

33658-18

07/28/2008

1/21



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Gharda Chemicals Ltd.
660 Newtown-Yardley Rd., Suite 106
Newtown, PA 18940

JUL 28 2008

Subject: EPA Reg. 33658-18 (Gharda Dicamba + 2,4-D DMA Herbicide) 2,4-D RED Label Amendment

The labeling referred to above is in compliance with the 2,4-D RED provided that you:

- 1) Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
- 2) Please note: Final product reregistration can't be considered until after all active ingredients in this product are eligible for reregistration.

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

- 3) To the first page of the label add the EPA Establishment number and the EPA Registration number.
- 4) Per the acute toxicity review, delete the text "Wear goggles." from the Hazards to Humans and Domestic Animals section (since this information is addressed under the PPE section).
- 5) The PPE section must be revised to read as follows:

"Some materials that are chemical-resistant to this product are any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

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

- long-sleeved shirt and long pants
- shoes and socks
- chemical-resistant gloves
- protective eyewear (goggles or face shield), and
- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements."

- 6) The mechanical transfer text (the second and third paragraph) under the Engineering Control Statement is not required. In addition, add the following statement to the Engineering Control Statement:

"Pilots must use an enclosed cockpit which meets the requirements listed in the WPS for agricultural pesticides

[40 CFR 170.240(d)(6)].”

7) The User Safety Requirements text must be revised to include the bolded word below:

“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.”

8) Revise the User Safety Recommendations to include the bolded text below:

“User Safety Recommendations

User should wash hands before, eating, drinking, chewing gum, tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.”

9) Revise the Environmental Hazards section of the label to read as follows:

“This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

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

Note: Any additional non-conflicting text currently on the label may be retained in this section. Specifically, the text “may adversely affect non-target plants” although not required, may be retained following the text “...aquatic invertebrates.”

10) The early entry PPE must be revised to read:

- coveralls worn over short-sleeve shirt and short pants,
- chemical-resistant footwear plus socks,
- chemical-resistant gloves made of any water-proof material,
- chemical-resistant headgear for overhead exposure,
- protective eyewear.”

11) A Non-Agricultural Use Requirements box must be added to label with the following entry restriction text:

“NON-AGRICULTURAL USE REQUIREMENTS

3/21

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter or allow people (or pets) to enter the treated area until sprays have dried.”

12) With the exception of drift-related text appearing in the Environmental Hazards (“Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas”) and General Precautions and Restrictions (“Do not apply this product in a way that will contact workers or other persons, either directly or through drift”), all drift text appearing on the label must be placed together and be located below the following required text. Any conflicting text must be deleted from the label.

Spray drift text must be added to the label and must read:

“Spray Drift Management

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

Droplet Size

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

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

Wind Speed

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

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

4/21

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

For aerial application:

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

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

For ground boom application:

Do not apply with a nozzle height greater than 4 feet above the crop canopy.”

13) - Under **Between Crop Applications** in Table 5 and in the crop-specific information section, revise the maximum rate per acre per application from 6 pints to 5.6 pints. In addition, add the following restrictions to this section:

“Only labeled crops can be planted within 30 days of application.
Limited to 2 applications per year.
Minimum of 30 days between applications.”

- Under the **Pasture (hay silage)** section, add the following restrictions (and delete any contradictory information currently on the label):

“For susceptible annual and biennial broadleaf weeds do not exceed 2.8 pints per acre per application. For moderately susceptible biennial and perennial broadleaf weeds and woody plants, do not exceed 5.6 pints per acre per application.

For spot treatment do not exceed 5.6 pints per acre.

Maximum of 2 applications per year.

Maximum of 11.2 pints per acre per year.

Minimum of 30 days between application.

If grass is to be cut for hay, Agricultural Use Restrictions for the Worker Protection Standard are applicable.”

- Under the **Sugarcane** section, add the following restrictions (and delete any contradictory information currently on the label):

“Do not harvest cane prior to crop maturity.

5/21

Do not apply more than 11.2 pints per acre per crop cycle.

Preemergence: Limited to one application per crop cycle. Maximum of 5.6 pints per acre per application.

Postemergence: Limited to one application per crop cycle. Maximum of 5.6 pints per acre per application.”

- Under the **Sorghum** section, add the following restrictions (and delete any contradictory information currently on the label):

“The preharvest interval is 30 days.

Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.

Postemergence: Limited to one application per crop cycle. Maximum of 2.8 pints per acre per application.”

Also correct the typographical error under **Sorghum** in Table 5.

- Under the **Wheat** section, add the following restrictions (and delete any contradictory information currently on the label):

“The preharvest interval (PHI) is 14 days.

Postemergence:
Limited to one postemergence application per crop cycle.
Maximum of 3.4 pints /acre per application.

Preharvest:
Limited to one preharvest application per crop cycle.
Maximum of 1.4 pints /acre per application.

Limited to 4.8 pints /acre per crop cycle.”

- Under the **Conservation Reserve Programs and General Farmstead** section, add the following restrictions (and delete any contradictory information currently on the label):

“Postemergence (annual and perennial weeds):
Limited to 2 applications per year.
Maximum of 5.6 pints /acre per application.
Minimum of 30 days between applications.

Postemergence (woody plants):
Limited to 1 application per year.
Maximum of 11.2 pints /acre per year.

Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

6/21

Page 6
EPA Reg. 33658-18

For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.”

- Under the **Dormant Basal Applications** and **Cut Surface Treatments** sections, add the following (forestry) restrictions:

“Limited to one basal spray or cut surface application per year.

Maximum of 22 pints per 100 gallons of spray solution.”

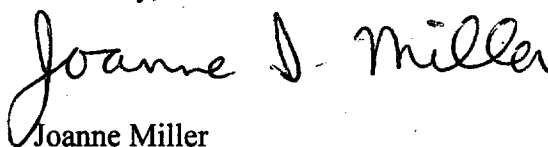
14) To the Warranty section add “to the extent consistent with applicable law” in front of “in no case shall Seller”.

Submit one copy of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have any questions please call Erik Kraft at 703-308-9358 or email at Kraft.Erik@epa.gov.

Sincerely,



Joanne Miller
Product Manager 23
Herbicide Branch
Registration Division (7505P)

rec'd 1-29-08
7/21



Gharda Chemicals Limited

Gharda Dicamba + 2,4-D DMA

Herbicide

For use on Conservation Reserve Program Land, Fallow Systems (Between Crop Applications), General Farmstead, Sorghum, Grass (Hay or Silage), Pastures, Rangeland, Sugarcane, and Wheat

Active Ingredients: *

Dimethylamine salt of dicamba (3,6-dichloro-o-anisic acid)	12.4%
Dimethylamine salt of 2,4-dichlorophenoxyacetic acid**	35.7%

Inert Ingredients:	<u>51.9%</u>
Total:	100.0%

* This product contains 10.3% dicamba or 1 pound per gallon (120 grams per liter) and 29.6% 2,4-D or 2.87 pounds per gallon (344 grams per liter).

** Isomer speck by AOAC method 978.05, 15th Edition.

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.)

See inside booklet for complete Precautionary Statements, Statement of Practical Treatment, Directions For Use, and Conditions of Sale and Warranty.

Shake well before using.

Net contents: TBA

ACCEPTED
with COMMENTS
in EPA Letter Dated

JUL 28 2008

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

33658-18

**Gharda Chemicals Limited
660 Newtown-Yardley Rd.
Newtown, PA 1894**

FIRST AID	
If in eyes	<ul style="list-style-type: none"> ▪ Hold eye open and rinse slowly and gently with water for 15-20 minutes. ▪ Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. ▪ Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> ▪ Call a poison control center or doctor immediately for treatment advice. ▪ Have person sip a glass of water if able to swallow. ▪ Do not induce vomiting unless told so by a poison control center or doctor. ▪ Do not give anything by mouth to an unconscious person
If on skin or clothing	<ul style="list-style-type: none"> ▪ Take off contaminated clothing ▪ Rinse skin immediately with plenty of water for 15-20 minutes ▪ Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> ▪ Move person to fresh air. ▪ If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth to mouth, if possible. ▪ Call as poison control center or doctor for further treatment advice.
<p>Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.</p>	
<p>HOT LINE NUMBER</p>	
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. For Emergency medical treatment information call Prostar at: 1-866 359-5660</p>	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER. Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Wear goggles. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin. Avoid breathing spray mist.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves Category A
- Shoes plus socks
- Protective eyewear

Mixers and loaders who do not use a mechanical system (probe and pump) must wear:

- Coveralls
- Chemical-resistant apron

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not re-use them. Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

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 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

• **For containers of 5 gallons or more:** Do not open pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

• **For containers greater than 1 gallon but less than 5 gallons:** When handlers use a mechanical system probe and pump), enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing 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

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. 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. Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Endangered Species Concerns

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

8/21

Storage and Disposal

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

Pesticide Storage: Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. Storage below 20°F may result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

Pesticide Disposal: Open dumping is prohibited. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal

Nonrefillable containers 5 gallons or less: Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Container Cleaning

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: 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 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 containers 5 gallons or larger: Refillable containers. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Container Cleaning

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

SPILLS: For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the CHEMTREC Emergency Response for decontamination procedures.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

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 also contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI of **48 hours**. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical resistant gloves Category A
- Shoes plus socks
- Protective eyewear

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.

General Information

Dicamba + 2,4-D DMA is a selective postemergence herbicide for controlling a wide spectrum of annual, biennial, and perennial broadleaf weeds and brush in grass forages and selected row crops.

Mode of Action

Dicamba + 2,4-D DMA contains two active ingredients: dicamba and 2,4-D. **Dicamba + 2,4-D DMA** is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. **Dicamba + 2,4-D DMA** 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.

Application Instructions

Apply **Dicamba + 2,4-D DMA** at the rates and growth stages listed in Tables 1 and 2 as follows unless instructed differently by Section VI or VII. (Food/Feed Crop Specific Information or Non-Food/Feed Use Specific Information). Applications can be made to actively growing weeds as aerial, broadcast, band, or spot spray applications. Dicamba 2,4-D Amine may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in preplant or pre-emergence uses for all crops listed on this label. Postemergence uses with sprayable fluid fertilizer may be made on pasture, hayland, or wheat crops only. The most effective application rate and timing varies based on the target weed species (refer to **Table 1**). In mixed populations of weeds the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size stated and will prevent adequate control.

Irrigation

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

Spray Coverage

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

Sensitive Crop Precautions

Dicamba + 2,4-D 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, stem or foliage. These plants are most sensitive to **Dicamba + 2,4-D DMA** during their development or growing stage. Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of **Dicamba + 2,4-D DMA** herbicide with the roots of desirable plants such as trees and shrubs.

- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if it is gusty or in excess of 5 mph and moving in the direction of nearby sensitive crops or if a temperature inversion exists. However, always make applications when there is some air movement to determine the direction and distance of possible spray drift. Coarse sprays are less likely to drift out of the target area than fine sprays. Agriculturally approved drift reducing additives may be used.
- Do not use aerial equipment or apply **Dicamba + 2,4-D DMA** herbicide when sensitive crops and plants are growing in the vicinity of the area to be treated.

Aerial Application Methods and Equipment

Water Volume:

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

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Make applications at the lowest safe height to reduce the exposure of spray droplets to evaporation and wind. The applicator must follow the most restrictive use cautions to avoid drift hazards, including those

found in this labeling as well as applicable state and local regulations and ordinances. Do not use aerial equipment if spray particles can **Dicamba + 2,4-D DMA** be carried by the wind into areas where sensitive crops or plants are growing a when temperature inversions exist.

Ground Application (Banding)

When applying **Dicamba + 2,4-D DMA** 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 5-40 gallons of spray solution per 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.

Spot or Small Area Application

Dicamba + 2,4-D DMA may be applied to individual dumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack, or other small capacity sprayers, prepare a solution of **Dicamba + 2,4-D DMA** in water according to **Table 3** (assuming that the spot treatment rate equates to 60 gallons per acre on the broadcast basis.) Adding a surfactant (0.5% by volume) can help improve control. For example, 5 gallons (40 pints or 640 fluid ounces) of herbicide solution would require 0.2 pints (3.2 fluid ounces) of surfactant.

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

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

Table 3. Knapsack Sprayer Dilution Instructions

Sprayer capacity(gallons of water)	Amount of Dicamba + 2,4-D DMA to add to the spray tank.
1 gallon	1 fluid ounce*
3 gallons	3 fluid ounces
5 gallons	5 fluid ounces
1 fluid ounce = 2 table spoons	

11/21

Table 1. Application and Timing – Annual Weeds

Weeds controlled (including ALS and triazine resistant)	Dicamba + 2,4-D DMA herbicide Rate per Acre (according to weed growth stage)					
	.5 pint	1 pint	1.5 pints	2 pints	3 pints	4 pints
Beebalm, Spotted	-	-	-	Pre bloom	Post bloom	-
Broomweed	1-3"	3" branching	-	Branching	-	After branching
Buckwheat, Wild	-	1-6"	-	-	-	-
Buffalo Bur	-	-	-	1-6"	-	After flowering
Burdock	-	Pre flower	-	-	-	-
Butter Cup	-	Pre flower	-	Early bloom	Late bloom	-
Chickweed, Common	-	Seedling	1-3"	-	-	-
Cockle, Cow	-	<3"	-	-	-	-
Cocklebur, Common	-	1-6"	6-12"	12-18"	-	-
Coreopsis, plain	-	1-6"	-	-	-	-
Croton, Woolly	1-4"	4-12"	12-30"	-	-	-
Devils Claw	-	-	-	<8"	--	-
Dogfennel	-	-	-	10-15"	-	-
Evening Primrose	-	<2"	-	2-6"	-	-
Flax	-	<2"	-	-	-	-
Fleabane, Annual	-	1-4"	4-8"	8"	-	-
Flixweed	-	<3"	-	-	-	-
Henbit	-	-	Preflower	-	Flower	-
Knotweed spp.	-	<3" runners	-	>3" runners	-	Actively growing
Kochia	-	1-6"	6-10"	10-20"	-	Actively growing
Lambsquarters, Common	-	1-6"	6-10"	10-20"	-	Actively growing
Mallow, Common	-	<3"	-	-	-	-
Morning glory, Ivyleaf	-	Pre flower	-	-	--	-
, Tall	-	Pre flower	-	Post flower	-	-
Mustards, Annual	-	Rosette	-	Early bolt	-	-
, Tansy	-	<3"	-	-	-	-
Pennycress, Field	-	-	-	Rosette	-	-
Pepperweed, Virginia	-	-	1-3"	3-6"	After branching	-
Pigweed, Prostate	-	<3"	-	-	-	-
, Redroot	-	<3"	3-10"	-	-	-
, Smooth	-	<3"	-	-	-	-
, Tumble	-	<3"	-	Mature	-	-
Poorjoe	-	Prior to flower	-	-	-	Actively growing
Purslane, Common	-	<3"	3-8"	-	-	-
Ragweed, Common	-	-	-	>10"	-	-
Western, Lanceleaf	1-3"	3-6"	6-10"	Actively growing	-	-
Sedge ¹	-	-	-	-	-	-
Shepherdspurse	-	Rosette	-	-	-	-
Smartweed, Pennsylvania	-	4"	-	-	4-12"	-
Sneezeweed, Bitter	-	1-4"	Prior to flower	Flower	-	-
Sowthistle	-	Rosette	-	Bolting	-	-
Sunflower	-	1-3"	3-6"	6-24"	-	-
Thistle, Russian	-	-	-	Rosette	-	-
Velvetleaf	-	<6"	6-20"	>20"	-	-

¹For use in non food/feed crop only. Adding crop oil concentrate has shown to improve performance on actively growing annual sedge.

12/21

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

Weeds controlled	Dicamba + 2,4-D DMA rate per acre (according to weed growth stage)					
	0.5 pint	1 pint	1.5 pints	2 pints	3 pints	4-6pints
Bindweed, Field	-	-	-	-	-	Actively growing
Bittercress	-	2-3"	-	-	-	-
Buckeye species ¹	-	-	-	-	Full leaf	-
Bullnettle ²	-	-	-	Flower	-	-
Chicory	-	-	-	-	Early bolting	-
Clover, Bur	-	-	Pre flower	-	-	-
Dandelion, Common	-	rosette	-	Bolting	-	-
Dewberry, Southern ¹	-	-	-	-	-	Spring or fall
Dock, Curly	-	-	Prior to bolting	-	After bolting	-
Elderberry ²	-	-	-	-	-	Actively growing
Goldenrod, Missouri	-	-	-	3-15"	Flower	-
Goldenweed, Common	-	-	-	-	-	Actively growing
Groundsel Texas	-	Rosette	Post-bolting	-	-	-
Honeysuckle, hairy	-	-	-	-	Spring or fall	-
Horsenettle, Carolina ¹	-	-	-	-	-	Flower or berry
Ivy, poison	-	-	-	After bloom	-	-
Knapweed, Black ²	-	-	-	-	-	Actively growing
, Russian ² ,	-	-	-	-	-	Actively growing
, Spotted	-	-	-	-	-	Actively growing
Marshelder	-	-	-	<12"	<12" prebloom	-
Mesquite	-	-	-	-	-	45-90days after bud break
Milkweed Antelopehorn ¹	-	-	-	Pre-flower	-	Flower
Noghtshade, Silverleaf ¹ ,	-	-	-	Full flower	-	-
, Black ¹	-	-	-	Full flower	-	Actively growing
Persimmon, Eastern ³	-	-	-	-	-	Actively growing
Prickly Lettuce	-	-	-	Rosette	-	Actively growing
Rabbitbrush ²	-	-	-	-	-	-
Ragwort, Tansy	-	-	-	Rosette	-	Actively growing
redvine ²	-	-	-	-	-	Actively growing
Sagebrush, Fringed ²	-	-	-	-	-	Actively growing
Smartweed	-	-	-	-	-	-
Sorrel, Red	-	-	Rosette	Bolting	Flower	Actively growing
Sowthistle ²	-	-	-	-	-	Actively growing
Spurge, Leafy ²	-	-	-	-	-	Full leaf
Tallow Tree, Chinese ⁴	-	-	-	-	-	-
Thistle, Bull	-	-	Rosette	Bolting	-	Actively growing
Canada ²	-	-	-	-	-	-
Musk	-	-	-	Rosette/bolting	-	-
Plumless	-	-	Rosette	Bolting	-	-
Vetch, Hairy	-	1-4"	4-8"	8" full flower	-	-
Yankee weed	-	-	-	10-18"	-	-
Yellow Starthistle ¹	-	-	-	-	-	-

¹ may require repeat applications

² recommended rate will provide top growth suppression only

³ for improved root kill or woody species such as mesquite and eastern persimmon, spray 4 pints of per acre **Dicamba + 2,4-D DMA** each year for 3 consecutive years. For increased control of weeds such as blackberry and dewberry, **Dicamba + 2,4-D DMA** may be tank mixed with **Ally® herbicide** (0.1-0.2 ounces per acre), if labeled for the use site.

⁴ Under dense populations, a second application may be needed for the following growing season.

Additives

To improve burn down of emerged weeds, surfactants and/or low use rate of liquid fertilizers(28-0-0, 32-0-0), or crop oil concentrate may be used with **Dicamba + 2,4-D DMA** herbicide or tank mixes after the weeds have emerged. Crop oil concentrate is for non food/feed purposes only. Do not apply tank mixes that include ammonium sulfate or crop oil concentrate to any food/feed crop use listed on this label. For food/feed uses crop uses, do not use liquid fertilizers that contain ammonium sulfate(AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances. Consult your local representative for recommendations for your area. For additional information, see **Compatibility Test for Mix Components**.

Oil concentrate

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

- Be nonphytotoxic
- Contain only EPA exempt ingredients
- Provide good mixing quality in the jar test, and
- Be successful in local experience

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

Compatibility Test for Mix Components.

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

Nitrogen Source

- **Sprayable liquid fertilizers:** Use one quart of sprayable liquid fertilizers (28-0-0, 32-0-0) per acre. Do not use brass or aluminum nozzles when spraying fertilizers.

Nonionic Surfactant

The standard label recommendation is 2-4 pints of an 80% active nonionic spray surfactant per 100 gallons of water. For certain weeds, use a higher spray surfactant rate.

Table 4. Additive Rate Per Acre

Additive	Rate Per Acre
Nonionic Surfactant	2-4 pints per 100 gallons
Sprayable liquid fertilizer (28-0-0, 32-0-0)	2-4 quarts
Crop Oil Concentrate	1 quart*

*see manufacturer's label for specific rate recommendations.

General Tank Mixing Information

Tank Mix Partners/Components

The following products may be tank mixed with **Dicamba + 2,4-D DMA** according to the specific tank mixing instructions in this label and respective product labels.

- Aim (carfentrazone-ethyl)
- Ally (metsulfuron-methyl)
- Amber (triasulfuron)
- Asulox (asulam)

- Atrazine
- Banvel (dicamba)
- Basagran (bentazon)
- BronatW (bromoxynl + MCPA)
- Buctril (bromoxyno)
- Canvas (thifensulfuron +
- Claritx (dicamba)
- Curtail (clorpyrabd + 2,4-D)
- Cyclone (paraquat)
- Dakota (fenoxaprop-p-ethyl + MCPA)
- Distinct (diflufenzopyr)
- Evik (ametryn)
- Express (thifensulfuron + tribenuron-methyl)
- Fallowmaster (glyphosate + dicamba)
- Finesse (chlorsulfuron + metsulfuron-methyl)
- Glean (chlorsulfuron)
- Gramoxone (paraquat)
- Harmony Extra (thifensulfuron + tribenuron-methyl)
- Karmex (diuron)
- Kerb (pronamide)
- Laddok S-12 (bentazon + atrazine)
- Landmaster (glyphosate + 2,4-D)
- Lexone (metribuzin)
- MCPA
- Paramount (quinclorac)
- Peak (prosulfuron)
- Permit (halosulfuron-methyl)
- Rave (dicamba + triasulfuron)
- Roundup Ultra (glyphosate)
- Sencor (metribuzinT)
- Sinbar (terbadl)
- Stinger (dopyrafid)
- Tiller (fenoxaprop-p-ethyl + 2,4-D + MCPA)
- Tordon (picloram)
- Touchdown (sulfosate)
- 2,4-D

See section **VI. Crop-Specific Information** for more details. Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes. Physical incompatibility, reduced weed control, or crop injury may result from mixing **Dicamba + 2,4-D DMA** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. BASF does not recommend using tank mixes other than those listed on BASF labeling. Local agricultural authorities may be a source of information when using other than BA recommended tank mixes. 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

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

- 1) **Water***Begin by agitating a thoroughly clean sprayer tank half full of dean 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. Wart until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4) **Water-dispersible products** (such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
- 5) **Water-soluble products.** (such as **Dicamba + 2,4-D DMA** herbicide) Emulsifiable concentrates (such as oil concentrate when applicable).
- 6) **Water-soluble additives** (such as liquid fertilizers (28-0-0, 32-0-0) when applicable).
- 7) **Remaining quantity of water.**

*If sprayable fluid fertilizer is used as the carrier, **Dicamba + 2,4-D DMA** must be diluted with a minimum of 5 parts water to 1 part **Dicamba + 2,4-D DMA**. Then add 0.25 to 0.5% volume/volume of a nonionic surfactant to the dilution before adding it to the sprayable fluid fertilizer to reduce the concern for compatibility problems with this mix. Always perform the **Compatibility Test** before mixing into the spray tank. Also, when using a sprayable fluid fertilizer as the carrier, any product contained in PVA bags must first be completely dissolved in water before the contents can be added to the fertilizer mix.

Restrictions and Limitations

- Maximum seasonal use rate: **Refer to Table 5.**
 - Preharvest Interval (PHI): **Refer to section VI.**
- Food/Feed.**

Crop-Specific Information:

- Restricted Entry Interval (REI): 48 hours

Crop Rotational Restrictions:

The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

- Planting/replanting restrictions for Dicamba + 2,4-D DMA herbicide applications of 6 pints per acre or less:

No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including sorghum, follow the preplant use directions in section **VI. Food/Feed Crop-Specific Information.** For barley, oat, wheat, and other grass seedlings, the interval between application and planting is 10 days per pint per acre.

- Planting/replanting restrictions for applications of more than 6 pints and up to 8 pints of Dicamba + 2,4-D DMA per acre:

Corn, sorghum, cotton (east of the Rocky Mountains) and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat, and other grass seedlings, may be planted if the interval from application to planting is 10 days per pint per acre east of the Mississippi River and 15 days per pint per acre west of the Mississippi River. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

• **Rainfast period:** Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of **Dicamba + 2,4-D DMA** .

• **Stress:** Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result.

• Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.

• Do not apply through any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.

• This product cannot be used to formulate or reformulate any other pesticide product.

15/21

Table 5. Crop-specific Restrictions and Limitations

Crop	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding'	Aircraft Application
Between Crop Applications	6 pints	8 pints	Yes	Yes
Pasture, Hay Silage	4 pints	8 pints	Yes	Yes
Sugarcane	6 pints	16 pints	Yes	Yes
Sorghum	1 pig	1 pint	Yes	Yes
Wheat	2 pints	3.33 pints	Yes	Yes

¹refer to section **VI. Food/Feed crop-Specific information** for grazing and feeding restrictions

Food/Feed Crop-Specific Information

Pastures, Rangeland and Grass (Hay, Silage)

Dicamba + 2,4-D DMA herbicide is recommended for use for pasture (including pasture grown for hay), rangeland and grass grown for hay or silage.

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

Rates above 4 pints of **Dicamba + 2,4-D DMA** per acre are for spot treatments only.

Retreatments may be made as needed; however, do not exceed a total of 8 pints of **Dicamba + 2,4-D DMA** per treated acre during a growing season.

Uses described in this section also pertain to small grains (such as barley, corn, forage sorghum, oats, rye, sudangrass, or wheat) grown for pasture, hay, and silage only. Newly seeded areas, including small grains own for pasture or hay, may be injured if rates of **Dicamba + 2,4-D DMA** greater than 2 pints per acre are applied.

In newly established hybrid Bermudagrass, Pangolagrass, and stargrasses (*Cynodon spp.*), use 2-4 pints of **Dicamba 2,4-D DMA** per acre to control or suppress weeds after planting vegetative propogules (stolens) of hybrid bermudagrasses. In addition to the weeds listed in **Tables 1 and 2**, this rate of **Dicamba + 2,4-D DMA** will control or suppress annual sedges, broadleaf signalgrass, crabgrass, and goosegrass.

Best results will be obtained if **Dicamba + 2,4-D DMA** is applied at the germinating stage of weeds. Under favorable conditions, this is usually 7-10 days after planting these grasses. Reduced control can be expected if weeds are allowed to reach 1" in height before application or if germination of weeds occurs 10 days after application.

Do not use on bentgrass, susceptible grass pastures (such as carpetgrass, buffalograss, or St. Augustine grass), lespedeza, wild winter peas, vetch, clover, and alfalfa pastures as injury will occur. When perennial weeds are reaching maturity, mowing and allowing some regrowth will enhance control. Difficult to control weeds and brush may require repeat applications.

For Pasture renovations, wait 3 weeks per quart (2 pints) of Dicamba 2,4-D used per acre before interseeding or injury may occur.

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

Grazing and Feeding Non-lactating Animals:

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

Grazing and feeding lactating animals: Do not graze lactating dairy animals within 7 days of treatment.

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

Pasture and Rangeland Tank Mixes

Dicamba + 2,4-D DMA may be applied in tank mixes with one or more of the following herbicides:

- Ally

- Amber
- Clarity
- Rave
- Oracle

Sorghum

Rates and Timings

Apply 1 pint of **Dicamba + 2,4-D DMA** per acre to sorghum in the 3-5 leaf stage (4-8" tall). For best performance, apply **Dicamba + 2,4-D DMA** when weeds are small (less than 3" tall).

Applications of **Dicamba + 2,4-D 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 10-14 days. Sorghum growing under conditions of stress such as high moisture, low fertility, and abnormal temperature may be more sensitive to applications of **Dicamba + 2,4-D DMA**.

Do not use surfactants or oils with postemergence applications of **Dicamba + 2,4-D DMA** on sorghum crops.

Do not use **Dicamba + 2,4-D DMA** if the potential for sorghum injury is not acceptable.

If sorghum is grown for pasture, hay, or silage refer to **Pasture and Rangeland** in section VI. **Crop-Specific Information** for livestock dazing and feeding restrictions.

Do not apply **Dicamba + 2,4-D DMA** to sorghum grown for seed production.

Make no more than one postemergence application per growing season.

Sorghum Tank Mixes

Dicamba + 2,4-D DMA may be applied in tank mixes with one or more of the following herbicides:

- Atrazine
- Basagran
- Butril
- Laddok S-12
- Paramount
- Peak
- Permit

Sugarcane

Applications of **Dicamba + 2,4-D DMA** herbicide can be made any time after the weeds have emerged and are actively growing but prior to the close-in stage of sugarcane. When possible, direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage. Application rates and timing are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

Rate:

- For control of listed annual broadleaf weeds, apply 2 pints of **Dicamba + 2,4-D DMA** per treated acre.
- For suppression of listed perennial weeds, apply 1-6 pints of **Dicamba + 2,4-D DMA** per treated acre.
- Retreatments may be made as needed, however, do not exceed 16 pints of **Dicamba + 2,4-D DMA** per treated acre during a growing season.

Sugarcane Tank Mixes

Dicamba + 2,4-D DMA may be applied in tank mixes with one or more of the following herbicides:

- Asulox • Lexone
- Atrazine • Sencor
- Evik • Sinbar

**Wheat
(fall and Spring -seeded)**

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

Do not graze or harvest for livestock feed prior to crop maturity. Do not use **Dicamba + 2,4-D DMA** in wheat underseeded with legumes.

EARLY SEASON APPLICATIONS: Apply 0.5-1 pint of **Dicamba + 2,4-D DMA** per acre to wheat unless using one of the wheat specific programs below. Early season applications to spring-seeded wheat must be made after tillering and before wheat reaches the 6-leaf stage. Early season applications to fall-seeded wheat must be made after tillering and prior to the jointing stage. Care should be taken in staging early developing wheat varieties such as TAM 107, Madison, or Wakefield to be certain that the application occurs prior to the jointing stage.

SPECIFIC USE PROGRAMS FOR FALL-SEEDED

WHEAT ONLY:

Up to 1.33 pints of **Dicamba + 2,4-D DMA** per acre may be applied for fall-seeded wheat after the wheat begins to tiller for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost before a killing freeze. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

PREHARVEST APPLICATIONS:

Dicamba + 2,4-D DMA can be used to control weeds that may interfere with harvest of wheat. Apply up to 2 pints of **Dicamba + 2,4-D DMA** 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 points) 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, **Dicamba + 2,4-D DMA** may be tank mixed with other herbicides such as **Ally** or **Roundup@ Ultra** that are registered for preharvest use in wheat. Preharvest use of **Dicamba + 2,4-D DMA** is not registered for use in California.

Table 7. Wheat Tank Mixes

Aim	0.3 ounce
Ally	0.05-0.1 ounce'
Amber	0.14-0.28 ounce'
Bronate	0.75-1.5 pints
Buctril	1-1.5 pits
Canvas	02-0.4 ounce'
Curtail	2-2.67 pints
Dakota²	16 fluid ounces
Express	0.083-0.167 ounce'
Finesse	0.167-0.33 ounce'
Glean	0.167 ounce'
Harmony extra	0.167-0.33 ounce'
Karmex³	0.5-1.5 pounds
2,4-D amine	4-20 fluid ounces ⁴
Metribuzin@ (Sencor, Lexone)	0.25-0.375 pound a.i. ,
Peak¹	0.25-0.38 ounce
Stinger	4-5.33 fluid ounces
Tiller²	1-1.7 pints

- ¹ Do not use low rates of sulfonylurea herbicides, such as **Ally, Amber, Canvas, Express, Finesse, Glean, Harmony Extra, and Peak** on more mature weeds or on dense vegetative growth.
- ² Do not use **Dicamba 2,4-D DMA** herbicide as a tank mix treatment with **Dakota** or **Tiller** on Durum wheat. Do not tank mix with **Tiller** if wild oat is the target weed.
- ³ Tank mixes with **Karmex** and metribuzin are for use in fall-seeded wheat only.
- ⁴ **Dicamba + 2,4-D DMA** contains 0.36 pounds a.e. of 2,4-D per pint. When tank mixing with 2,4-D, do not exceed a combined total of 1.0 pound a.e. per acre of 2,4-D and do not exceed 0.5 pound a.e. of 2,4-D unless injury to wheat is acceptable.

**Between Crop Applications,
Conservation Reserve Programs,
General Farmstead and Fallow**

These uses are considered Food/Feed Crops when harvested, gazed or foraged. Consult **Section. III** for adjuvant restrictions and **Section. VII** for specific use directions.

Non-Food/Feed Use (Land not Harvested Grazed or Foraged) Specific Information

Between Crop Applications

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

Dicamba + 2,4-D DMA may be applied preplant for the control or suppression of broadleaf weeds in a "pre plant burn down program". Rates of .5 - 6 pints may be applied preplant alone or in tank mix with glyphosate, Touchdown, paraquat, or other products labeled for preplant burn down.

Dicamba + 2,4-D DMA herbicide can be applied either postharvest in the fall, spring or summer during the fallow period or to crop stubble/set-aside acres. Apply **Dicamba + 2,4-D DMA** as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

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

Rates and Timings:

Apply 0.5-6 pints of **Dicamba + 2,4-D DMA** per acre. Refer to **Table 1** to determine use rates for specific targeted weed species. Retreatments may be made as needed; however, do not exceed a total of 8 pints of **Dicamba + 2,4-D DMA** per treated acre during a growing season. For best performance, apply **Dicamba + 2,4-D DMA** 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 **Dicamba + 2,4-D DMA** 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 **Dicamba + 2,4-D DMA**. For seedling control, a follow-up program or other cultural practices could be instituted.

Between Crop Tank Mixes

In tank mixes with one or more of the following herbicides, apply 0.5-2 pints of **Dicamba + 2,4-D DMA** per acre for control of annual weeds, or 2 - 8 pints of **Dicamba + 2,4-D DMA** per acre for control of biennial and perennial weeds:

- Aim
- Ally
- Amber
- Atrazine
- Bladex
- Curtail
- Cyclone
- Distinct
- Fallowmaster
- Finesse
- Glyphosate
- Gramoxone
- Kerb
- Landmaster BW
- Paramount
- Sencor
- Tordon 22K
- Touchdown
- 2,4-D

Conservation Reserve Programs and General Farmstead

Dicamba + 2,4-D DMA herbicide is recommended for use for Conservation Reserve Programs, general farmstead (non-cropland only), weed and brush control, or use in State Recognized Noxious Weed areas (noncropland areas). Refer to **Tables 1** and **2** for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Rates above 4 pints of **Dicamba + 2,4-D DMA** per acre are for spot treatments only. Retreatments may be made as needed; however, do not exceed a total of 8 pints of **Dicamba + 2,4-D DMA** per treated acre during a growing season.

FARMSTEAD AND FENCEROW TREATMENT APPLICATION INSTRUCTIONS

Dicamba + 2,4-D DMA may be applied using water or oil and water emulsions in spot application to control undesirable vegetation using handgun or similar types of application equipment. In addition to weed species listed in **Tables 1** and **2**, these treatments may be used to control or suppress woody plant specs listed in **Table 6**.

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

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

Do not exceed 40 gallons of spray solution per treated acre per application. Forty gallons of spray solution contains 1.0 pound acid equivalent of dicamba and 2.87 pounds acid equivalent of 2,4-D. Spray plants to wet. Do not allow this spray mix to contact desirable vegetation.

To control brush, briars, and weeds along fencerows surrounding pasture and ranch lands, and fallow fields, use a tank mix of 2.5% of **Dicamba + 2,4-D DMA**, 87.5% water, 10% diesel oil, and sufficient emulsifier (to mix the diesel and emulsifier). The diesel oil in this tank mix will damage or kill desirable gasses and should not be used in pastures or where damage to desirable species cannot be tolerated.

- 1) **Water:** Begin by agitating a thoroughly clean spray tank with the desired quantity of clean water. Maintain constant agitation during complete mixing procedure.
- 2) **Emulsifier:** Add 0.5% volume to volume
- 2) **Dicamba + 2,4-D DMA** Add 2.5 gallons per 100 gallons of total intended solution.
- 3) **Diesel Oil:** Add 10 gallons per 100 gallons of total intended solution.
- 4) Maintain constant agitation during application. Under good agitation, the spray solution should be milky white with no oil layer on top. If an oil layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

FOR SPRAYING FOLIAR APPLICATIONS:

1. Spray when leaves have reached full size but have not hardened due to drought or maturity.
2. Spray individual plants to wet with handgun.
3. For larger stems (up to 3" in diameter) and hard to

control species, direct spray stream to base of stems to wet the stem at sod surface in addition to wetting the foliage.

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

FOR DORMANT BASAL APPLICATIONS:

1. Increase diesel oil content to 15% or 15 gallons of diesel oil per 100 gallons of total solution.
2. Spray in late winter and early spring before plants break dormancy.
3. Spray the bottom 24" of the target stem to wet on all sides.
4. For larger stems (up to 3" in diameter) and hard to kill species direct the spray solution to the base of target stems to wet the soil at the stem/soil junction in addition to wetting the stem.
5. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

FOR CUT SURFACE TREATMENTS:

Apply **Dicamba + 2,4-D DMA** in an undiluted state as a cut surface treatment to curd unwanted trees and prevent sprouts of cut trees.

- **Frill or Girdle Treatments:** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with **Dicamba + 2,4-D DMA**.
- **Stump Treatments:** Spray or paint freshly cut surface with **Dicamba + 2,4-D DMA**. The cambium layer (the area adjacent to the bark) should be thoroughly wet. Treat stumps within 6 hours after cutting.

Table 6. The following list of trees and vines can be controlled on farmsteads and fencerows as foliar, basal, or cut surface treatments:

Alder	Kudzu
Ash	Locust, Black
Aspen	Maple
Basswood	Mesquite
Beech	Oak
Blackberry	Oak, Poison
Black gum	Olive, Russian
Cedar	Persimmon, Eastern
Cherry	Pine
Chinquapin	Plum. Sand
Cottonwood	Poplar
Creosote bush	Rabbit brush
Dewberry	Red cedar, Eastern
Dogwood	Rose, McCartney
Elm	Rose, Multifloral
Grape	Sagebrush, Fringe
Green briar	Sassafras
Hawthorn (thorn apple)	Spruce
Hemlock	Sumac
Hickory	Sweet gum
Honey locust	Sycamore
Honeysuckle	Tarbrush
Hornbeam	Willow
Huckleberry	Witch hazel
Huisache	Yaupon
Ivy Poison	Yucca

Weeds listed in this label:		Common Name	Scientific Name
Common name	Scientific name	BIENNIALS AND PERENNIALS	
ANNUALS			
Beebalm, Spotted	<i>Monarda punctata</i>	Bindweed, Field	<i>Convolvulus arvensis</i>
Broomweed, Common	<i>Gutierrezia dracunculoides</i>	Bittercress	<i>Cardamine spp.</i>
Buckwheat, Wild	<i>Polygonum convulvulus</i>	Buckeye	<i>Aesculus spp.</i>
Buffalo bur	<i>SoJanum rostratum</i>	Bullnettle	<i>Cnidoscopus stimulosus</i>
Burdock	<i>Arctium spp.</i>	Chicory	<i>Cichorium intybus</i>
Buttercup, Corn	<i>Ranunculus arvensis</i>	Clover, Hop	<i>Trifolium aureum</i>
Chickweed, Common	<i>Stellaria media</i>	Dandelion	<i>Taraxacum officinale</i>
Cockle, Can	<i>Agrostemma grthago</i>	Dock, Curly	<i>Rumex crispus</i>
Cocklebur, Common	<i>Xanthium strumanum</i>	Elderberry	<i>Sambucus Canadensis</i>
Coreopsis, Plains	<i>Coreopsis tinctoria</i>	Goldenrod, Missouri	<i>Solidago missouriensis</i>
Croton, Woolly	<i>Croton capitatus</i>	Goldenweed, Common	<i>Isocoma coronopifolia</i>
Devils claw	<i>proboscidea louisianica</i>	Groundsel	<i>Senecio vulgaris</i>
Dogfennel (Cypress weed)	<i>Eupatodum capaffoisum</i>	Honeysuckle, Hairy	<i>Lonicera</i>
Evening primrose, Cut leaf	<i>Oenothera lacinata</i>	Horsenettle	<i>Solanum carolinense</i>
Flax	<i>Limrn catharticum</i>	Ivy, Poison	<i>Rhus radicans</i>
Fleabane, Annual	<i>Erigeron annuus</i>	Knapweed, Black	<i>Centaurea nigra</i>
Fix weed	<i>Descurainia sophia</i>	Russian	<i>Centaurea repens</i>
Henbit	<i>Lamium amplexicaule</i>	Spotted	<i>Centaurea maculosus</i>
Knotweed. Prostrate	<i>Polygonum aviculare</i>	Marshelder	<i>Ina annua</i>
Kochia	<i>Kochia scopana</i>	Mesquite	<i>Prosopis juliflora</i>
Lambsquarters. Common	<i>Chenopodium album</i>	Milkweed, Antelopehorn	<i>Asclepius</i>
Lettuce, Prickly	<i>Lactuca semola</i>	Nightshade, Silverleaf	<i>Solanum elaeagnifolium</i>
Mallow, Common	<i>Malva neglecta</i>	Black	<i>Solanum nigrum</i>
Morning-glory, ivy leaf	<i>Ipomea hederacea</i>	Persimmon, Eastern	<i>Diospyros virginiana</i>
Tall	<i>Ipomea purpurea</i>	Rabbitbrush	<i>Chrysanthemum pulchellus</i>
Mustard, Annual	<i>Brassica spp.</i>	Ragwort, Tansy	<i>Senecio jacobia</i>
Tansy	<i>Descurainia pinnata</i>	Redvine	<i>Brunnichia ovate</i>
Pennycress, Field	<i>Thlaspi arvense</i>	Sagebrush, Fringed	<i>Artemisia figida</i>
Pepper weed, Virginia	<i>Lepidium virginicum</i>	Smartweed, Swamp	<i>Polygonum coccineum</i>
Pigweed. Prostrate	<i>Amaranthus bitoides</i>	Sorrel, Red (Sheep Sorrel)	<i>Rumex acetosella</i>
Redroot	<i>Amaranthus retroflexus</i>	Sowthistle, Perennial	<i>Sonchus arvensis</i>
Smooth	<i>Amaranthus hybndus</i>	Spurge, Leafy	<i>Euphorbia esula</i>
Tumble	<i>Amaranthus atbus</i>	Starthistle, Yellow	<i>Sauria solstitialis</i>
Poorjoe	<i>Diodia teres</i>	Tallow Tree, Chinese	<i>Sapium sebiferum</i>
Purslane, Common	<i>Portulaca oleracea</i>	Thistle, Bull	<i>Cirsium vulgare</i>
Ragweed, Common	<i>Ambrosia artemisiAolia</i>	Canada	<i>Cirsium arvense</i>
Lance-Leaf	<i>Ambrosia bidentata</i>	Musk	<i>Carduus nutans</i>
Western	<i>Ambrosia psdostachya</i>	Plumeless	<i>Carduus acanthoides</i>
Sedge	<i>Cyperus compressus</i>	Vetch	<i>Vicia spp.</i>
Shepherdspurse	<i>Capsella bursa -pastoris</i>	Yankeeweed	<i>Eupatorium compositifolium</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>		
Sneezeweed, Bitter	<i>Helenium amurum</i>		
Sunflower, Common (Wild)	<i>Helianthus annus</i>		
Thistle, Russian	<i>Salsola ibenca</i>		
Velvetleaf	<i>Abutdon teophrasti</i>		

Food/Feed Crop Uses

This product can be used on the following:

- *Conservation Reserve Program Land
- *Fallow Systems (Between Crop Applications)
- Grain Sorghum
- Grass (Hay or Silage)
- Pastures
- Rangeland
- Sugarcane
- Wheat.

Look inside for complete **Restrictions** and **Limitations** and **Application Instructions**.

*These sites are considered to be Food/Feed uses only when harvested, grazed or foraged. Otherwise, they are considered to be non-food/feed uses.

Banvel, Clarity, Distinct, Weedmaster, Paramount are registered trademarks of BASF Corporation.
Basagran and Laddok are registered trademarks of BASF AG.
Ally, Bladex, Canvas, Express, Finesse, Glean, Harmony, Karmex, Lexone, and Sinbar are registered trademarks of E. I. du Pont de Nemours & Company.
Asulox is a registered trademark of Bayer AG.
Amber, Evik, and Peak are registered trademarks of Syngenta.
Bronate and Kerb are registered trademarks of Dow AgroSciences LLC.
Buctrif is a registered trademark of Bayer AG.
Curtail, Stinger, and Tordon are registered trademarks of Dow AgroSciences LLC.
Cyclone and Touchdown are registered trademarks of Syngenta.
Dakota and Tiller are registered trademarks of Bayer AG.
Gramoxone is a registered trademark of Syngenta.
Landmaster and Roundup Ultra are registered trademarks of Monsanto Company.
Oracle is a registered trademark of Gharda USA, Inc.
Permit is a registered trademark of Nissan Chemical Industries, Ltd.
Rave is a trademark of Syngenta.
Sencor is a registered trademark of Bayer AG.
Aim is a trademark of FMC Corporation.

EPA Accepted:

Notice of Warranty and Disclaimer

Seller warrants that at the time of delivery the product in this container conforms to its chemical description contained hereon and is reasonably fit for its intended purpose under normal conditions of use. This is the only warranty made on this product. Seller expressly disclaims any implied warranties of merchantability or fitness for any particular purpose and, except as set forth above, any other express or implied warranties. Any damages arising from breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid for this product by Buyer, and shall not include incidental or consequential damages such as, but not limited to, loss of profits or values. It is impossible to eliminate all risks inherently associated with the 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 the manner of use or application, all of which are beyond the control of the Seller. In no case shall Seller be liable for the consequential, special or indirect damages resulting from the use or handling of this product. To the extent with applicable law all such risks shall be assumed by the Buyer. Buyer acknowledges the use of its own independent skill and expertise in the selection and use of the product and does not rely on any oral or written statements or representations.