


|   |  |  |                                     |
|---|--|--|-------------------------------------|
| (A)  | United States Environmental Protection Agency<br>Office of Pesticide Programs (H7505C)<br>Washington, DC 20460 | <input type="checkbox"/> Registration<br><input checked="" type="checkbox"/> Amendment<br><input type="checkbox"/> Other | OPP Identifier Number<br><br>160075 |
|   | Application for Pesticide:   |  |                                     |

## Section I

|   |   |  |
|---|---|--|
| 1. Company/Product Number<br>5905-72  | 2. EPA Product Manager<br>JOANNE MILLER | 3. Proposed Classification<br><input type="checkbox"/> None <input type="checkbox"/> Restricted  |
| 4. Company/Product (Name)<br>2,4-D AMINE  | PM#<br>23                               |  |
| 5. Name and Address of Applicant (Include ZIP Code)<br><br>HELENA CHEMICAL COMPANY<br>6075 POPLAR AVENUE, SUITE 500<br>MEMPHIS, TN 38119<br><input 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:<br><br>EPA Reg. No. _____<br>Product Name _____ |

**BEST AVAILABLE COPY**

## 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.)

PER PR NOTICE 93-3 CHANGING UNDER ENVIRONMENTAL HAZARDS SECTION WETLANDS STATEMENT TO:  
"FOR TERRESTRIAL USES, DO NOT APPLY DIRECTLY TO WATER, OR TO AREAS WHERE SURFACE  
WATER IS PRESENT OR TO INTERTIDAL AREAS BELOW THE MEAN HIGH WATER MARK.


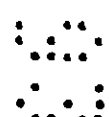
**NOTIFICATION  
LABEL NOT REVIEWED  
PER PR NOTICE 93-3**

## Section III

DATE 8/3/93

|   |   |   |  |
|---|---|---|--|
| 1. Material This Product Will Be Packaged In:   |   |   |  |
| Child-Resistant Packaging<br><input type="checkbox"/> Yes*<br><input type="checkbox"/> No   | Unit Packaging<br><input type="checkbox"/> Yes<br><input type="checkbox"/> No | Water Soluble Packaging<br><input type="checkbox"/> Yes<br><input type="checkbox"/> No  | 2. Type of Container<br><input type="checkbox"/> Metal<br><input type="checkbox"/> Plastic<br><input type="checkbox"/> Glass<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Other (Specify) _____ |
| * Certification must be submitted.  |   | If "Yes," Unit Package wgt. No. per container   | If "Yes," Package wgt. No. per container   |
| 3. Location of Net Contents Information<br><input type="checkbox"/> Label <input type="checkbox"/> Container  |   | 4. Size(s) of Retail Container  |  |
|   |   | 5. Location of Label Directions<br><input type="checkbox"/> On Label<br><input type="checkbox"/> On Labeling accompanying product |  |
| 6. Manner in Which Label is Affixed To Product<br><input type="checkbox"/> Lithograph<br><input type="checkbox"/> Paper glued<br><input type="checkbox"/> Stenciled |   | <input type="checkbox"/> Other (_____)  |  |

## Section IV

|  |  |   |   |
|--|--|---|---|
| 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)  |  |   |   |
| Name<br><br>JUDY OLDHAM  | Title<br><br>MANAGER, REGISTRATION SERV.       | Telephone No. (Include Area Code)<br><br>901-761-0050 |   |
| <b>Certification</b><br>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<br><br>  | 3. Title<br><br>MANAGER, REGISTRATION SERVICES |   |  |
| 4. Typed Name<br><br>JUDY OLDHAM   | 5. Date<br><br>JULY 6, 1993                    |   |   |

# 2,4-D AMINE

2-710  
NOTIFICATION  
LABEL NOT REVIEWED  
PER PR NOTICE 88-6  
DATE 8/3/93

| ACTIVE INGREDIENT:  | BY WT.       |
|---|--------------|
| *Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid ..... | 46.6%        |
| INERT INGREDIENT: .....                                     | <u>53.4%</u> |
| TOTAL .....   | 100.0%       |

\*2,4-Dichlorophenoxyacetic acid equivalent 38.7%-3.76 lbs. per gallon.  
Isomer specific by AOAC method 6.D01-5.

KEEP OUT OF REACH OF CHILDREN

## CAUTION - CAUCION

**PRECAUCION AL USUARIO:** Si usted no lee ingles, no use este producto hasta que le etiqueta haya sido explicada ampliamente.

SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**BEST AVAILABLE COPY**

EPA REG. NO. 5905-72  
EPA EST NO.

MANUFACTURED BY  
HELENA CHEMICAL COMPANY  
MEMPHIS, TN 38119

NET CONTENTS:

## PRECAUTIONARY STATEMENTS

### CAUTION

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed. Avoid breathing spray mist. Avoid contact with skin, eyes and clothing. May produce skin sensitization reaction in certain individuals. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

When mixing, loading, or applying this product or repairing or cleaning equipment used with this product, wear eye protection (face shield or safety glasses), chemical-resistant gloves, long-sleeved shirt, long pants, socks, and shoes. For aerial applicators in enclosed cockpits and applicators applying this product from a tractor that has a completely enclosed cab, eye protection is not required.

Wash hands, face, and arms with soap and water as soon as possible after mixing, loading, or applying this product. Wash hands, face, and arms with soap and water before eating, smoking, or drinking. Wash hands and arms before using toilet. After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry. Remove saturated clothing as soon as possible and shower.

If this container contains over 1 gallon and less than 5 gallons, persons engaged in open pouring of this product must also wear coveralls or a chemical-resistant apron.

If this container contains 5 gallons or more in capacity, a mechanical system (probe and pump) 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.

#### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Call a physician or poison control center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if irritation persists.

**IF IN EYES:** Flush with plenty of water. Get medical attention if irritation persists.

#### ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

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4/10/10

### **GROUNDWATER CONTAMINATION**

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.

### **PROTECTIVE CLOTHING**

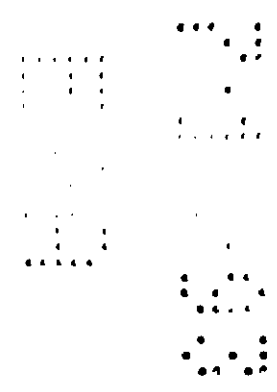
When handling this product, wear chemical resistant gloves.

### **PHYSICAL OR CHEMICAL HAZARDS**

Do not use, pour, spill or store near heat or open flame.

### **DIRECTIONS FOR USE**

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



### AGRICULTURAL USE REQUIREMENTS

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

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, wear:

- long-sleeved shirt and long pants
- chemical-resistant gloves such as butyl or nitrile or barrier laminate
- shoes and socks
- protective eyewear (face shield or safety glasses)

For Turf Sites (excluding sod farms): Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated, and appropriate actions to take in case of accidental exposure). When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information:

#### CAUTION

Area treated with 2,4-D Amine on (date of application).

Do not enter without appropriate personal protective clothing for 12 hours. Refer to Hazards to Humans and Domestic Animals section of this label for personal protective clothing.

### CHEMIGATION PROHIBITION

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

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### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Protect from freezing. If stored below 32°F and crystals form, warm to 72°F for 24 hours, periodically rolling drum to reconstitute.

#### PESTICIDE DISPOSAL:

Pesticide wastes are toxic. 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:

Metal containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state or local authorities.

Plastic containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### OBSERVE THESE PRECAUTIONS

Avoid applications of spray or drift of spray to desirable plants, as this product may injure cotton, tomatoes, beans, peas, most vegetables, ornamentals, grapes or others. Even minute quantities of the spray may cause severe injury. Accordingly, application by airplanes should be made only when there is no hazard from drift. All sprays are likely to drift under certain conditions. The finer the spray, the greater the likelihood of drift effect. Coarse sprays are less likely to drift.

Use only amount needed. **DO NOT OVERDOSE.**

Be sure that airplane spraying equipment has a quick-acting, effective cutoff valve, and is used from the lowest possible altitude by an aircraft operator experienced in the application of herbicides.

Do not use same equipment for other purposes. If necessary to use sprayer for any other spraying, be sure to thoroughly clean all equipment with a suitable chemical cleaner. (1 qt. of household ammonia in 20 to 25 gals. water - let stand overnight, then rinse thoroughly with water)

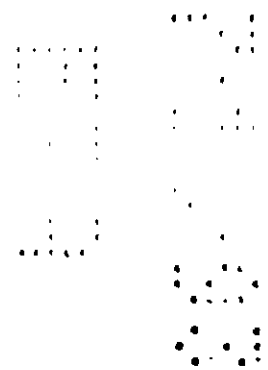
### FOLLOW THESE DIRECTIONS CAREFULLY

Always mix with water, so as to apply the recommended amount of 2,4-D Amine per acre in the amount of water necessary to cover an acre of ground with the spraying equipment used.

Apply 2,4-D sprays at low pressures of approximately 30 to 50 pounds, with nozzles adjusted to give a coarse, wetting spray consisting of large droplets.

For best results apply 2,4-D sprays when soil and climatic conditions are conducive to rapid plant growth. This product may be applied when temperatures range from 50° to 95°; results may be unsatisfactory below 65° and above 90°. Sprays applied under adverse conditions (abnormally cool or hot and dry weather or when weeds are near maturity) should contain maximum recommended dosage. Under such conditions, control results may not always be entirely satisfactory.

The recommendations given are general. Because of varietal and local conditions, consult Agricultural Experiment Station or Extension Service weed specialists.



## THIS CONTAINER IS NON-RETURNABLE

## Conversion Table

|                              |        |            |         |         |         |         |
|------------------------------|--------|------------|---------|---------|---------|---------|
| 2,4-D Acid<br>Required       | 1 lb.  | 3/4 lb.    | 1/2 lb. | 3/8 lb. | 1/4 lb. | 1/8 lb. |
| Amount 2,4-D<br>Amine to use | 2 pts. | 1 1/2 pts. | 1 pt.   | 3/4 pt. | 1/2 pt. | 1/4 pt. |

## AMOUNTS OF SPRAY MIXTURE TO APPLY

**AIRPLANE APPLICATION** - Water - Dilute recommended amount of 2,4-D Amine in 3 to 10 gallons of water and apply per acre.

**GROUND SPRAYERS** - Dilute recommended amount in 8 to 20 or more gallons of water and apply per acre. The amount of water required will depend upon the crop and type of equipment used. Thorough agitation of spray mixture is necessary for best results.



80A10

## TO CONTROL WEEDS IN RESISTANT CROPS

2,4-D Amine is a selective water soluble herbicide for the control of susceptible broadleaved weeds in growing small grain crops, corn, sugar cane, pastures, lawns, and turf.

The following dosages are suggested on growing crops for the control of susceptible weeds such as mustard, sunflower, lambs-quarters, pigweed, ragweed, dock, cocklebur, sow thistle, marsh elder, and many other species. Perennial weeds are best when in bud or in early bloom stage of growth.

**WHEAT, OATS, BARLEY AND RYE** - 2,4-D sprays applied during seedling stage of growth may reduce yields. When crop plants are tillering (stooling), use 1/2 to 1 pint of 2,4-D Amine per acre and 1 to 1-1/2 pints per acre when fully tillered (stooled) - but before the early boot stage.

Sprays containing 2 to 3 pints per acre may be applied as an emergency weed control measure when seed in heads is past dough stage.

When small grain is underseeded with a legume such as alfalfa or clovers, use 1/4 to 1/2 pint of 2,4-D Amine per acre while the small grain is between tiller and boot stage. The legumes are less likely to be injured if a small grain foliage canopy is allowed to develop before application is made. Apply the lowest gallonage possible at low pressure in order to reduce penetration of the canopy with the spray.

Consult your local authorities: Fall applications of 2,4-D in crops are not recommended. Do not forage or graze treated grain fields within two weeks after treatment with 2,4-D. Do not feed treated straw to livestock.

**CORN AND SORGHUM** - Crop varieties vary in susceptibility to injury. 2,4-D sprays may cause some injury to stalks such as lodging, bending, and brittleness. Plants generally recover from lodging or bending. Stalks may remain brittle 5 to 7 days, during which time they are subject to breakage by high winds and cultivation. Avoid cultivating while this condition prevails. Injury is most likely when crop is growing rapidly.

Spray 1 pint of 2,4-D Amine per acre as soon as majority of weeds are actively growing. Do not apply 2,4-D sprays from tasseling to dough stage. Use extension nozzles to direct sprays away from the leaves of corn and sorghum that are 8 inches or more high.

**RICE** - To control Curly Indigo, Coffeeweed and other broadleaved weeds in rice, apply 2,4-D Amine at 1 to 2-1/2 pints per acre any time after rice is well tillered but before the joining or boot stage (4 to 8 weeks after emergence; or where flooded, treated between 7 and 9 weeks after seeding, when plants have emerged above water and leaves are standing erect). Rice plants are sensitive to 2,4-D in the early seedling, boot and early heading stages; avoid applications of 2,4-D Amine during these stages of growth. Avoid drift to cotton or other 2,4-D susceptible crops.

**SUGAR CANE** - Apply 2,4-D Amine at 1 or 2 quarts per acre when cane is 1 to 2 feet tall to control broadleaved weeds.



## TO CONTROL WEEDS ON PASTURE, GOLF COURSES, PARKS, CEMETERIES, AND LARGE TURF AREAS

For each application apply sprays containing 2 to 3 pints of 2,4-D Amine per acre per site for control of most broadleaved weeds. Use higher rate where perennial broadleaved weeds are the major problems. Spray when seeds are growing actively. Seedling grasses should not be sprayed until root systems are established and sod has been formed. Some injury to clover, creeping bent, carpet grass and St. Augustine grass may occur. Keep dairy animals off treated areas for 7 days. Do not cut grass for hay for 30 days after treatment. Do not slaughter for meat animals for 3 days after treatment. For use in hand sprayers, mix 1-1/2 to 2 teaspoons of 2,4-D Amine per gallon of water. Wet all foliage thoroughly.

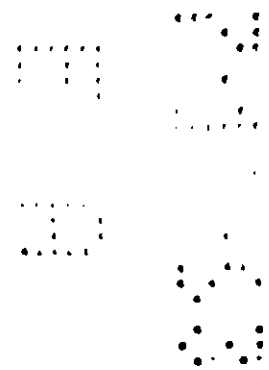
### NOTES FOR ALL TURF SITES:

Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried or dust has settled.

The maximum number of broadcast applications per treatment site is 2 per year.

After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

When using this product, wear long-sleeved shirt, long pants, socks, shoes, and chemical-resistant gloves.



**CONDITIONS OF SALE - LIMITED WARRANTY  
AND LIMITATIONS OF LIABILITY AND REMEDIES**

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. The Company shall not be liable and any and all claims against the Company are waived for special indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income.

The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.