

89168-2

12/06/2012 ()

1/21



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Scott Baker
Lighthouse Product Services
3937 Cedarwood Lane
Johnstown, CO 80534

12-6-12

Subject EPA Reg 89168-2 / Liberty Dicamba +2,4-D DMA Notification

Dear Mr Baker

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 10-18-12 for the product EPA Reg 89168-2 / Liberty Dicamba +2,4-D DMA. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records. The revised basic csf is acceptable.

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

Sincerely,

A handwritten signature in black ink, appearing to read "K. Montague", is positioned above the typed name.

Kathryn Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)



Please read instructions on reverse before completing form

Form Approved OMB No. 2070-0080, Approval expires 2 28 95

21



United States
Environmental Protection Agency
Washington DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1 Company/Product Number 89168 2	2 EPA Product Manager Davis	3 Proposed Classification <input type="checkbox"/> None <input checked="" type="checkbox"/> Restricted
4 Company/Product (Name) Liberty DICAMBA + 2 4 D DMA	PM# 25	
5 Name and Address of Applicant (Include ZIP Code) LIBERTY CROP PROTECTION, LLC 3937 CEDARWOOD LANE JOHNSTOWN, CO 80534 <input checked="" type="checkbox"/> Check if this is a new address	6 Expedited Review In accordance with FIFRA Section 3(c)(3) (b)(i) my product is similar or identical in composition and labeling to EPA Reg No _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application
<input checked="" type="checkbox"/> Notification Explain below	<input type="checkbox"/> Other Explain below

Explanation Use additional page(s) if necessary (For section I and Section II)

Notification of new label and CSF following transfer from the previous registrant Change to Primary Brand Name under PR Notice 98-10

Section - III

1 Material This Product Will Be Packaged In					
Child Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2 Type of Container <input checked="" type="checkbox"/> Metal <input type="checkbox"/> Plastic c c c c c <input type="checkbox"/> Glass c c c c c <input type="checkbox"/> Paper c c c c c <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If Yes Unit Packaging wgt	No per container	If "Yes" Package wgt	No per container
3 Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4 Size(s) Retail Container 1 2 5 15 30 55 110 275 Gal Bulk		5 Location of Label Directions <input checked="" type="checkbox"/> Attached to container c c c c c	
6 Manner in Which Label is Affixed to Product		<input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled	<input checked="" type="checkbox"/> Other self adhesive c c c c c		

Section - IV

1 Contact Point (Complete items directly below for identification of individual to be contacted if necessary to process this application)			
Name Scott Baker		Title Regulatory Agent	
		Telephone No (Include Area Code) 970 313 6654	
Certification I certify that the statements I have made on this form and all attachments thereto are true accurate and complete I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law			6 Date Application Received (Stamped)
2 Signature 		3 Title Regulatory Agent	
4 Typed Name Scott Baker		5 Date October 18, 2012	



3/21

October 18 2012

Document Processing Desk (REGIS)
Office of Pesticide Programs
U S Environmental Protection Agency
One Potomac Yard Room S-4900
2777 S Crystal Drive
Arlington VA 22202

Subject LIBERTY DICAMBA + 2 4-D DMA EPA Reg No 89168-2

Lighthouse Product Services LLC Regulatory Agent for Liberty Crop Protection LLC is submitting the enclosed documentation to update the EPA files with new labeling and Confidential Statements of Formula for the subject product This product was recently transferred to Liberty Please find the following enclosed

- 1 Application Form 8570-1
- 2 1 copy of updated label
- 3 1 copy of updated Basic CSf

In addition to the product name company identification EPA Registration number the date code and the Conditions of Sale and Limitation of Warranty and Liability being updated and some minor formatting

This notification is consistent with the provisions of PR Notice 98 10 and EPA regulations at 40 CFR 152.46 and no other changes have been made to the labeling or the confidential statement of formula of this product I understand that it is a violation of 18 U S C Sec 1001 to willfully make any false statement to EPA I further understand that if this notification is not consistent with the terms of PR Notice 98 10 and 40 CFR 152.46 this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA

I also changed 'recommended rates to specified' or Listed as appropriate

Please contact me at 970-313-6654 or by e-mail sbaker@lhpsonline.com if there are any questions or comments concerning this submission

Sincerely,

Scott Baker
Regulatory Agent for Liberty Crop Protection LLC

"SHINING THE LIGHT ON YOUR REGULATORY NEEDS"

3937 Cedarwood Lane
970-313 6654

Fax 970 667 4010

Johnstown, Colorado 80534
sbaker@lhpsonline.com

LIBERTY DICAMBA + 2,4-D DMA

Not suitable
Acceptable

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 INGREDIENT(S)

Dimethylamine salt of 3,6-dichloromethoxybenzoic acid* 12.5%

Dimethylamine salt of 2,4-dichlorophenoxyacetic acid** 36.0%

INERT INGREDIENTS

51.5%

TOTAL

100.0%

*This product contains 10.4% dicamba or 1 pound per gallon (120 grams per liter) acid equivalent

**This product contains 29.9% 2,4-D or 2.87 pounds per gallon (344 grams per liter) acid equivalent

Isomer specific 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 you in detail)

See inside booklet for complete Precautionary Statements and Directions for Use

EPA Reg No 89168-2

EPA Est No XXXXX XX XXX

101412

Net Contents _____

Manufactured For
LIBERTY CROP PROTECTION LLC
3937 CEDARWOOD LANE
JOHNSTOWN CO 80534

cccccc
cccccc

FIRST AID

IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 minutes	cccccc
	Remove contact lenses if present after first 5 minutes then continue rinsing eye	cccccc
	Call a poison control center or doctor for treatment advice	cccccc
IF ON SKIN OR CLOTHING	Take off contaminated clothing	cccccc
	Rinse skin immediately with plenty of water for 15-20 minutes	cccccc
	Call a poison control center or doctor for further treatment advice	cccccc
IF INHALED	Move person to fresh air	cccccc
	If person is not breathing call 911 or an ambulance then give artificial respiration preferably mouth to mouth if possible	cccccc
	Call a poison control center or doctor for further treatment advice	cccccc
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice	cccccc
	Have a person sip a glass of water if able to swallow	cccccc
	Do not induce vomiting unless told to do so by a poison control center or doctor	cccccc
	Do not give anything by mouth to an unconscious or convulsing person	cccccc
HOT LINE NUMBER		
Have the product container or label with you when calling a poison control center or doctor or going for treatment You may also contact 1-800-222-1222 for emergency medical treatment information		
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage		

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 Wash thoroughly with soap and water after handling and before eating drinking chewing gum or using tobacco Remove contaminated clothing and wash before reuse

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are butyl rubber natural rubber neoprene or nitrile rubber If you want more options follow the instructions for category A on an EPA chemical resistance category selection chart

All mixers, loader, applicator, flaggers, and other handlers must wear

- Long sleeved shirt and long pants
- Shoes plus socks and
- Chemical resistant gloves (except for applicators using groundboom equipment pilots and flaggers) 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

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

Engineering Control Statements

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

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

If this container contains 5 gallons or more in capacity do not open pour 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 If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4)) the handler PPE requirements may be reduced or modified as specified in the WPS

USER SAFETY RECOMMENDATIONS

Users should

- Wash hands before eating drinking chewing gum using tobacco or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside If pesticide gets on skin wash immediately with soap and water
- 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

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas and non target plants Do not contaminate water when disposing of equipment washwaters or rinsate

Groundwater Contamination

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

Most cases of groundwater contamination involving phenoxy herbicides such as 2 4 D have been associated with mixing/loading and disposal sites Caution should be exercised when handling 2 4 D pesticides at such sites to prevent contamination of groundwater supplies Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination

Endangered Species Concerns

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

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

Do not apply this product in a way that will contact workers or other persons either directly or through drift Only protected handlers may be in the area during application For any requirements specific to your State or Tribe consult the agency responsible for pesticide regulation

Unless otherwise directed in supplemented labeling all applicable directions restrictions precautions and Conditions of Sale and Warranty are to be followed This labeling must be in the user s possession during application

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of **48 hours** PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants soil or water is

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

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170) The WPS applies when this product is used to produce agricultural plants on farms forests nurseries or greenhouses

Do not enter or allow others to enter until sprays have dried

STORAGE AND DISPOSAL

PROHIBITIONS Do not contaminate water food or feed by storage or disposal Do not store under conditions that might adversely affect the container or its ability to function properly

PESTICIDE STORAGE Do not store below temperature of 32 F or above 100°F Store in original container in a well ventilated area separately from fertilizer feed and foodstuffs Keep container tightly closed when not in use Reduce stacking height where local conditions can affect package strength

Steps to be taken in case material is released or spilled Dike and contain the spill with inert material (sand earth etc) and transfer liquid and solid diking material to separate containers for disposal Remove contaminated clothing and wash affected skin areas with soap and water Wash clothing before re use Keep the spill out of all sewers and open bodies of water

PESTICIDE DISPOSAL Pesticide wastes are toxic Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law and may contaminate groundwater If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance

CONTAINER DISPOSAL Non refillable containers Plastic/Metal Containers Do not reuse or refill this container Offer for recycling or reconditioning if available or puncture and dispose of in a sanitary landfill or by incineration or if allowed by state and local authorities by burning If burned stay out of smoke Triple rinse or pressure rinse container (or equivalent) promptly after emptying

Non refillable container less than or equal to 5 gallons Triple rinse as follows Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container 1/4 full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times

Non refillable container greater than 5 gallons Triple rinse as follows Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container 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 on its other end and tip it back and forth several times Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal Repeat this procedure two more times

Pressure rinse as follows (all sizes) Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip Hold container upside down over application equipment or mix tank or collect rinsate for later use 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 (Drum/Bulk/Mini bulk) Refill this container with pesticide only Do not reuse this container for any other purpose Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller If not returned to the point of purchase or to the designated location triple rinse emptied container and offer for recycling Disposal of this container must be in compliance with state and local regulations

When this container is empty replace the cap and seal all openings that have been opened during use and return the container to the point of purchase or to a designated location named at the time of purchase of this product in a bulk container Prior to refilling inspect carefully for damage such as cracks punctures abrasions worn out threads and closure devices Check for leaks after refilling and before transporting Do not transport if this container is damaged or leaking

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

I PRODUCT INFORMATION

LIBERTY DICAMBA + 2,4 D DMA herbicide 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

LIBERTY DICAMBA + 2,4 D DMA contains two active ingredients uniquely formulated to be used alone or tank mixed with other listed products as well as liquid fertilizer solutions **LIBERTY 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 **LIBERTY DICAMBA + 2,4 D DMA** interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds

II APPLICATION INSTRUCTIONS

Apply **LIBERTY DICAMBA + 2,4 D DMA** at the rates and growth stages listed in **Tables 1 and 2** as follows unless instructed differently by section on **Food/Feed Crop Specific Information** or **Non Food/Feed Use Specific Information** Applications can be made to actively growing weeds as aerial broadcast band or spot spray applications **LIBERTY DICAMBA + 2,4 D DMA** may be applied using water or sprayable fluid fertilizer as a carrier Sprayable fluid fertilizer may be used as the carrier in preplant or pre emergence use for all crops listed on this label

Postemergence uses with sprayable fluid fertilizer may be made on pasture hayland or wheat crops only

The most effective application rate and timing varies based on the target weed species (refer to Table 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 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 prevent adequate spray coverage

Sensitive Crop Precautions

LIBERTY 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 stems or foliage These plants are most sensitive to **LIBERTY 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 **LIBERTY DICAMBA + 2,4 D DMA** with the roots of desirable trees and shrubs

Do not use aerial equipment or apply **LIBERTY DICAMBA + 2,4 D DMA** when sensitive crops and plants are growing in the vicinity of area to be treated

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g. wind direction wind speed temperature relative humidity) and method of application (e.g. ground aerial airblast 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 applying sprays that contain 2,4 D mixed with other active ingredients that require a Medium or more fine spray apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles

Wind Speed Do not apply at wind speeds greater than 15 mph Only apply this product if the wind direction favors on target deposition and 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 Do not spray near susceptible plants if the wind is gusty or in excess of 5 mph and moving in the direction of nearby susceptible 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 Leave an adequate buffer zone between area to be treated and susceptible plants Coarse sprays are less likely to drift out of the target area than fine sprays The use of agriculturally accepted drift retardants are acceptable and advised

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

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

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 rinse the equipment before after use applying this product

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 stage height to reduce the exposure of spray droplets to evaporation and wind

The boom height 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 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

The applicator must follow the most restrictive use cautions to avoid drift hazards including those found in the this labeling as well as applicable state and local regulations and ordinances

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

Table 1, Application Rate and Timing Annual Weeds

Weeds Controlled (including ALS and triazine resistant)	Rate Per Acre (according to weed growth stage)					
	0.5 pints	1.0 pints	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				
Buffalobur				1-6		flowering
Burdock		pre flower				
Buttercup		pre flower		early bloom	late bloom	
Chickweed Common		seedling	1.3			
Cockle Cow		< 3				
Cocklebur Common		1.6	6-12	12-18		
Coreopsis Plains		1.6				
Croton Woolly	1-4	4-12	12-30			
Devil's claw				< 8		
Dogfennel				10-15		
Evening Primrose		< 2		2-6		
Falseflax Smallseed		< 2				
Fleabane Annual		1-4	4-8	8		
Fixweed		< 3				
Henbit			preflower		flower 	
Knotweed Spp		< 3 runners		> 3 runners		
Kochia		1.6	6-10	10-20		
Lambsquarters Common		1.6	6-10	10-20		
Mallow Common		< 3				
Morning glory Ivyleaf		pre flower				
Tall		pre flower		post flower		
Mustards Annual		Rosette		early bolt		
Tansy		< 3				
Nightshade Black				full flower		actively growing
Pennycress Field				rosette		
Pepperweed Virginia			1.3	3-6	after branching	
Pigweed Prostrate		< 3				
Redroot		< 3	3-10			
Smooth		< 3				
Tumble		< 3		mature		
Poorjoe		prior to flower				actively growing

Purslane Common		< 3	3 8		
Ragweed Common	13	3 6	6 10	>10	
Western Lanceleaf	13	3 6	6 10	actively growing	
Sedge ¹				< 4 leaves	
Shepherdspurse		rosette			
Smartweed Pennsylvania		<4			4 12
Sneezeweed Bitter		1 4	prior to flower	flower	
Sowthistle Annual		rosette		bolting	
Sunflower		1 3	3 6	6 24	
Thistle Russian				< 3	
Velvetleaf		< 6	6 20	> 20	
* For use in non food/feed crop. Adding crop oil concentrate has shown to improve performance on actively growing annual sedge					

Table 2 Application Rate and Timing Biennial and Perennial Weeds

Weeds Controlled	Rate Per Acre (according to weed growth stage)					
	0 5 pints	1 0 pints	1 5 pints	2 pints	3 pints	4 pints
Bindweed Field						actively growing
Bittercress ⁵		2 3				
Buckeye species ¹					full leaf	
Bullnettle ^{2 5}				flower		
Chicory				rosette	early bolting	
Clove 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	
Groundsel Texas		rosette	post bolting			
Honeysuckle Hairy					spring or fall	
Horsenettle Carolina ¹	—	—	—	—	—	flower / pre-bloom berry
Ivy Poison	—	—	—	after bloom	—	flower
Knapweed Black ²	—	—	—	—	flower	actively growing
Russian ²	—	—	—	—	flower	actively growing
Spotted	—	—	—	—	flower	actively growing
Lettuce Prickly				rosette	flower	actively growing
Marshelder		—	—	<12	12 /prebloom	flower
Mesquite ³		—	—	—	—	45 90 days after bud break
Milkweed ^{1 5}	—	—	—	pre flower	—	flower
Nightshade Silverleaf ¹	—	—	—		—	full flower
Persimmon Eastern ³	—	—	—	—	—	actively growing
Rabbitbrush ²	—	—	—	—	—	actively growing
Ragwort Tansy	—	—	—	rosette	—	actively growing
Redvine ²	—	—	—	—	—	actively growing
Sagebrush Fringed ²	—	—	—	—	—	actively growing

Smartweed Perennial	-	-	-	-	-	actively growing
Sorrel Red	-	-	rosette	bolting	flower	
Sowthistle ² Perennial	-	-	-	-	-	actively growing
Spurge Leafy ²	-	-	-	-	-	full leaf
Tallow Tree Chinese ^{4 5}	-	-	-	-	-	actively growing
Thistle Bull	-	-	rosette	bolting	-	
Canada ²	-	-	-	-	-	-
Musk	-	-	-	rosette/bolting	-	-
Plumeless	-	-	rosette	bolting	-	-
Vetch Hairy	-	1-4	4 8	8 full flower	-	-
Yankee weed	-	-	-	10 18	-	
Yellow Starthistle ¹	-	-	-	-	-	rosette

¹ May require repeat applications

² Specified 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 **LIBERTY DICAMBA + 2 4-D DMA** each crop season for 3 consecutive crop seasons For increased control of weeds such as blackberry and dewberry **LIBERTY 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 the following growing season

⁵ Not for use in California

Ground Application (Banding)

When applying **LIBERTY DICAMBA + 2,4 D DMA** herbicide by banding determine the amount of herbicide and water volume needed using the following formula

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

per acre rate per acre

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

volume per acre volume per acre

Ground Application (Broadcast)

Water volume Use 5 40 gallons of spray solution per broadcast acre for optimal performance Use the higher spray volume when treating dense or tall vegetation

Application Equipment Select nozzle design to produce minimal amounts of fine spray particles Spray nozzles as close to the weeds as is practical for good weed coverage

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

Spot or Small Area Application

LIBERTY DICAMBA + 2,4 D DMA may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems For knapsack or other small capacity sprayers prepare a solution of **LIBERTY DICAMBA + 2,4 D DMA** in water according to **Table 3** (assuming that the spot treatment rate equates to 60 gallons pre 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

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

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

Table 3 – Knapsack Sprayer Dilution Instructions

Sprayer Capacity	Amount of DICAMBA + 2, 4-D DMA
------------------	---------------------------------------

(gallons of water)	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 tablespoons

III ADDITIVES

To improve burndown of emerged weeds, surfactants and/or low use rates of liquid fertilizers (28 0 0 32 0 0) or crop oil concentrate may be used with **LIBERTY DICAMBA + 2,4 D DMA** herbicide or **LIBERTY DICAMBA + 2,4 D DMA** tank mixes applied after the weeds have emerged. Crop oil concentrate is for non food/feed crop uses only. Do not apply tank mixes that include Ammonium Sulfate or Crop Oil Concentrate to any food/feed crop use listed on this label. For food/feed crop use, do not use liquid fertilizers that contain Ammonium Sulfate (AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances.

Oil Concentrate

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

- be non phytotoxic
- contain only EPA exempt ingredients
- provide good mixing quality in the jar test and
- be successful in local experience

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

Adjuvants containing crop oil concentrates may be used for preplant, pre emergence and between cropping applications. **Do not use crop oil concentrate for postemergence applications in food/feed crops (i.e. 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 non ionic spray surfactant per 100 gallons of water. For certain weeds, use a higher spray surfactant rate.

Table 4 Additive Rate Per Acre

Additive ¹	Rate Additive Per Acre
Nonionic Surfactant	2.4 pints per 100 gallons
Sprayable Liquid Fertilizers (28 0 0 32 0 0)	½ GPA of spray surfactant
Crop Oil Concentrate	1 quart*

* See manufacturer's label for specific rate recommendations.

IV TANK MIXING INFORMATION

Tank Mix Partners/Components

The following products may be tank mixed with **LIBERTY 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)
- **Basagran®** (bentazon)
- **Bronate®** (bromoxynil + MCPA)
- **Buctril®** (bromoxynil)
- **Canvas®** (thifensulfuron methyl + tribenuron methyl + metsulfuron methyl)
- **Clarity®** (dicamba)
- **Curtail™** (clopyralid + 2,4 D)
- **Cyclone®** (paraquat)

- **Dakota®** (fenoxaprop p ethyl + MCPA)
- **Distinct®** (diflufenzopyr + dicamba)
- **Evik®** (ametryn)
- **Express®** (tribenuron methyl)
- **Fallowmaster®** (glyphosate + dicamba)
- **Finesse®** (chlorsulfuron + metsulfuron methyl)
- **Glean®** (chlorsulfuron)
- **Gramoxone® Extra** (paraquat)
- **Harmony® Extra** (thifensulfuron methyl + 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®** (metribuzin)
- **Sinbar®** (terbacil)
- **Stinger™** (clopyralid)
- **Tiller®** (fenoxaprop p ethyl + 2,4 D + MCPA)
- **Tordon™** (picloram)
- **Touchdown®** (glyphosate)
- **2,4 D**

See **FOOD/FEED CROP SPECIFIC INFORMATION** section for more information for more details. Read and follow the applicable **Restrictions and Limitations** and **Directions for Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **LIBERTY DICAMBA + 2,4 D DMA** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers.

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test. For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of specified label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is still incompatible, do not mix the ingredients in the same tank.

Mixing Order

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

- 1 **Water** Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2 **Agitation** Maintain constant agitation throughout mixing and application.
- 3 **Products in PVA bags** Place any product contained in water soluble bags into the mixing tank. Wait until all water soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4 **Water dispersible products** (such as dry flowables, wettable powders, suspension concentrates, and suspensions).
- 5 **Water soluble products** (such as **LIBERTY DICAMBA + 2,4 D DMA**).
- 6 **Emulsifiable concentrates** (such as oil concentrate, when applicable).
- 7 **Water soluble additives** (such as liquid fertilizers (28-0-0, 32-0-0), when applicable).
- 8 **Remaining quantity of water**

* If sprayable fluid fertilizer is used as the carrier, **LIBERTY DICAMBA + 2,4 D DMA** must be diluted with a minimum of 5 parts water to 1 part **LIBERTY DICAMBA + 2,4 D DMA**. Then add 0.25% 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.

V RESTRICTIONS AND LIMITATIONS

Maximum seasonal use rate Refer to Table 5.

Preharvest Interval (PHI) Refer to Food/Feed Crop Specific Information.

Restricted entry Interval (REI) 48 Hours.

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

Planting/replanting restrictions for LIBERTY 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 Food/Feed Crop Specific Information. For barley, oat, wheat, and other grass seedings, 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 LIBERTY 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 seedings 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 effectiveness of **LIBERTY 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 this product 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** another pesticide product.

Table 5 Crop Specific Restrictions and Limitations

Crop	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding ¹	Aircraft Application	Comments
Between Crop Applications	5.5 pints	8 pints	Yes	Yes	Plant only labeled crops within 29 days following application. Limited to 2 applications per year. Minimum of 30 days between applications. Maximum of 5.5 pints LIBERTY DICAMBA + 2,4-D DMA per acre per application (8 pints LIBERTY DICAMBA + 2,4 D DMA per acre per year). Maximum of 2.0 lb ae 2,4-D and 1.0 lb ae dicamba per
Pasture Hay, Silage	4 pints	8 pints	Yes	Yes	Maximum of 2 applications per year. Minimum of 30 days between applications. Maximum of 4 pints LIBERTY DICAMBA + 2,4-D DMA per acre per application (8 pints LIBERTY DICAMBA + 2,4 D DMA per acre per year). Maximum of 4.0 lb ae 2,4-D per acre per year.
Sorghum	1 pint	1 pint	Yes	Yes	Limited to one application per crop cycle.
Sugarcane	5.5 pints	11 pints	Yes	Yes	Limited to one application per crop cycle.
Wheat					
Postemergence		3.33 pints	Yes	Yes	Limited to one postemergence and one preharvest application per crop cycle. Limited to 4.8 pints LIBERTY DICAMBA + 2,4 D DMA per acre per year. Postemergence Maximum 1.25 lb ae 2,4-D per acre per application (3.33 pints LIBERTY DICAMBA + 2,4 D DMA per acre per application).
Preharvest		1.4 pints	Yes	Yes	Preharvest Maximum of 0.5 lb ae 2,4-D per acre per application (1.4 pints LIBERTY DICAMBA + 2,4-D DMA per acre per application).

¹Refer to **FOOD/FEED CROP SPECIFIC INFORMATION** for grazing and feeding restrictions.

VI FOOD/FEED CROP SPECIFIC INFORMATION

Pastures, Rangeland and Grass (Hay, Silage)

LIBERTY DICAMBA + 2,4 D DMA is recommended for use for pasture (including pasture grown for hay), rangeland, grass grown for hay or silage, between crop applications/fallow systems, Conservation Reserve Programs, and general farmstead (non cropland only).

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

Rates above 4 pints of **LIBERTY DICAMBA + 2,4 D DMA** per acre are for spot treatments only

Crop Specific Restrictions

Do not exceed a total of 8 pints of **LIBERTY DICAMBA + 2,4 D DMA** per treated acre during a crop season

Maximum of 4 0 lb ae 2 4 D per acre per year

- Maximum of 2 applications per year

Minimum of 30 days between applications

Maximum of 5 5 pints **LIBERTY DICAMBA + 2 4 D DMA** per acre per application per year

For spot treatment do not exceed 5 5 pints **LIBERTY DICAMBA + 2,4 D DMA** per acre

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 grown for pasture or hay may be injured if rates of **LIBERTY DICAMBA + 2,4 D DMA** are greater than 2 pints per acre are applied

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

Best results will be obtained if **LIBERTY 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) lezpedeza wild winter peas vetch clover and alfalfa pastures as injury will occur

When perennial weeds are reaching maturity mowing and allowing some regrowth will enhance control Difficult to control weeds and brush may require a repeat application

For pasture renovations, wait 3 weeks per quart (2 pints) of **LIBERTY DICAMBA + 2,4 D DMA** 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 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 within 37 days of treatment

Pasture and Rangeland Tank Mixes

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

Ally®

Amber®

Banvel®

Clarity®

Rave®

Sorghum

Rates and Timings

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

Applications of **LIBERTY DICAMBA + 2,4 D DMA** to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling 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 **LIBERTY DICAMBA + 2,4 D DMA**

Crop Specific Restrictions

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

Do not use **LIBERTY DICAMBA + 2,4 D DMA** if the potential for sorghum injury is not acceptable

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

Limited to 1 application per crop cycle

Maximum of 1 pint **LIBERTY DICAMBA + 2 4 D DMA** per acre per crop season

If sorghum is grown for pasture hay or silage refer to **Pastures, Rangeland and Grass (Hay, Silage)** under **Food/Feed Crop Specific Information** for livestock grazing and feeding restrictions

Sorghum Tank Mixes

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

Atrazine	Laddock® S 12	Peak®
Basagran®	Paramount®	Permit®
Buctril®		

Sugarcane

Applications of **LIBERTY DICAMBA + 2,4 D DMA** can be made any time after 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 **LIBERTY DICAMBA + 2,4 D DMA** per treated acre
- For suppression of listed perennial weeds, apply 1.6 pints of **LIBERTY DICAMBA + 2,4 D DMA** per treated acre

Crop Specific Restrictions

- Limited to 1 application per crop cycle
- Do not exceed a maximum of 5.5 pints **LIBERTY DICAMBA + 2 4-D DMA** per application
- Maximum of 11 pints **LIBERTY DICAMBA + 2 4-D DMA** per acre per year

Sugarcane Tank Mixes

LIBERTY 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 only, refer to **Pastures, Rangeland and Grass (Hay, Silage)**

Crop Specific Restrictions

- Do not graze or harvest for livestock feed prior to crop maturity
- Do not use **LIBERTY DICAMBA + 2,4 D DMA** in wheat underseeded with legumes
- Applications are limited to 1 **postemergence** application per crop cycle and 1 **preharvest** application per crop cycle, with a maximum application of 1.75 lb ae 2 4 D per acre per year (4.8 pints **LIBERTY DICAMBA + 2 4-D DMA** per acre per year)
- Postemergence**
 - Limited to 1 application per crop cycle
 - Maximum application rate of 1.25 lb ae 2 4 D per acre per application (3.33 pints **LIBERTY DICAMBA + 2,4 D DMA** per acre per application)
- Preharvest**
 - Limited to 1 application per crop cycle
 - Maximum application rate of 0.5 lb ae 2 4 D per acre per application (1.4 pints **LIBERTY DICAMBA + 2 4 D DMA** per acre per application)

EARLY SEASON APPLICATION

Apply 0.5-1 pint of **LIBERTY 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 **LIBERTY DICAMBA + 2,4 D DMA** per acre may be applied on fall seeded wheat after the wheat begins to tiller for suppression of perennial weeds such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

PREHARVEST APPLICATIONS

LIBERTY DICAMBA + 2,4 D DMA can be used to control weeds that may interfere with harvest of wheat. Apply up to 1.4 pints of **LIBERTY 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 (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

A waiting interval of 14 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, **LIBERTY DICAMBA + 2,4 D DMA** may be tank mixed with other herbicides such as **Ally** or **Gly Star™ Plus** that are registered for preharvest use in wheat.

Preharvest use of **LIBERTY DICAMBA + 2,4 D DMA** is not registered for use in California.

Table 6 Wheat Tank Mixes

Tank Mix Partner	Rate Per Acre
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 pints
Canvas®	0.2 - 0.4 ounce
Curtail™	2 - 2.67 pints
Dakota® ²	16 fluid ounces
Express®	0.083 - 0.167 ounce ¹
Finesse®	0.167 - 0.33 ounce ¹
Glean®	0.167 ounce ¹
Harmony® Extra	0.167 - 0.33 ounce ¹
Karmex® ³	0.5 - 1.5 pounds
2,4 D amine	4 - 20 fluid ounces ⁴
Metribuzin ³ (Sencor® Lexone®)	0.25 - 0.375 pounds a.i.
Peak®	0.25 - 0.38 ounce
Stinger™	4 - 5.33 fluid ounces
Tiller® ²	1 - 1.7 pints

Do not use low rates of sulfonylurea herbicide 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 **LIBERTY DICAMBA + 2,4 D DMA** as a tank mix treatment with Dakota or Tiller on Durum wheat. Do not tank mix with Tiller if wild oat is the larger weed.

³ Tank mixes with Karmex and metribuzin are for use in **fall seeded wheat only**.

⁴ **LIBERTY DICAMBA + 2,4 D DMA** contains 0.36 pounds acid equivalent of 2,4 D per pint. When tank mixing with 2,4 D, do not exceed a combined total of 1.0 pound acid equivalent per acre of 2,4 D and do not exceed 0.5 pounds acid equivalent of 2,4 D unless injury to wheat is acceptable.

Between Crop Applications/Fallow Systems, Conservation Reserve Programs, and General Farmstead

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

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

Between Crop Applications

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

LIBERTY DICAMBA + 2,4 D DMA can be applied postharvest in the fall spring or summer during the fallow period or to crop stubble/set aside acres Apply to weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer

See **RESTRICTIONS AND LIMITATIONS** for the recommended interval between application and planting to prevent crop injury

Rates and Timings

Apply 0.5 to 5.5 pints of **LIBERTY 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 **LIBERTY DICAMBA + 2,4 D DMA** per treated acre during a growing season For best performance apply **LIBERTY 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 **LIBERTY 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 **LIBERTY 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 to 2 pints of **LIBERTY DICAMBA + 2,4 D DMA** per acre for control of annual weeds or 2.8 pints of **LIBERTY DICAMBA + 2,4 D DMA** per acre for control of biennial and perennial weeds

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

Conservation Reserve Programs and General Farmstead

LIBERTY DICAMBA + 2,4 D DMA is recommended for use for Conservation Reserve Programs general farmstead (non cropland only) weed and brush control or use in State Recognized Noxious Weed areas (non cropland areas)

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

Rates above 4 pints of **LIBERTY 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 5.5 pints of **LIBERTY DICAMBA + 2,4 D DMA** per treated acre during a growing season

Farmstead and Fence row Treatment Application Instructions

LIBERTY 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 species listed in **Table 6**

To prepare soil and water emulsions mix in the order and proportions indicated below

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

Do not exceed 40 gallons of spray solution per treated acre per application 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 fence rows surrounding pasture and ranch lands and fallow fields use a tank mix of 2.5% **LIBERTY 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 grasses and should not be used in pastures or where damage to desirable species cannot be tolerated

- 1) **Water** Begin by agitating a thoroughly clean sprayer tank with the desired quantity of clean water. Maintain constant agitation during complete mixing procedure.
- 2) **Emulsifier** Add 0.5% volume to volume of water.
- 3) **LIBERTY DICAMBA + 2,4 D DMA** add 2.5 gallons per 100 gallons of total intended solution.
- 4) **Diesel Oil** Add 10 gallons per 100 gallons of total intended solution.

Maintain constant agitation during application. Under good agitation, the spray solution should be milky white with no oil layer on top. If oil layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

FOR SPRAYING FOLIAR APPLICATIONS

- 1 Spray when leaves have reached full size but have not hardened due to drought or maturity.
- 2 Spray individual plants to wet with handgun.
- 3 For larger stems (up to 3" in diameter) and hard to control species, direct spray stream to base of stems to wet the stem at soil surface in addition to wetting the foliage.
- 4 Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

FOR DORMANT BASAL APPLICATIONS

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

FOR CUT SURFACE TREATMENTS

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

- **Frill or Girdle Treatments** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with **LIBERTY DICAMBA + 2,4 D DMA**.
- **Stump Treatments** Spray or paint freshly cut surface with **LIBERTY 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 7 The following list of trees and vines can be controlled on farmsteads and fencerows as foliar, basal, or cut surface treatments.

Alder	Dewberry	Huisache	Redcedar	Eastern
Ash	Dogwood	Ivy	Poison	Kudzu
Aspen	Elm	Locust	Black	
Basswood	Grape	Maple		
Beech	Greenbriar	Mesquite		
Blackberry	Hawthorn (Thornapple)	Oak		
Blackgum	Hemlock	Oak	Poison	
Cedar	Hickory	Olive	Russian	
Cherry	Honeylocust	Persimmon	Eastern	
Chinquapin	Honeysuckle	Pine		
Cottonwood	Hornbeam	Plum	Sand (Wild Plum)	
Creosotebush	Huckleberry	Poplar		
		Rabbitbrush		
			Yucca	

Weeds listed in this label

Common Name	Scientific Name
ANNUALS	
Beebalm Spotted	<i>Monarda punctata</i>
Broomweed Common	<i>Gutierrezia dracunculoides</i>
Buckwheat Wild	<i>Polygonum convolvulus</i>
Buffalobur	<i>Solanum rostratum</i>
Burdock	<i>Arctium spp</i>
Buttercup Corn	<i>Ranunculus arvensis</i>
Chickweed Common	<i>Stellaria media</i>
Cockle Corn	<i>Agrostemma githago</i>
Cocklebur Common	<i>Xanthium strumarium</i>
Coreopsis Plains	<i>Coreopsis tinctoria</i>

Milkweed	<i>Asclepius</i>
Nightshade Silverleaf	<i>Solanum elaeagnifolium</i>
Persimmon Eastern	<i>Diospyros virginiana</i>
Rabbitbrush	<i>Chrysanthemum pulchellus</i>
Ragwort Tansy	<i>Senecio jacobia</i>
Redvine	<i>Brunnichia ovata</i>
Sagebrush Fringed	<i>Artemisia frigida</i>
Smartweed Swamp	<i>Polygonum coccineum</i>
Sorrel Red (Sheep Sorrel)	<i>Rumex acetosella</i>
Sowthistle Perennial	<i>Sonchus arvensis</i>
Spurge Leafy	<i>Euphorbia esula</i>
Starthistle Yellow	<i>Centaurea solstitialis</i>
Tallow Tree Chinese	<i>Sapium sebiferum</i>
Thistle Bull	<i>Cirsium vulgare</i>
Canada	<i>Cirsium arvense</i>
Musk	<i>Carduus nutans</i>
Plumeless	<i>Carduus acanthoides</i>
Vetch	<i>Vicia spp</i>
Yankeeweed	<i>Eupatorium compositifolium</i>

Food/Feed Crop Uses

This product can be used on the following

Conservation Reserve Program Land

Fallow Systems (Between Crop Application)

General Farmstead

Grain Sorghum

Grass (Hay or Silage)

Pastures

Rangeland

Sugarcane

Wheat

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

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

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product If the terms are not acceptable return the product at once unopened and the purchase price will be refunded

The Directions for Use of this product must be followed carefully It is impossible to eliminate all risks inherently associated with the use of this product Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application weather presence of other materials or other influencing factors in the use of the product which are beyond the control of LIBERTY CROP PROTECTION LLC or Seller To the extent consistent with applicable law all such risks shall be assumed by Buyer and User and Buyer and User agree to hold LIBERTY CROP PROTECTION LLC and Seller harmless for any claims relating to such factors

LIBERTY CROP PROTECTION LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use subject to the inherent risks referred to above when used in accordance with directions under normal use conditions This warranty does not extend to the use of this product contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or LIBERTY CROP PROTECTION LLC and Buyer and User assume the risk of any such use TO THE EXTENT CONSISTENT WITH APPLICABLE LAW LIBERTY CROP PROTECTION LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE

To the extent consistent with applicable law neither LIBERTY CROP PROTECTION LLC nor Seller shall be liable for any incidental consequential or special damages resulting from the use or handling of this product TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF LIBERTY CROP PROTECTION LLC AND SELLER FOR ANY AND ALL CLAIMS LOSSES INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY CONTRACT NEGLIGENCE TORT STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR AT THE ELECTION OF LIBERTY CROP PROTECTION LLC OR SELLER THE REPLACEMENT OF THE PRODUCT

LIBERTY CROP PROTECTION LLC and Seller offer this product and Buyer and User accept it subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability which may not be modified except by written agreement signed by a duly authorized representative of LIBERTY CROP PROTECTION LLC

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

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

Basagran® and Laddok® S 12 are registered trademarks of BASF AG

Asulox® Bronate® Butrl® Dakota® Tiller® are registered trademarks of Bayer CropScience

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

Landmaster® Permit® and Roundup® Ultra are registered trademarks of Monsanto Company

Curtail™ Stinger™ Grazon™ Kerb™ and Tordon™ are trademarks of Dow AgroSciences LLC

Aim™ is a trademark of FMC Corporation

Fallow Star™ and Gly Star™ Plus are trademarks of Albaugh Inc