

15440-32

09-08-2011

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (7504P)  
Ariel Rios Building  
1200 Pennsylvania Ave., NW  
Washington, D.C. 20460

EPA Registration  
Number:

15440-32

Date of Issuance:

SEP - 8 2011

NOTICE OF PESTICIDE:

Registration  
 Reregistration

(under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:

Marks 2,4-DB DMA 2

Name and Address of Registrant (include ZIP Code):

Nufarm Limited  
Wyke Lane, Wyke, Bradford  
West Yorkshire BD12 9EJ, England

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

EPA received a label amendment request submitted on September 6, 2011. EPA grants this request under the authority of section 3(c)(5) of the Federal Insecticide, Fungicide and Rodenticide Act, as amended. With this accepted labeling, all requirements set forth in the Reregistration Eligibility Decisions (RED)s for 2,4-DB have been satisfied. Therefore, EPA reregisters the product listed above. This action is taken under the authority of section 4(g)(2)(c) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Submit one (1) copy of final printed labeling. Amended labeling will supersede all previously accepted labels. A copy of your label stamped "Accepted" is enclosed for your records. Products shipped after twelve (12) months from the date of this Notice or the next printing of your label, whichever occurs first, must bear the new revised label.

If you have any questions regarding this Notice, please contact Hope Johnson at (703) 305-5410 or at johnson.hope@epa.gov

Signature of Approving Official:

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

Date:

SEP - 8 2011



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**ACCEPTED**

SEP - 8 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No 15440-32

**Marks 2,4-DB DMA 2**  
**BROADLEAF HERBICIDE**

**ACTIVE INGREDIENT:**

4-(2,4-Dichlorophenoxy) butyric acid, dimethylamine salt\* ..... 26.67%

**OTHER INGREDIENTS** ..... 73.33%

**TOTAL** ..... 100.00%

\*4-(2,4-Dichlorophenoxy) butyric acid equivalent 22.6% by weight or 2 pounds per gallon.

**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 this label, find someone to explain it to you in detail.)

**FIRST AID STATEMENTS**

<b>If in eyes</b>	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice. □
<b>If swallowed</b>	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 to by a poison control center or doctor. Do not give anything to an unconscious person.
<b>If on skin or clothing</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
<b>If inhaled</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center, doctor or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 a.m. to 4:30 p.m. Pacific Time (NPIC website: [www.npic.orst.edu](http://www.npic.orst.edu)) During other times, call the poison control center 1-800-222-1222.

**NOTE TO PHYSICIAN**

Rinse eye(s) with running water for at least 20 minutes. If only one eye is affected, avoid washing substance into the unexposed eye. Treat symptomatically.

In case of ingestion of concentrate, probable mucosal damage may contraindicate the use of gastric lavage. Repeat doses of activated charcoal are contraindicated if the patient has absent bowel sounds because of the risk of obstruction.

Maintain respiration, monitor ECG and blood gases. Correct acidosis with iv sodium bicarbonate. Control convulsions with diazepam and treat hypotension with volume replacement and inotropes (eg dopamine or dobutamine) as necessary. Monitor CPK for rhabdomyolysis.

Forced alkaline diuresis in the treatment of severe phenoxy acid poisoning is no longer recommended due to the risk of electrolyte imbalance. Urinary alkalinization is less hazardous. The recommended regimen for urinary alkalinization is as follows: To maintain urine pH greater than 7.5, adults should be given 50 ml boluses of 8.4% sodium bicarbonate iv and/or 1 L of 1.26% sodium bicarbonate plus 40 mmol potassium iv over 4 hours. Children should be given 1 ml/kg of 8.4% sodium bicarbonate plus 20 mmol potassium diluted in 500 ml dextrose saline infused at 2 to 3 ml/kg/hour.

These guidelines are subject to review and a Poison Control Center should be contacted in each case where treatment is likely to be necessary.

See side panel and inside booklet for additional Precautionary Statements.

**NET CONTENTS 1 or 5 GALLONS**

Produced by:  
Nufarm Limited  
Wyke Lane, Bradford  
West Yorkshire, BD12 9EJ, ENGLAND  
Telephone +44(0)1274 691234; Telefax +44(0)1274 691176

EPA Reg. No. 15440-32  
EPA Est. No. 15440-GBR-1

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## PRECAUTIONARY STATEMENTS

### Hazards to humans and domestic animals.

**DANGER:** Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing

### PERSONAL PROTECTIVE EQUIPEMENT (PPE)

Materials that are chemical resistant to this product are made of 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 and other handlers must wear protective eyewear (goggles or face shield) and long-sleeved shirt and long pants, shoes and socks, plus chemical-resistant gloves (except for pilots) and chemical-resistant apron when mixing/loading, cleaning up spills, cleaning equipment, or otherwise exposed to concentrate.

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

### ENGINEERING CONTROL STATEMENTS

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.

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators.

See Engineering Controls for additional requirements.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users 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. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This chemical is toxic to fish. 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 from treated areas may be hazardous to aquatic organisms in neighboring issues. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not contaminate water intended for irrigation or domestic purposes. Do not apply when weather conditions favor drift from target area.

**Groundwater Contamination:** Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-DB have been associated with mixing/loading and disposal sites. Caution must be exercised when handling 2,4-DB 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 spill will help prevent 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.

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

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

### AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 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 made of any waterproof material, shoes plus socks, and protective eyewear.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container in a dry secured storage area. Keep container tightly closed when not in use.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. 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 container. Do not reuse or refill this container. Triple rinse (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. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

### RESTRICTIONS:

Do not apply this product through any type of irrigation system.

Do not use in or near a greenhouse.

Do not feed/graze soybean forage or harvest hay for 60 days following any 2,4-DB application.

Do not apply Marks 2,4-DB DMA 2 directly to or otherwise permit it to come in contact with cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers, or other desirable crop or ornamental plants. Do not permit spray mist to drift onto susceptible plants because very small quantities of 2,4-DB can cause severe injury during the growing or dormant periods. Use coarse sprays to minimize drift. Do not apply with nozzles that produce fine spray droplets.

### SPRAY DRIFT MANAGEMENT

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

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. Apply only when the wind speed is 2 to 10 mph at the application site.

### APPLICATION PROCEDURES

Marks 2,4-DB DMA 2 can be applied by ground or aerial application. The following provides methods of application for each crop.

#### AERIAL APPLICATION:

Use orifice discs, cores and nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage. Use a minimum spray volume of 5 GPA and a maximum pressure of 20 psi.

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.

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

Do not make applications into temperature inversions.

#### **GROUND APPLICATION:**

Use a standard herbicide sprayer that provides uniform and accurate application. Sprayer should be equipped with screens no finer than 50 mesh in the nozzle tips and in-line strainers.

Select a spray volume and delivery system that will ensure thorough and uniform spray coverage. For optimum spray distribution and thorough coverage, use flat fan nozzles (maximum tip size 8008) with a minimum spray pressure of 20 psi at the nozzle tips. Other nozzle types that produce coarse spray droplets may not provide adequate coverage of the weeds to ensure optimum control. Do not use raindrop nozzles to apply Marks 2,4-DB DMA 2 because weed control may be reduced. Use a minimum spray volume of 10 gallons per acre (GPA) for optimum spray coverage. When using higher speed equipment, a maximum speed of 10 mph is suggested if field conditions cause excessive boom movement during application and subsequent poor spray coverage. Ground applications made when dry, dusty field conditions exist may provide reduced weed control in wheel track areas.

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

#### **PRODUCT INFORMATION**

Spray tank residues of 2,4-D or MCPA mixed with Marks 2,4-DB DMA 2 can cause serious crop or ornamental plant injury. A sprayer previously used to apply these chemicals must be thoroughly cleaned with alkali and water before applying Marks 2,4-DB DMA 2. Be sure sprayer is clean before applying Marks 2,4-DB DMA 2.

Local conditions may affect the use of herbicides. Consult your State Agricultural Experiment Station, Farm Advisors, or Extension Weed Specialists for advice in selecting treatment from this label to best fit local conditions.

**INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY, DO NOT USE THIS PRODUCT.**

Crop varieties vary in response to 2,4-DB and some are easily injured. Apply Marks 2,4-DB DMA 2 only to varieties known to be tolerant to 2,4-DB. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-DB, consult your seed company, state Agricultural Extension Service or qualified crop consultant for advice. Be sure that use of this product conforms to all applicable laws, rules and regulations. Certain states have restrictions pertaining to application distances from susceptible crops. The applicator must become familiar with these laws, rules, or regulations and follow them exactly.

#### **PRECAUTIONS**

**Mixing and Loading:** Most cases of ground water contamination involving phenoxy herbicides such as 2,4-DB have been associated with mixing/loading and disposal sites. Caution must be exercised when handling 2,4-DB pesticides at such sites to prevent contamination of ground water supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment directly on an impervious pad to contain spills will help prevent ground water contamination.

Drift from ground application may be reduced by: (1) keeping the spray boom as near to the crop as possible in order to obtain complete coverage; (2) by applying 10 gallons or more of spray per acre; (3) by using no more than 20 pounds of pressure at the nozzle tips; and (4) by not spraying when wind exceeds 5 miles per hour.

Drift from aerial application may be reduced by: (1) applying as near to the target as possible to obtain adequate coverage; (2) by applying 5 or more gallons of spray per acre; (3) by using 20 pounds pressure or less at the nozzle tips; (4) by using nozzles which produce a coarse spray pattern; and (5) by spraying when there is no possibility for a temperature inversion at time of spraying.

Applications by aircraft, ground rig and hand sprayers must be carried out only when there is no hazard from spray drift.

#### **MIXING INSTRUCTIONS:**

**Marks 2,4-DB DMA 2 ALONE:** Fill the spray tank 1/2 to 3/4 full with clean water. Begin agitation and add the listed amount of Marks 2,4-DB DMA 2. Use the lower rates of Marks 2,4-DB DMA 2 shown under each crop when weeds are young and actively growing. Use the higher rates of Marks 2,4-DB DMA 2 listed when weeds are larger and not growing rapidly. Add water to the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application.

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**TANK MIXTURES:** Marks 2,4-DB DMA 2 can be applied in tank mixture with other herbicides registered for use on approved crops. Refer to the specific crop section for application rates and other restrictions. Use the lower rates of Marks 2,4-DB DMA 2 shown under each crop when weeds are young and actively growing. Use the higher rates of Marks 2,4-DB DMA 2 listed when weeds are larger and not growing rapidly. To apply Marks 2,4-DB DMA 2 in mixture with another product, fill the spray tank 1/2 to 3/4 full with clean water and begin agitation. If tank mixing with wettable powder, soluble powder, flowable or dry flowable products, add the powder or flowable product first. After the other herbicide is thoroughly mixed with water, add the listed amount of Marks 2,4-DB DMA 2 and add water to the spray tank to the desired level. If tank mixing the other product types, add the Marks 2,4-DB DMA 2 first before adding the other product. Always mix one product in water thoroughly before adding another product or compatibility problems may occur. Never mix two products together without first mixing in water.

Maintain sufficient agitation while mixing and during application to ensure a uniform spray mixture. If spray mixture is allowed to remain without agitation for short periods of time, be sure to agitate until uniformly mixed before application.

**COMPATIBILITY**

Marks 2,4-DB DMA 2 may form an insoluble precipitate in very hard water. If you expect to mix Marks 2,4-DB DMA 2 with very hard water, test compatibility by mixing a small amount of Marks 2,4-DB DMA 2 in the proposed dilution rations, shake and observe. A compatibility agent approved for use on growing crops such as UNITE or E-Z MIX may be tested to reduce precipitation. Whenever hard water is used to dilute Marks 2,4-DB DMA 2, spray immediately and do not allow spray mixture to sit overnight.

**WEED LIST**

Marks 2,4-DB DMA 2 will control or suppress the following weeds depending on weed height.

COMMON NAME	BOTANICAL NAME	MAXIMUM WEED HEIGHT*
Velvetleaf	<i>Abutilon theophrasti</i>	1 inch
Virginia copperleaf	<i>Acalypha virginica</i>	1 inch
Prickly sida (teaweed)	<i>Sida spinosa</i>	1 inch
Common ragweed	<i>Ambrosia artemisiifolija</i>	1 inch
Threeseed croton (goatweed)	<i>Croton lindheimeranus</i>	1 inch
Lambsquarters	<i>Chenopodium album</i>	1 inch
Wild mustard	<i>Sinapsis arvensis</i>	1 inch
Field pennycress	<i>Thlaspi arvense</i>	1 inch
Jimsonweed	<i>Datura stramonium</i>	1.5 inches
Devilsclaw	<i>Proboscidea louisianica</i>	2 inches
Pigweed	<i>Amaranthus ssp.</i>	3 inches
Morning glory	<i>Ipomoea ssp.</i>	3 inches
Cocklebur	<i>Xanthium ssp.</i>	3 inches
Curled dock	<i>Rumex crispus</i>	3 inches
Russian thistle	<i>Salsola kali</i>	3 inches
Yellow rocket	<i>Barbarea vulgaris</i>	3 inches
Sicklepod	<i>Cassia obtusifolia (L)</i>	2 inches
Smartweed	<i>Polygonum ssp.</i>	3 inches

\*Growth of taller weeds will be only suppressed.

**SOYBEANS**

**Preplant through preemergence:**

Apply 0.7 to 0.9 pint/A Marks 2,4-DB DMA 2 plus 0.5% V/V non-ionic surfactant for control of emerged cocklebur, annual morningglory and other susceptible broadleaf weeds before planting or before crop emergence. Apply when weeds are small and actively growing (see WEED LIST). Marks 2,4-DB DMA 2 may not give complete control of larger overwintered mustards.

**Postemergence broadcast (over the top):**

Apply 0.7 to 0.9 pint/A Marks 2,4-DB DMA 2 for control of emerged cocklebur, annual morningglory and other susceptible broadleaf weeds. Apply when weeds are small and actively growing (see WEED LIST). Apply to soybeans from 7 to 10 days before bloom up to mid-bloom when soybeans are about knee-high and growing actively.

Soybean foliage should be dark green indicating that nodulation and nitrification are under way. Post emergence broadcast application at these rates prior to or after this application timing is not recommended as reduced flowering and yield may result. DO NOT APPLY Marks 2,4-DB DMA 2 postemergence broadcast to soybeans grown in IA, IL, IN, KS, KY (except the Purchase area), MO (except the MO bootheel), MI, MN, NE, ND, OH, SD and WI.

**Postemergence directed band:**

Apply 0.7 to 0.9 pint Marks 2,4-DB DMA 2 per broadcast acre as a directed band treatment to control emerged cocklebur and annual morningglory up to 3 inches tall. To control other susceptible broadleaf weeds up to 1 inch tall, apply 1.4 to 1.6 pints per broadcast acre as a directed band treatment. Apply no more than twice per season to minimize the potential for stunting crops. Apply when soybeans are 8 or more inches tall with sprayer nozzles mounted to insure proper placement of spray on only the lower 1/3 of the soybean plants. Do not allow spray to contact growing terminals of beans as excessive crop injury will result. Do not mount nozzles on booms with drop pipes or on cultivators without gauge wheels. Use flat fan type nozzles, 8001 or larger or the equivalent with a minimum nozzle pressure of 20 psi 2nd at least 10 gallons of spray volume per acre.

### **TANK MIXTURES OF Marks 2,4-DB DMA 2 AND OTHER HERBICIDES IN SOYBEANS**

Applying tank mixtures of Marks 2,4-DB DMA 2 preplant/preemergence or postemergence with other soybean herbicides as directed by local weed control authorities can reduce competition from early weed populations and can improve weed control or control of mid-to-late-season weed populations, thus minimizing the likelihood of yield reduction in soybean fields with heavy broadleaf weed infestations. However, treating soybeans under stress (as from drought or disease such as Phytophthora root rot) or in any other manner not directed on this label can cause crop injury and yield reduction. Follow the local directions of your state Cooperative Extension service, or other agricultural weed control authority. Always follow the instructions of any product used in tank mixture with Marks 2,4-DB DMA 2.

#### **Gramoxone® Inteon:**

Apply 0.5 to 0.75 pint/A Marks 2,4-DB DMA 2 plus the specified rate of Gramoxone® Inteon plus 0.5% V/V nonionic surfactant for improved control of emerged annual morningglory, common cocklebur, marehail and other problem weeds. Apply to small actively growing weeds. Refer to the Gramoxone Inteon label for full list of weed species controlled and specific application stage and rate. Apply before planting or before soybean emergence. Do not apply this tank mixture after crop emergence.

#### **Prowl®:**

Apply 0.7 to 0.9 pint/A Marks 2,4-DB DMA 2 plus 1.0 to 3.0 pints/A Prowl® plus 0.5% V/V non-ionic surfactant for control of emerged cocklebur, annual morningglory and other susceptible broadleaf weeds. Apply when broadleaf weeds are actively growing and small (see WEED LIST). Marks 2,4-DB DMA 2 mixtures may not give complete control of larger overwintered mustards. Best results will be achieved by adding a non-ionic surfactant to the spray tank when making a preplant application. Apply up to 45 days prior to soybean planting. Do not apply a Marks 2,4-DB DMA 2 plus Prowl tank mixture at or after planting north of Interstate 80. Surface applications of Prowl tank mixtures north of Interstate 80 require at least 1 inch rainfall or mechanical incorporation prior to planting or crop injury may result. Do not apply this tank mixture after crop emergence.

#### **Roundup® or Honcho®:**

Apply 0.5 to 0.75 pint/A Marks 2,4-DB DMA 2 plus 1 to 1.5 pints/A Roundup® or Honcho® plus 0.5 to 1.0% V/V non-ionic surfactant for improved control of emerged annual morningglory, common cocklebur and other problem weeds. Apply to small actively growing weeds. Refer to the Roundup or Honcho labels for specific rates, application stage and weed species controlled. Apply before planting or before soybean emergence. Do not apply this tank mixture after crop emergence.

#### **Pursuit Plus®:**

Apply 0.5 to 0.75 pint/A Marks 2,4-DB DMA 2 plus 2.5 pints/A Pursuit Plus® plus 0.25% V/V non-ionic surfactant for improved control of emerged mustards, field pennycress and other problem weeds. Apply when broadleaf weeds are actively growing and small (see WEED LIST). Apply before planting or before soybean emergence. Do not apply this tank mixture after crop emergence.

#### **Pursuit®:**

Apply 2 to 3 fl. oz./A Marks 2,4-DB DMA 2 plus 4 fl. oz./A Pursuit® for improved control of common and giant ragweed, morningglory, and other broadleaf weeds. Refer to the Pursuit label regarding the use of surfactants and weed species controlled. Apply this tank mixture any time after soybean emergence but no later than 85 days before harvest.

#### **Scepter® or Scepter 70DG®:**

Apply 0.5 to 0.75 pint/A Marks 2,4-DB DMA 2 plus 0.66 pint/A Scepter® or 2.8 02.14 Scepter 70DG® plus 0.25% V/V for improved control of emerged mustards, field pennycress and other problem weeds. Apply when broadleaf weeds are actively growing and small (see WEED LIST). Apply before planting or before soybean emergence. Do not apply this tank mixture after crop emergence.

#### **Squadron®:**

Apply 0.5 to 0.75 pint/A Marks 2,4-DB DMA 2 plus 3 pints/A Squadron® plus 0.25% V/V non-ionic surfactant for improved control of emerged mustards, field pennycress and other problem weeds. Apply when broadleaf weeds are actively growing and small (see WEED LIST). Apply before planting or before soybean emergence. Do not apply this tank mixture after crop emergence.

#### **Basagran®:**

Apply 2 fl. oz/A Marks 2,4-DB DMA 2 plus 1.5 to 2 pints/A Basagran® to improve control of annual morningglory. Apply to vines up to 6 inches long in the southern states of AL, AR, FL, GA, LA, MS, NC, OK, SC, TN, TX and VA or a maximum of 10 inches long in all other states. Apply postemergence to soybeans. Under certain conditions soybean foliage may burn, crinkle and bronze following application.

**Blazer®:**

Apply 2 fl. oz/A Marks 2,4-DB DMA 2 plus 1.5 to 2 pints/A Blazer® to improve control of larger morningglory, cocklebur, common ragweed, jimsonweed and pigweed. Apply when weeds are actively growing and before they reach 12 inches. Apply postemergence to soybeans. Under certain conditions, soybean foliage may burn, crinkle and bronze following application. Soybean yield may be reduced. Do not add surfactant or crop oil to this mixture as increased crop injury may result.

**Reflex®:**

Apply 2 to 3 fl oz/A Marks 2,4-DB DMA 2 plus 1 to 1.5 pints/A Reflex® for improved control of annual morningglory, giant ragweed and cocklebur. Apply to actively growing weeds in seedling stage of growth. Apply postemergence to soybeans. Under certain conditions bronzing, crinkling or spotting of soybean foliage may occur.

**Sencor DF®:**

Apply 0.9 pint/A Marks 2,4-DB DMA 2 plus 0.33 to 0.66 lb/A Sencor DF® for improved control of cocklebur, annual morningglory and other broadleaf weeds. Apply before weeds are 3 inches tall. A non-ionic surfactant may be added to improve broadleaf weed control. Apply to soybeans as a directed band treatment only when soybeans are at least 8 inches high, with spray or nozzles mounted to insure proper placement of spray on no more than the lower 1/3 of the soybean plants. Do not apply directly to soybean plants or serious crop injury will occur. Soybean leaves contacted by spray will be killed. Follow all variety restrictions on the full Sencor DF label.

**RESTRICTIONS AND LIMITATIONS FOR USE ON SOYBEANS**

Beans stressed by drought or other influences should not be sprayed. Do not use this product on soybeans that show symptoms of disease such as Phytophthora root rot.

Do not graze or feed soybean hay within 60 days after application of Marks 2,4-DB DMA 2 tank mix application.

Do not harvest soybeans within 60 days after spray application.

Do not treat soybeans with a tank mixture of Marks 2,4-DB DMA 2 and Sevin® Carbaryl insecticide as severe injury may result.

When preplant through preemergence treatment is followed with a Marks 2,4-DB DMA 2 postemergence application, the cumulative rate must not exceed 1.6 pints per acre per season.

Follow all restrictions and limitations of any product used in tank mixture with Marks 2,4-DB DMA 2.

Do not use Marks 2,4-DB DMA 2 alone or in tank mixture as a preplant through preemergence application to soybeans in California.

**PEANUTS**

Apply 0.8 to 1.0 pint/A Marks 2,4-DB DMA 2 for control of annual morningglory, cocklebur and other broadleaf weeds. Apply when weeds are small and actively growing (see WEED LIST). A second application may be made for late germinating cocklebur and morningglory. Apply to peanuts 2 to 12 weeks after planting in the states of AL, AR, FL, GA, LA, NC, SC, TN, and VA. In NC, SC and VA, do not apply later than 45 days before harvest.

For control of annual morningglory and cocklebur in TX, OK and NM, apply 0.8 to 1.0 pint/A Marks 2,4-DB DMA 2 before weeds are 3 inches tall. For optimum control of other susceptible broadleaf weeds (see WEED LIST), apply 1.6 pints/A. For optimum prickly sida suppression, make a second application 14 days later. Apply to peanuts 2 to 12 weeks after planting.

**RESTRICTIONS AND LIMITATIONS FOR USE ON PEANUTS**

Do not feed treated peanut vines or peanut hay to livestock.

Do not apply Marks 2,4-DB DMA 2 if peanut plants are under stress from drought as injury may occur.

Do not apply later than 100 days after planting or within 60 days of harvest.

**SEEDLING AND ESTABLISHED ALFALFA**

Apply 1 to 2 quarts/A Marks 2,4-DB DMA 2 for control of emerged lambsquarters, pigweed, field pennycress, wild mustard, common ragweed, cocklebur, yellow rocket, Russian thistle and annual morningglory species less than 1 inch high. Use 2 to 3 quarts/A for control of these weeds up to 3 inches high. Use the higher rates in dry, low humidity growing areas. Apply 3 quarts/A for control or suppression of smartweed and curled dock up to 3 inches tall. Apply postemergence to seedling or established alfalfa. Alfalfa should be healthy and actively growing for greatest selectivity; twisting of stems and malformation of leaves may occur. Under most conditions this response is usually outgrown. A non-ionic surfactant at 0.25% V/V may improve weed control in seedling alfalfa grown in dry, low humidity areas only. The surfactant may cause some twisting of stems and malformation of leaves. This response is usually outgrown under most conditions. Marks 2,4-DB DMA 2 may not adequately control overwintered broadleaf weeds including field pennycress and mustards.

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For control of emerged susceptible broadleaf and grass weeds that are actively growing, apply 1 to 3 quarts/A Marks 2,4-DB DMA 2 plus 1 to 2.5 pints/A Poast® plus 2 pints/A Crop Oil Concentrate. Refer to the directions above and the Poast label for weeds controlled and application timing. Alfalfa should be healthy and actively growing for greatest crop tolerance. Established alfalfa is less tolerant to Marks 2,4-DB DMA 2 than in the seedling stage of growth. Some yellowing and burning of alfalfa foliage, stem and leaf malformation may occur with this tank mixture. Alfalfa will generally outgrow this response. Balance the severity of your grass and broadleaf weed problem with the potential for crop injury. Do not add non-ionic surfactant, Dash®, UAN solution or ammonium sulfate to this tank mixture.

#### **RESTRICTIONS AND LIMITATIONS FOR USE ON ALFALFA**

Do not graze established alfalfa or feed straw or hay from established alfalfa to meat or dairy livestock within 30 days after application.

Do not graze or feed seedling alfalfa to meat or dairy livestock within 60 days after application.

Do not apply when crop is stressed from lack of moisture. Do not spray when the temperature exceeds 90°F and/or is predicted to exceed 90°F during the three days following application.

Do not add any wetting agents or detergents to the spray solution unless as specified on this label.

Rainfall or overhead irrigation within 7 to 10 days following a Marks 2,4-DB DMA 2 application can cause unacceptable crop injury. For irrigated crops, apply Marks 2,4-DB DMA 2 as soon as possible after irrigation. Delay the next irrigation for 7 to 10 days after spraying.

Follow all restrictions and precautions of any product used in tank mixture of Marks 2,4-DB DMA 2.

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