants such as petroleum based oils after grass emergence on newly seeded grasses.

#### **NEWLY SEEDED AREAS**

**Doleac DMA** 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 **Doleac DMA** greater than 1 pint per treated acre may severely injure newly seeded grasses. Preplant applications – injury to new seedings may occur if intervals between application and grass planting is less than 45 days per pint of **Doleac DMA** per treated acre West of the Mississippi River or 20 days per pint 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.

Augustine grass may be injured when treated with **Doleac DMA** at rates exceeding 1 pint per treated acre.

#### **WEEDS CONTROLLED**

**Doleac DMA**, when applied at specified rates, will control many annual and biennial weeds and provide control or suppression of many perennial weeds. (Refer to **WEED LIST**).

#### **RATES AND TIMINGS**

Application rates and timing of **Doleac DMA** treatment are given below. Use the higher rate of the rate range when vegetation is either dense or tall, or when weeds are growing under stressed conditions such as drought or cool temperature.

#### **RESTRICTION:**

 Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA per acre with no more than 2 applications per year.

	Broadcast Rate per Treated Acre		
Weed Stage and Type	Amount of Formulated Doleac DMA (pints)	Equivalent Lbs. a.i.	PHI
Annual - Small, actively growing - Established weed growth	1/4 - 1 1	1/8 - 1/2 1/2	For grass
Biennial <sup>1, 2</sup> Rosette diameter - Less than 3 inches - 3 inches or more	1/2 - 1 1 - 2	1/4 - 1/2 1/2 - 1	forage: O days For
- Bolting biennial	2	1	grass hay: 7 days
Perennial <sup>2</sup> - Suppression/Control	2	1	Lauyo

<sup>&</sup>lt;sup>1</sup>For best results, treat Biennial weeds with **Doleac DMA** when they are in the rosette stage of growth.

#### TANK MIX TREATMENTS

To control grasses and additional broadleaf weeds, **Doleac DMA** may be tank mixed with other herbicides registered for use in Conservation Reserve Programs such as 2,4-D, glyphosate, paraquat, metsulfuron, and others. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### ASPARAGUS (FOR USE ONLY IN THE STATES OF CALIFORNIA, OREGON, AND WASHINGTON)

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions. **NOTE:** If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

#### **RESTRICTIONS:**

- Do not harvest prior to 24 hours after treatment.
- Do not use in the Coachella Valley of California.
- A retreatment may be made if needed; however, DO NOT EXCEED a total of 1 pint (1/2 lb. a.i.) of **Doleac DMA** per treated acre per crop year.



<sup>&</sup>lt;sup>2</sup> Biennial and Perennial weeds will require follow-up (sequential) treatments for seedling control and escapes.

#### **RATES AND TIMINGS**

Apply **Doleac DMA** to emerged and actively growing weeds in 40 to 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting.

#### **TANK MIXING**

**Doleac DMA** may be tank mixed with 2,4-D or glyphosate for improved control of labeled (\*) weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Weeds	Doleac DMA Rate per Treated Acre
Mustard, Black Pigweed, Redroot (Carelessweed) Sowthistle, Annual * Thistle, Canada Thistle, Russian	1/2 - 1 pt. (1/4 - 1/2 lb. a.i.)
* Bindweed, Field Chickweed, Common Goosefoot, Nettleleaf Radish, Wild Thistle, Milk	1 pt. (1/2 lb. a.i.)

#### TURF AND LAWNS (FOR USE IN FARMSTEAD (NON-CROPLAND) AND SOD FARMS)

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions. To avoid injury to newly seeded grasses, application of **Doleac DMA** should be delayed until after the second mowing. Further-more, application rates in excess of 1 pint (1/2 lb. a.i.) per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustine grass. In areas where roots of sensitive plants extend, do not apply in excess of 1/4 pint (1/8 lb. a.i.) of **Doleac DMA** per treated acre on coarse textured (sandy-type) soils, or in excess of 1/2 pint (1/4 lb. a.i.) per treated acre on fine textured (clayey-type) soils. Do not make repeat applications in these areas for 30 days and until previous applications of **Doleac DMA** have been activated in the soil by rain or irrigation.

#### **WEEDS CONTROLLED**

**Doleac DMA**, when applied at specified rates, will give control of many annual, biennial, and labeled (\*) perennial broadleaf weeds commonly found in turf. **Doleac DMA** will also give growth suppression of many other listed perennial broadleaf weeds and woody brush and vine species. (Refer to **WEED LIST**).

#### MIXING AND APPLICATION

Apply 30 to 200 gallons of diluted spray per treated acre (3 qts. to 4 1/4 gals. per 1,000 sq. ft.), depending on density or height of weeds treated and on the type of equipment used.

#### RATES AND TIMINGS

Use the higher level of listed rate ranges when treating dense vegetative growth. For best performance, apply when weeds are emerged and actively growing.

#### RESTRICTION:

 Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA per acre with no more than 2 applications per year.

	Doleac DMA Herbicide		
Weed Stage and Type	Pints per	Lbs. a.i. per	Teaspoons per
	Treated Acre	Treated Acre	1,000 sq. ft.
Annual - Small, actively growing - Established weed growth	1/4 - 1	1/4 - 1/2	1 - 2 1/4
	1 - 1 1/2	1/2 - 3/4	2 1/4 - 3 1/4
Biennial Rosette diameter - Less than 3 inches - 3 inches or more	1/2 - 1	1/4 - 1/2	1 - 2 1/4
	1 - 2	1/2 - 1	2 1/4 - 4 1/2
Perennial and Woody - Brush and Vines	1 - 2	1/2 - 1	2 1/4 - 4 1/2

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with 2,4-D, MCPA, MCPP, or bromoxynil for control of additional weeds listed on the tank mix product label. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management fromanother).

Apply 1/5 to 1/2 pint (1/10 to 1/4 lb. a.i.) of **Doleac DMA** per treated acre with the labeled rate of 2,4-D, MCPA, MCPP, or bromoxynil.

#### **RESTRICTION:**

Repeat treatments may be made as needed; however, DO NOT EXCEED 2 pints (1 lb. a.i.)
 of **Doleac DMA** per treated acre during the growing season.

# GRASS SEED CROPS (GRASSES GROWN FOR SEED INCLUDING BERMUDA GRASS, BLUEGRASS, FESCUE AND RYEGRASS)

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions. Refer to the PASTURE, HAY, RANGELAND, AND FARMSTEAD (NON-CROPLAND AREAS) section for possible grazing and feeding restrictions.

Do not use on bentgrass unless possible crop injury can be tolerated.



#### **WEEDS CONTROLLED**

**Doleac DMA** will provide control or suppression of annual broadleaf weeds listed below. For improved control of listed weeds plus additional weeds, it is recommended that **Doleac DMA** be applied in a tank mix with other herbicides.

Alfalfa <sup>1</sup>	Hemlock, Poison
Bedstraw, Catchweed	Knapweed, Russian <sup>1</sup>
Bindweed, Field	Knawel
Buttercup, Corn	Kochia
Buttercup, Creeping	Knotweed, Prostrate
Buttercup, Western Field	Ladysthumb
Catchfly, Nightflowering	Lambsquarters, Common
Chamomile, Corn	Lettuce, Prickly
Chickweed, Common	Mayweed (Dogfennel)
Chickweed, Mouseear	Ragwort, Tansy
Clover	Sorrel, Red (Sheep Sorrel)
Cockle, White	Sowthistle, Annual
Dock, Broadleaf	Starwort, Little
Dock, Curly	Thistle, Canada <sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Top growth control only.

#### **RATES AND TIMINGS**

Apply 1/2 to 1 pint of **Doleac DMA** per treated acre on seedling grass after the crop reaches the 3 - 5 leaf stage. Apply up to 2 pints of **Doleac DMA** on well-established Perennial grass. DO NOT APPLY AFTER THE GRASS SEED CROP BEGINS TO JOINT. For best performance, make applications when weeds are in the 2 - 4 leaf stage and rosettes are less than 2 inches across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

#### **RESTRICTION:**

Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA
per acre with no more than 2 applications per year.

#### TANK MIX TREATMENTS

For control of grasses or additional broadleaf weeds, **Doleac DMA** may be tank mixed with all broadleaf herbicides registered for use in Grass Seed Production. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **Broadcast Rate per Treated Acre:**

Apply 1/2 to 2 pints Doleac DMA with:

2,4-D amine or ester	Diuron
Bromoxynil	MCPA
Clopyralid	

#### **ANNUAL GRASS CONTROL**

For suppression of annual grass weeds such as Downy brome (Cheatgrass), Ripgut brome, Rattail fescue, and Windgrass.

Apply up to 2 pints (1 lb. a.i.) of **Doleac DMA** per treated acre in the fall or late summer after harvest and burning of established grass seed crops (maximum of 2 treatments per year). Applications should be made immediately following first irrigation when the soil is moist and before weeds have more than 2 leaves.

PREPLANT DIRECTIONS FOR BROADLEAF WEED CONTROL BEFORE WHEAT, CORN, SORGHUM, SOYBEANS (POST HARVEST/FALLOW/CROP STUBBLE/SET-A-SIDE)

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions.

#### **WEEDS CONTROLLED**

**Doleac DMA** may be applied alone or in tank mix combinations with other herbicides registered for this use.

**Doleac DMA** can be applied either post harvest in the fall, spring or summer during the fallow period or to crop stubble/set-a-side acres. **Doleac DMA**, when applied at the specified rates, will control many annual broadleaf weeds; see the **WEEDS CONTROLLED** section under small grains. In addition, **Doleac DMA** will control or suppress the following biennial and perennial broadleaf weeds:

Alfalfa 1	Nightshade, Silverleaf
Artichoke, Jerusalem	Redvine
Bindweed, Field	Smartweed, Swamp
Bindweed, Hedge	Sowthistle, perennial <sup>1</sup>
Blueweed, Texas	Spurge, leafy
Bursage (Bur Ragweed) (Povertyweed) (Lakeweed) <sup>1</sup>	Thistle Bull
Dandelion, Common <sup>1</sup>	Thistle, Canada <sup>2</sup>
Dock, Curly <sup>1</sup>	Thistle, Milk
Dogbane, Hemp	Thistle, Musk
Garlic, Wild <sup>2</sup>	Thistle, Plumeless
Horsenettle, Carolina	Thistle, Scotch
Knapweed, Diffuse	Trumpetcreeper (Buckvine)
Knapweed, Spotted	

<sup>&</sup>lt;sup>1</sup>Perennials may be controlled using **Doleac DMA** at rates lower than those labeled for other listed perennial weeds. (See **RATES AND TIMINGS** under this heading.)



<sup>&</sup>lt;sup>2</sup> See the SPECIAL TANK MIX TREATMENTS section under this heading for specific control programs for these weeds.

#### **RATES AND TIMINGS**

Apply **Doleac DMA** as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (post harvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer. Agriculturally approved spray additives, such as surfactants or oils, may be used to enhance spray coverage and the herbicide's penetration of weed foliage. See **CROPPING RESTRICTIONS** for labeled interval between application and planting to prevent crop injury.

For best performance, make application when annual weeds are less than 6 inches 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. Most effective control of upright perennial broadleaf weeds, such as Canada thistle and Jerusalem artichoke, occurs if application is made when the majority of weeds, such as field bindweed and hedge bindweed, are best controlled when weeds are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds which develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for **Doleac DMA**. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of **DICAMBA** 4 DMA, see the **RATE AND TIMINGS** section under the **SMALL GRAINS** heading for details.

#### DOLEAC DMA RATES PER TREATED ACRE

#### RESTRICTION:

Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA
per acre with no more than 2 applications per year.

Weed Type	Doleac DMA per Acre per Application
Annual	1/2 - 1 pt (8 - 16 fl. oz.)
Biennial	1 - 2 pts (16 - 32 fl. oz.)
Perennial	1 - 4 pts (16 - 64 fl. oz.)
Perennial suppression	1 - 2 pts (16 - 32 fl. oz.)
Labeled (1) perennials	2 pts (32 fl. oz.)
Other perennials	2 pts (32 fl. oz.)

#### TANK MIX TREATMENTS

**Doleac DMA** may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### Annual Weed Control -Broadcast Rate per Treated Acre:

Apply 1/4 to 1 pint Doleac DMA with one or more of the following:

2,4-D	Metsulfuron-methyl
Atrazine	Paraquat
Chlorsulfuron + metsulfuron-methyl	Pronamide
Glyphosate	Triasulfuron
Metribuzin	

#### Biennial and Perennial Weed Control -Broadcast Rate per Treated Acre:

Apply 1 to 2 pints (0.5-1.0 lb. a.i.) of **Doleac DMA** with one or more of the following:

2,4-D	Glyphosate
Chlorpyralid	Picloram

#### **SPECIAL TANK MIX TREATMENTS**

For suppression of perennial weeds, apply 1/2 - 1 pint of **Doleac DMA** per acre with the labeled rate of glyphosate.

For wild garlic control, apply 1 pint **Doleac DMA** per acre with the labeled rate of 2, 4-D LV Ester. Apply when wild garlic is 4 to 8 inches tall.

For Canada thistle control, use **Doleac DMA**, or **Doleac DMA** plus Curtail® or **Doleac DMA** plus glyphosate herbicide or glyphosate tank mix treatments.

Application may be made during fallow periods for control of volunteer barley, bulbous bluegrass, downy brome, jointed goatgrass, common rye and volunteer wheat when they are actively growing. Use 1 pint **Doleac DMA** per acre with the labeled rate of pronamide. Fall seeded wheat may be planted 9 months or more after application. For best performance, make application between mid-October and mid-December, prior to soil freeze up.

During fallow periods, apply **Doleac DMA** plus glyphosate + 2,4-D to give improved control of kochia, wild buckwheat, prickly lettuce, field bindweed and Canada thistle. Use 1/8 - 1/4 pint of **Doleac DMA** per acre plus the labeled rate of glyphosate + 2,4-D for annual weed control or 1/4 to 1/2 pint **Doleac DMA** per acre plus the labeled rate of glyphosate + 2,4-D for perennial weed suppression.

#### **CROPPING RESTRICTIONS**

The following use directions are based on a maximum single application rate of 1.0 lb. a.i. per acre and a maximum annual rate of 2.0 lbs. a.i. per acre per year.

**CORN, SORGHUM** and **SOYBEANS** may be planted in the spring following applications made during the previous year. If less than 1 inch of rainfall occurs between application and first killing frost, treated areas should be cultivated to allow herbicide to come in contact with moist soil. Cultivation may take place before or immediately after ground thaw.

Soybean injury may occur if the interval between application and planting is less than specified. In areas with greater than 30 inches of rainfall, delay planting for 30 days per pint of **Doleac DMA** per treated acre. In areas with less than 30 inches of rainfall, delay planting for 45 days per pint of **Doleac DMA** per treated acre. Exclude days when ground is frozen.

**WHEAT** may be planted in the fall or spring following applications. Also, spot applications may be made any time prior to crop emergence if crop injury can be tolerated in treated areas. Wheat injury may occur if the interval between application and planting is less than specified.



East of the Mississippi River, the interval is 20 days per pint of **Doleac DMA** per treated acre or 1.25 days per 1 ounce. Moisture is essential for **Doleac DMA** degradation. Exclude days when ground is frozen.

West of the Mississippi River, the interval is 45 days per pint of **Doleac DMA** per treated acre or 3 days per ounce. Moisture is essential for **Doleac DMA** degradation. Exclude days when ground is frozen.

Following a normal harvest of barley, oats, or wheat, any rotation crop may be planted. If the interval before harvest is shortened, such as when cover crops will be plowed under, do not follow up with the planting of a sensitive crop.

### CONTROL OF PERENNIAL BROADLEAF WEEDS IN CROPLAND (SPOT APPLICATION ONLY)

FOR USE ONLY IN THE STATES OF IDAHO, MONTANA, NEVADA, OREGON, UTAH AND WASHINGTON.

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions.

#### **RESTRICTIONS:**

- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Doleac DMA per acre with no more than 2 applications per year.
- Do not treat subirrigated cropland or areas where the soil remains saturated with water throughout the year.

**NOTE:** Do not use unless injury to wheat or rotated barley will be acceptable. Application may be made up to one month prior to the planting of wheat.

#### WEEDS CONTROLLED

**Doleac DMA**, when applied at specified rates, will control many broadleaf weeds including:

Bindweed, Field	Knapweed, Russian
Dock, Broadleaf (Bitterdock)	Ragwort, Tansy
Dock, Curly	Spurge, Leafy
Knapweed, Black	Thistle, Canada

#### **RATES AND TIMINGS**

**Doleac DMA** may be applied at any time following a crop harvest to stubble, fallow or other cropland. Application should be made when weeds are actively growing and prior to a killing frost.

Barley, oats, corn, sorghum (milo), annual or perennial grass crops may be planted into treated areas one year after application. Do not plant crops grown for seed (other than perennial grass seed) into treated areas until three years after application. Do not plant broadleaf crops such as alfalfa, beans, peas, potatoes, or sugarbeets into treated areas until two years after application.

In most cases, treatments will not kill perennial weed seedlings, which germinate from seed one or two years after treatment. Once the effect of the chemical has been lost, a follow-up program for seedling control or other cultural practices should be instituted.

#### WIPER APPLICATION

**IMPORTANT:** Observe all restrictions, precautions, mixing, and application instructions. **Doleac DMA** may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution containing 1 part **Doleac DMA** to 1 part water. Do not contact desirable vegetation with herbicide solution. Only make wiper application to crops (including pastures) and non-cropland areas described in this label with the exception of grain sorghum (milo).

#### STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

Store in original containers in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross- contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

#### PESTICIDE DISPOSAL

Triple rinse pesticide from containers and use rinsates in the pesticide application. Wastes which cannot be used according to label instructions must be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER HANDLING**

**Non-refillable containers. Plastic or Metal.** Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, such as burning of plastic containers. If burned, stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

Non-refillable container less than or equal to 5 gallons: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation 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 container greater than 5 gallons: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water. 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 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 formulation 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 formulation equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over formulation equipment or mix tank or collect rinsate for later use or 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 and bulk):** Refill this container with pesticide only. Do not reuse this container for any other purpose. Empty containers retain vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the container into formulation equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with pump for 2 minutes. Pour or pump rinsate into formulation equipment or rinsate collection system. Repeat this rinsing process two more times.



#### LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire DIRECTIONS FOR USE, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

#### REGISTERED TRADEMARKS

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