

**AMINE 4D****WEED KILLER SELECTIVE BROADLEAF WEED CONTROL****Active Ingredient:**

Dimethylamine salt of 2,4-D-Dichlorophenoxyacetic acid .... 46.3%

**Other Ingredients** ..... 53.7%

Total ..... 100.0%

2,4-Dichlorophenoxyacetic Acid Equivalent 38.4% = 3.8 lbs./gal. isomer  
Specific by AOAC Method No. 6D01-5**ACCEPTED**

APR 10 2002

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 48273-4**Keep Out of Reach of Children****DANGER – PELIGRO**Si usted no entiende la etiqueta, busque alguien para que se la  
explique en detalle. (If you do not understand this label, find  
someone to explain it to you in detail).**PRECAUTIONARY STATEMENTS****Hazards to Humans and Domestic Animals****DANGER**Corrosive. Causes irreversible eye damage. May be fatal if absorbed through skin. Harmful if swallowed or inhaled. Do  
not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist.**Personal Protective Equipment (PPE)**

Applicators and other handlers, including persons repairing or cleaning equipment, must wear:

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves
- Chemical resistant footwear and socks
- Protective eyewear such as face shield or safety glasses (brow and temple protection recommended)
- Chemical resistant headgear for overhead exposure
- A chemical resistant apron should also be worn when cleaning equipment, mixing or loading.

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 and maintaining PPE. If no other  
instructions for washing, use detergent and hot water. Keep and wash all PPE separately from other laundry. After  
each day of use, clothing or PPE must not be reused until it has been cleaned.

For containers over 1 gallon but 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.**Engineering Controls Statements**Mechanical Transfer for Containers of 5 or More Gallons: 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. 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.When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection  
Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or  
modified as specified in the WPS.**User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Immediately remove clothing if pesticide gets inside. Then thoroughly wash and put on clean clothing.
- Immediately remove PPE after handling this product. Wash the outside of gloves before removing. As soon as possible thoroughly wash and change into clean clothing.

### Environmental Hazards

Vapors, spray drift or runoff may adversely affect non-target plants. This product may injure cotton, beans, peas, grapes, ornamentals, etc. Course sprays are less likely to drift. For terrestrial uses, 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 wastewater. **Mixing and Loading:** Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Exercise caution 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 reduces the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills helps prevent groundwater contamination.

### First Aid

<b>If in Eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on Skin or Clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Immediately rinse skin with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If Swallowed</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

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-xxx-xxxx for emergency medical treatment information.]

{Note: The first aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.}

### DIRECTIONS FOR USE

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

#### Storage and Disposal

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

**Pesticide Storage:** Store product in a cool and dry locked place out of reach of children. Store at temperatures above 32°F. **Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinse water 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 of the nearest EPA regional office for guidance. **Container Disposal:** Triple rinse (or equivalent) and offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by the approved state and local procedures.

**Mini-Bulk and/or 55 Gallon Drum Container Precaution:** Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damage or worn thread on closure devices. **Refill only with Amine 4D herbicide.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Amine 4D herbicide will result in contamination and may weaken container. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container. **Container is not safe for food, feed or drinking water.**

Carefully read all directions for use before applying. 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. Do not apply this product through any type of irrigation system.

#### 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, forest, 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 intervals. 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 over short-sleeved shirt and short pants, waterproof gloves, chemical resistant footwear plus socks, protective eyewear and chemical resistant headgear for overhead exposure.

#### 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 (CFR 40 Part 170). The WPS applies when this product is used to produce plants on farms, nurseries or greenhouses. Do not allow people, other than applicator, or pets on treatment area during application. Do not enter treated areas until spray has dried.

#### General Information

This product is recommended for the control of numerous broadleaf weeds and certain 2,4-D susceptible woody plants without injury to most established grasses. A partial list of weeds controlled: Beggarticks, Bitterweed, Blueweed Texas, Broomweed, Cornflower, Croton, Dandelion, Docks, Dogfennel, Farmweed, Galinsoga, Garlic Weed, Goatsbeard, Halogeton, Hemp Wild, Jewelweed, Jimsonweed, Kochia, Lambsquarter, Mallow Venice, Marshelder, Mildevetch, Moringglory Annual, Mustards, Nettles, Onion Wild, Redstem, Salsify, Shepherdspurse, Sicklepod, Smartweed, Smartweed Bitter, Sowthistle Annual, Spanishneedles, Sunflower, Sweetclover, Tansymustard, Tansyragwort, Thistle Bull, Thistle Musk, Thistle Russia, Velvetleaf, Vervains, Vetch, Water Plantain, Witchweed, Wormwood, Yellow Rocket, Yellow Starthistle.

#### How To Mix

Fill the spray tank half full, then add the required amount of this product and continue filling the tank with the balance of water. Keep agitator running when filling the tank and during spray operations. Apply this product as a water spray during warm weather when weeds or brush are actively growing. Treatment during drought periods often will give poor results. Use low spray pressure to minimize spray drift. On croplands and along roadsides do not exceed 20 psi pressure.

Apply enough spray volume to provide uniform coverage of weeds and brush, usually 5 to 20 gallons water per acre by ground equipment and 2 to 5 gallons water by aircraft. Use higher gallonage to improve spray coverage. Use the lower dosage for young, succulent growth of sensitive weed species. Use the higher rate for less sensitive species and under conditions where control is more difficult. Do not mix with oil, Atrazine, surfactant or other adjuvants unless specifically recommended on this label. Deep rooted perennial weeds such as Canada Thistle and Field Bindweed and many woody plants usually require repeated applications for best control. Do not use in greenhouses. Do not use the same equipment for applying other materials to 2,4-D susceptible crops as injury may result.

#### Use Precautions

Do not apply this product or otherwise permit it to come into contact with cotton, grapes, fruit trees, vegetables, flowers or other desirable crops or ornamental plants that are 2,4-D sensitive. Do not permit spray mist to drift onto them, since even a very small quantity of spray, which may not be visible, can cause severe injury during growing and dormant periods. Use coarse sprays to minimize drift. With ground equipment, spray drift can be lessened by keeping the spray booms as low as possible; by applying 20 gallons or more of spray per acre; by using no more than 20 psi with flat fan or flooding flat fan nozzle tips; and by not spraying when winds exceed 6 to 7 miles per hour. Do not apply with hollow cone insecticide-type nozzles or other nozzles that produce a fine droplet spray.

With aircraft application, drift can be lessened by applying not less than 5 gallons of spray per acre; using no more than 20 psi at the nozzles; by using nozzles that produce a coarse spray pattern; and by spraying only when the wind velocity is less than 5 mph. Only applicators experienced in the use of 2,4-D formulations may aerially apply this product. Consult your local regulatory agency concerning requirements prior to applying this product.

**Note:** When stored at temperatures below freezing, it may be necessary to warm contents to not less than 45°F and thoroughly mix before using.

#### Small Grain

##### Barley, Oats, Rye, Wheat

**Post-emergence (Barley, Wheat, Rye):** Not underseeded with a legume crop for annual weeds use 1-1/3 pints per acre. For perennial weeds use 2 pints per acre. For general weed control use 2 pints per acre. Spray when grain is in full tiller

stage (usually 4 to 8 inches tall) and weeds are small. Do not apply before tiller stage or from early boot up to the milk stage.

**Post-emergence (Oats):** Use ½ to 1 pint per acre. For preharvest treatment when grain is in the soft to hard dough stage, spray to control large weeds that threaten harvest operation.

Do not graze or feed treated forage from treated fields within 2 weeks after treatment. Do not use treated straw for livestock feed.

#### Sorghum (Milo)

Apply 2/3 pint per acre when plants are 6 to 15 inches tall. A higher rate of 2/3 to 1 pint per acre may be needed for some weeds but the chance of crop injury is likewise increased. Do not use with oil. Do not treat before plants are 5 inches tall or during boot, flowering or early dough stages. If plants are taller than 8 inches, use drop nozzle to keep spray off the foliage as much as possible. Temporary crop injury may occur under conditions of high soil moisture and high air temperatures. If it is necessary to treat crop at this time, use 2/3 pint per acre. Varieties vary in tolerance to 2,4-D. Do not spray sensitive varieties. Consult with your Extension Service personnel or University Specialist for this information.

#### Rice

Use 1 to 2-1/2 pints per acre in 5 to 10 gallons of water per acre, 7 to 10 weeks after planting or when rice is fully tillered but not yet in boot stage. Do not apply after panicle initiation, after rice internodes exceed 1-1/2 inch at early seeding, early panicle, boot, flowering or early heading growth stages.

**Note:** Some rice varieties can be injured by 2,4-D under certain conditions; therefore consult your local Extension Service personnel or a University specialist for rates and timing of sprays.

#### Corn

**Pre-emergence:** Apply 2 to 4 pints per acre (1-1/2 to 3 tbsps. per 1,000 sq. ft.) to soil anytime after planting but before corn emerges. Do not use on light sandy soils.

**Post-emergence:** After emergence of corn plants use ½ pint per acre (1-1/8 tsp. per 1,000 sq. ft.). Applications of ½ to 1 pint per acre (1-1/8 to 2-1/4 tsp. per 1,000 sq. ft.) may be needed for maximum control of some weeds but such rates are more likely to injure corn. If corn is over 8 inches tall, use drop nozzle to keep spray off the corn foliage as much as possible. Do not apply from the tasseling to the dough stage. Do not use with oil, Atrazine or adjuvants. Crop injury is more likely to occur if corn is growing rapidly under high temperatures and high moisture soil conditions. To reduce breakage of stalk from temporary brittleness caused by 2,4-D, delay cultivation for 8 to 10 days after treatment.

**Note:** Hybrids vary in response to 2,4-D and some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Contact the seed company or the Agricultural Experimental station weed specialist for this information.

#### Sugar Cane

Apply as a pre-emergence application before cane appears or as a post-emergence spray in the spring after the canes emerge and then through the lay by stage in accordance with State recommendations. Use 2 to 4 pints in sufficient water to treat 1 acre.

#### Grass Seed Crops

Use 1 to 2 pints per acre (2-1/4 to 4-1/2 tsp. per 1,000 sq. ft.) in sufficient water to give uniform coverage by air or ground application. Apply to established stands in the spring from the tiller to the early boot stage. Do not spray in boot stage. New spring seedlings may be treated with the lower rate after grasses have at least 5 leaves. Perennial weeds' regrowth may be treated in the fall at the higher rate.

#### Pasture and Rangeland

The maximum application rate to pasture and rangeland is 2 pounds per acre of 2,4-D acid equivalent per acre per application site. **Note:** Observe the following: a 7-day pre-grazing interval for dairy cattle; a 30 day pre-harvest interval for grass cut for hay; and a pre-slaughter interval for meat animals of 3 days. Do not use on bent grasses, alfalfa, clover or other legumes or on newly seeded pastures. Do not apply after heading begins or when the grass is in the boot to milk stage where grass seed production is desired.

For Bitterweed, Broomweed, Docks, Kochia, Marshelder and other broadleaf weeds, use 3 to 4 pints per acre (6-1/2 to 9 tsp. per 1,000 sq. ft.) to control most species. If weeds are young and actively growing, 2 to 3 pints per acre (4-1/2 to 6-1/2 tsp. per 1,000 sq. ft.) may control same species. Deep rooted perennials may require repeated treatments "fall-spring-fall" or "spring-fall-spring." In newly sprigged Coastal Bermudagrass apply 2 to 3 pints per acre (4-1/2 to 6 1/2 tsp. per 1,000 sq. ft.) either pre-emergence or post-emergence treatment.

#### Lawn, Golf Courses, Parks, Cemeteries and Similar Ornamental Turf

Apply 3 pints per acre (6-1/2 tsp. per 1,000 sq. ft.) in sufficient water to give good coverage (usually between 3 to 5 gallons of water per 1,000 sq. ft.). Increase this to 4 pints per acre (3 tbsps. per 1,000 sq. ft.) if hard to kill weeds (Spurge)

are present. Do not apply to newly seeded lawns until grasses become well established. Injury may result if applied to Bentgrass, St. Augustinegrass, Carpetgrass, Centipedegrass, Dichondra and clover. After weeds have died remove all dead vegetation. Prepare the seed bed by addition of top soil, peat moss or other soil amendments. Work into the topsoil. Wait 2 weeks then seed the area at 1-1/2 times the recommended seeding rate. Keep soil moist through the first cutting. **The maximum number of broadcast applications per treatment site is 2 per year.**

**For Fences, Ditchbanks, Roadsides and Industrial Sites**

Apply 2 to 3 pints per acre in 100 gallons of water and spray weeds to point of runoff. Treat as soon in spring as possible, since young actively growing weeds are easier to control.

**Spot Treatment of Weeds**

Mix 2 to 3 tablespoonfuls per gallon of water and apply with a hand sprayer to control broadleaf weeds in small non-cropland areas. Add a suitable, approved surfactant to spray mixture to ensure better coverage of target weeds. Do not use the same sprayer for spraying insecticides or fungicides.

**Aquatic Sites**

**Weeds and Brush Irrigation Canal Ditchbanks**

(Seventeen Western States: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington and Wyoming.)

For control of annual and perennial broadleaf weeds, apply 1 to 2 quarts of this product per acre in approximately 20 to 100 gallons per acre in 7 feet of water. Treat when weeds are young and actively growing before the bud or early bloom stage. For harder-to-control weeds, a repeat spray after 3 to 4 weeks using the same rates may be needed for best results. Apply no more than two treatments per season.

For woody brush and patches of perennial broadleaf weeds, mix 1 gallon of this product in 150 gallons of water. Thoroughly wet foliage using about 1 gallon of solution per square rod. Note: 1 square rod = 30.25 square yards.

**Spraying Instructions:**

Apply with low pressure (10 to 40 psi) power spray equipment mounted on a truck, tractor or boat. Apply while traveling upstream to avoid accidental concentration of chemical into water. Spray when the air is fairly calm, 10 mph or less. Do not use on small canals (less than 10 cfs) where water will be used for drinking purposes.

Boom spraying onto water surface must be held to a minimum and do not permit cross-stream spraying to opposite banks. When spraying shoreline weeds, allow no more than 2 foot overspray, with an average of less than 1 foot overspray, onto water to prevent introduction of greater than negligible amounts of chemical into the water.

Do not allow dairy animals to graze on treated areas for at least 7 days after spraying. Do not fish water within treated banks.

**Aquatic Weed Control**

**For use in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, rivers and streams that are quiescent or slow moving.**

**Notice to Applicators:**

**State and Local Coordination:** Before application, coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

**Fish Toxicity – Oxygen Ratio:** Fish breathe oxygen in the water and a water-oxygen ratio must be maintained. Decaying weeds use up oxygen. To avoid fish kill from decaying plant material, do not treat more than one half the lake or pond at one time. For large bodies of weed-infested waters, leave buffer strips of at least 100 feet wide and delay treatment of these strips for 4 to 5 weeks or until the dead vegetation has decomposed.

**Wind Velocity – Ground or Surface Application:** Do not apply when wind speeds are at or above 10 mph. **Air Application:** Do not apply when wind speeds are at or above 5 mph. The restrictions do not apply to subsurface applications used in weed control programs.

**Irrigation:** Delay the use of treated waters for irrigation for three weeks after treatment unless an approved assay shows that the water does not contain more than 0.1 ppm 2,4-D acid. Do not treat irrigation ditches in areas where water will be used to overhead sprinkler irrigate susceptible crops, especially grapes, tomatoes and cotton.

**Potable Water:** Delay the use of treated water for domestic purpose for a period of three weeks or until such time as an approved assay shows that the water contains no more than 70 ppb 2,4-D acid.

**Water Hyacinth (*Eichornia crassipe*)**

This product will control water hyacinth with surface and air applications.

**Amounts to Use:** 2 to 4 quarts (4 lbs. acid equivalent per gallon) per acre. **Spray only the weed mass.** Use 4 quarts when plants are matured or when the weed mass is dense.

**When to Apply:** Spray when water hyacinth plants are actively growing. Repeat as necessary to kill regrowth and hyacinth plants missed in the previous operation.

**Surface Application:** Use power sprayers operated with a boom or spray gun mounted on a boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 50 to 400 gallons/A of spray mixture. Special precautions, such as the use of low pressure, large nozzles and thickening agents, should be taken to avoid spray drift in areas of sensitive crops. Follow the drift control agent label for mixing directions.

**Air Application:** Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 1.0 gallon per acre of this product through a standard boom system with a minimum of 5 gallons of spray mix per acre.

2,4-D Acid	½ lb.	1 lb.	2 lbs.	3 lbs.	4 lbs.
Equivalent Amine 4-D	1 pt.	2 pts.	2 qts.	3 qts.	4 qts.

**Water Milfoil (*Myriophyllum spicatum*)**

For Eurasian Water Milfoil in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA System. This product will control milfoil with surface, subsurface and air application.

**How to Use:** To control water milfoil when using or applying less than 5 gallons of concentrate per acre, dilute the concentrate with water to apply a minimum of 5 gallons of spray mix per acre. Do not treat within ½ mile of potable water intakes. Treat shoreline areas by subsurface injection applied by boat to avoid aerial drift. Do not apply when weather conditions favor drift from target area. Do not contaminate water by cleaning of equipment washwaters.

**Open Water Areas:** To reduce contamination and prevent undue exposure to fish and other aquatic organisms, do not treat water areas that are not infested with aquatic weeds.

**Amounts to Use:** Apply 2.5 to 10 gallons of this product per acre. Use the higher rate in areas of greater water exchange. These areas may require a repeat application.

**When to Apply:** For best results, apply in spring or early summer when milfoil starts growing. This timing can be checked by sampling the lake bottom in areas heavily infested with weeds the previous year.

**Subsurface Application:** Apply 2.5 to 10 gallons of this product per acre as a concentrate directly into the water through boat mounted distribution systems.

**Surface Application:** Apply 2.5 to 10 gallons of this product per acre in a minimum spray volume of 5 gallons mix per acre.

**Air Application:** Use drift control spray equipment or thickening agents mixed into the solution. Apply 2.5 to 10 gallons per acre of this product through standard boom systems with a minimum of 5 gallons of spray mix per acre.

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty or any other warranty of **Merchantability or Fitness for a Particular Purpose**, express or implied, extends to the use of this product contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

**In Case of an Emergency, Call 24 Hours A Day: ChemTrec 1-800-424-9300**

EPA Reg. No. 48273-4

EPA Est. \_\_\_\_\_

NET CONTENTS: \_\_\_\_ GALLONS (1 through 55)

**MARMAN USA, INC.**  
P.O. Box 22829  
Tampa, FL 33622-2829

[ ] Denotes alternate/optional language

{ } Denotes language that does not appear on the market labeling