



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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

JUL 1 5 2003

Linda D. Pearce Wilbur Ellis Co. P.O. Box 1286 Fresno, CA 93715

Subject:

Amine 4

EPA Reg. No. 2935-512

Amendment dated May 6, 2003

Dear Ms Pearce:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following changes are made:

1. The First Aid instructions must be listed in order of decreasing Toxicity Category.

Therefore, list the instructions in the following order (same as on the recently approved label for Riverdale Weedestroy AM-40 Amine Salt, EPA Reg. No. 228-145):

If in eyes
If swallowed

2. In the instructions in the section "First Aid/If in eyes", change the word "minutes" to "minutes"

In addition, this label is accepted with the following stipulation. The Agency has accepted the labeling changes that are necessary to comply with the first aid labeling requirements described in PR Notice 2001-1. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the first aid revisions have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

A copy of the label stamped "Accepted with comments" is enclosed for your records. Please submit one copy of the final printed label, **incorporating the revisions noted** above, before you release the product for shipment.

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If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,

Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505C)

Enclosure

# AMINE 4

#### A SELECTIVE HERBICIDE

FOR CONTROL OR SUPPRESSION OF MANY BROADLEAF WEEDS IN BOTH NON-CROP AREAS AND CERTAIN CROP AREAS, LAWNS, PONDS, DITCH BANKS, PASTURES AND RANGELANDS. ALSO FOR

CONTROL OF TREES BY INJECTION.

#### **ACTIVE INGREDIENT:**

**30mer Specific AOAC Method:** 

12,4-Dichlorophenoxyacetic Acid Equivalent ....39.3%, 3.8 lbs./gal.

EPA Reg. No. 2935-512

EPA Est. No. 42750-MO-1

# KEEP OUT OF REACH OF CHILDREN DANGER – PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

#### **FIRST AID**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

swallowed:	-Call a poison control center or doctor immediately for treatment adviceHave person sip a glass of water if able to swallowDo not induce vomiting unless told to do so by a poison control center or doctorDo not give anything by mouth to an unconscious person.
If in eyes:	-Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minuets, then continue rinsing eye.

**NOTE TO PHYSICIANS:** Probable mucosal damage may contraindicate the use of gastric lavage.

advice.

-Call a poison control center or doctor for treatment

## PRECAUTIONARY STATEMENTS HAZARDS to HUMANS and DOMESTIC ANIMALS

#### DANGER

**CORROSIVE**: Causes irreversible eye damage. Do not get in eyes or on clothing. Avoid contact with skin. May cause skin irritation. Harmful if swallowed. Avoid inhaling vapor or spray mist.



#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

NON-WPS USES: Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural plant uses are covered by the WPS – must wear: face shield, goggles or safety glasses and long pants, long-sleeved shirt, socks, shoes and rubber gloves.

It is recommended that safety glasses include brow and temple protection. In addition to the clothing and eye protection listed above, commercial mixers/loaders/applicators must wear Chemical-resistant in place of rubber gloves except when the product is applied to a golf course. After using this product, remove clothing and launder separately before reuse and promptly and thoroughly wash hands and exposed skin with soap and water. The maximum number of broadcast applications to turf per treatment site is two per year.

NON-WPS INDUSTRIAL/AQUATIC USES: When mixing, loading or applying this product or repairing or cleaning equipment used with this product, wear face shield or goggles and chemical-resistant gloves, long-sleeved shirt, long pants, socks and shoes. For aerial applicators in an enclosed cockpit 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. 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.

WPS USES: Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural plant uses are covered – must wear: coveralls over short-sleeved shirt and short pants, waterproof gloves, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical-resistant apron 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 instruction for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

Engineering controls statements: If this container is over 1 gallon and less than five gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer 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 product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a nonrefillable 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) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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 MPS.

#### **USER SAFETY RECOMMENDATIONS**

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

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. 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. Do not contaminate water when disposing of equipment washwaters. Do not apply this product through any type of irrigation system. Do not contaminate water used for irrigation or domestic purposes. Use care to avoid spray contact or drift to 2,4-D susceptible plants such as cotton, tomatoes, flowers, okra, grapes, fruit trees and ornamentals or other susceptible crops, or severe damage may result. Excessive amounts of this product in soil may temporarily inhibit seed germination and plant growth. Do not permit spray mist containing this product to drift onto them. Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement and an increase in air temperature with an increase in height. In humid regions, a fog or mist may form. An inversion may be detected by producing a smoke column and checking for a layering effect. If questions exist pertaining to the existence of an inversion, consult with local weather services before making an application. Do not spray when the wind is plowing towards susceptible crops or ornamental plants. Use coarse sprays to minimize drift. Spray drift can be lessened by keeping the spray boom as low as possible, by spraying when wind velocity is low, by decreasing the pounds of pressure at the nozzle tips, and by stopping all spraying when wind is blowing toward susceptible plants. Do not use the same spray equipment for applying other materials to 2,4-D susceptible crops as injury may result. It is best to use a separate sprayer for application of insecticides and fungicides.

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.

When using on (1) Pastures and Rangeland Grasses, there is (a) Seven-day pre-grazing interval for dairy cattle; (b) 30-day pre-harvest interval for grass cut for hay; and (c) Three-day preslaughter interval for meat animals. (2) Corn and small grains; Do not allow livestock to forage or graze treated fields within 14 days after treatment. Do not feed treated straw to livestock. (3) Sorghum: do not allow livestock to graze treated areas within 14 days after treatment, and (4) Grass Seed Crops: Do not graze dairy animals within 7 days after treatment.

#### 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.

#### <u>AGRICULTURAL USE REQUIREMENTS</u>

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

#### NONAGRICULTURAL 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.

Reentry statement for residential and other 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 or dust has settled.

#### GENERAL INFORMATION

AMINE 4 will control or suppress the following weeds in addition to many other noxious plants susceptible to 2,4-D. Alders, Alligator weed, American lotus, Arrowhead, Artichoke, Aster, Austrian fieldcress, Beggarticks, Biden, Bindweed, Bitterweeds, Bitter winter cress, Black-eyed Susan, Blessed thistle, Blue lettuce, Box elder, Broomweed, Buckhorn, Buil thistle, Bulrush, Burdock, Bur ragweed, Buttercup, Canada thistle, Carpetweed, Catnip, Chickweed, Chicory, Cinquefoil, Cockle, Cocklebur, Coffee bean, Coffeeweed, Common sowthistle, Creeping jenny, croton, Curly indigo, Dandelion, Devil's claw, Dock, Dogbane, Duckweed, Elderberry, Flea bane (daisy), Flixweed, Florida pusley, Frenchweed, Galinsoga, Goatsbeard, Goldenrod, Goosefoot, Ground ivy, Gumweed, Healall, Hemp, Henbit, Hoary cress, Honeysuckle, Horsetail, Indigo, Indiana mallow, Ironweed, Jerusalem artichoke, Jewelweed, Jimsonweed, Knotweed, Lambsquarters, Locoweed, Lupines, Mallow, Many flowered aster, Marijuana, Marshelder, Mexican weed, Morningglory, Muskthistle, Mustards, Nettles, Nutgrass, Orange hawkweed, Parrot feather, Parsnip, Pennycress, pennywort, Pepperweeds, Pigweed, Plantains, Poison hemlock, Poison ivy, Pokeweed, Poorjoe, Povertyweed, Prickly lettuce, Primrose, Puncture vine, Purslane,

ragweed, Rush, Russian thistle, Eagebrush, St. Johnswort, Salsify, Shepherdspurse, Sicklepod, Smartweed, Sneezeweed, Southern wild rose, Sowthistle, Spanishneedles, Spatterdock, Stinging nettles, Stinkweed, Sumac, Sunflower, Sweet clover, Tanweed, Tarweed, Thistles, Toadflax, Tumbleweed, Velvet leaf, Vervain, Vetch, Virginia creeper, Water hyacinth Water lily, Water plantain Water primrose, Water shield, Wild carrot, Wild garlic Wild lettrice, Wild onion, Wild parsnips, Wild radish, Wild rape, Wild strawberry, Wild sweet potato, Willow, Witchweed, Wormsweed, Yeilow rocket.

Generally the lower dosages given will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed or the use of an approved tank mix combination. Apply AMINE 4 during warm weather when weeds are young and growing actively. If band treatment is used, base the dosage rate on the actual area to be sprayed. Although water quantities may vary due to different types of application equipment, sufficient water must be used to provide for complete and uniform coverage. Higher water gallonage may be used if desired to improve spray coverage. In all cases, use the same recommended amount of 2,4-D per acre. When product is used for weed control in crops, the growth stage of the crop must be considered. For crop uses, do not mix with oil, surfactants or other adjuvants unless specifically recmmended on label. To do so may reduce herbicide's selectivity and could result in crop damage. 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-D and some are easily injured. Apply this product to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant's 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 should become familiar with these laws, rules or regulations and follow them exactly. Do not apply when temperature exceeds 90°F. Read and follow all directions and precautions on this label and on the labels of any products for which a tank mixture is being considered. Wilbur-Ellis Company recommends the use of a drift retardant agent such as BIVERT®.

compatibility: If AMINE 4 is to be tank mixed with fertilizers or ith other pesticides, compatibility should be tested prior to mixing. It test for compatibility, use a small container and mix a small amount (0.5 to 1 qt.) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within five to 15 minutes.

TO PREPARE THE SPRAY: Mix AMINE 4 only with water. Add about half the water to the mixing tank, then add the AMINE 4 with agitation, and finally the rest of the water with continuing agitation. Note: Adding oil, wetting agent or other surfactant to the spray may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop damage.

WITH LIQUID NITROGEN SOLUTIONS: For late season application in corn, pastures or small grains in one operation for control or suppression of smartweed, cocklebur, annual morningglory and other annual broadleaf weeds less than one-inch high. Field should be as clean as possible and corn 20 to 30" tall. Apply one pint with 80 to 120 lbs. Nitrogen per acre: the spray must be prepared by first adding the required amount of liquid nitrogen solution to spray tank. Next dilute one pint of AMINE 4 with 2 quarts clean water for each acre to be treated with one tankful. Start the tank agitator and slowly add the diluted 2,4-D solution. Spray immediately, maintaining continuous agitation until spray tank is empty. Direct the spray to lower 3" to 4" of corn stalk. Use spray equipment designated to handle corrosive liquid nitrogen solutions. After spraying, remove any remaining solution and rinse rig thoroughly with water. Mix only one tank at a time. Do not spray during or immediately following cold, near freezing weather. Do not allow mixture to stand overnight.

NOTE: If good continuous agitation is not maintained, separation of the spray mixture and/or clogging of the nozzles is likely to occur. Fertilizers can increase foliage contact burn of herbicides. Reducing the fertilizer rate and concentrate will reduce the hazard of leaf burn.

**ADJUVANT USE:** An agricultural surfactant, such as R-11\* Spreader-Activator may be added at 0.25% by volume (1qt. per 100 gallons of spray solution) to help increase the control of large or difficult weeds.

**EQUIPMENT CLEANUP:** Sprayers and equipment should be washed thoroughly after use. Neutral Clean™ tank cleaner will aid in cleaning equipment. Do not let washwater accumulate on the ground. Pesticide residue must be captured and disposed of according to state, local and federal regulations.

#### SELECTIVE WEEDING IN CROPS

BARLEY, WHEAT, OATS AND RYE: Spring Post-emergence (not underseeded with legumes) - In spring grown grains, spray after grain begins tillering and before the boot stage (usually 4" to 8" tall) and weeds are small. Apply 1/2 to 1 pint of AMINE 4 per acre. For aerial application on grain, application rates should be 1 to 5 gallons of total spray by air or 3 to 25 gallons by ground equipment. Oats are more sensitive to 2,4-D than other grains and should be sprayed in the spring when well established and tillered and before jointing after crop has reached the dough stage. In winter grains, use 1 to 2 pints of AMINE 4 to control large weeds that will interfere with harvest or to suppress perennial weeds. Fall seeded oats for grain planted in Southern U.S. - apply after full tillering but before the early bud stage. Do not spray during or immediately following cold weather. Spring Post-emergence (underseeded with legumes) Apply ¼ to ½ pint after grain is 8" tall. Do not spray grain in boot to dough stage. Do not spray alfalfa or sweet clover unless the infestation is severe and injury to these legumes can be tolerated. Preharvest treatment can be applied when the grain is in the dough stage. Best results will be obtained when soil moisture is adequate for plant growth and weeds are growing well.

FOR EMERGENCY WEED CONTROL IN WHEAT – Perennial broadleaf weeds – apply 3 pints per acre when weeds are approaching bud stage. Do not spray grain in the boot to dough stage. The 3 pint per acre application can produce injury to wheat. Balance the severity of your weed problem against the possibility of crop damage. Where perennial weeds are scattered, spot treatment is suggested to minimize the extent of crop injury. Use lower rate if small annual and biennial weeds are the major problem. Use the higher rate if perennial weeds or annual and biennial weeds are present which are in the hard-to-kill categories as determined by local experience. The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the grain damage risk. Do not apply AMINE 4 to grain in the seedling stage. For aerial application on grain, application rates should be 1 to 5 gallons of total spray by air or 3 to 25 gallons by ground equipment.

CORN (Field, Sweet and Popcorn): Preplant – Apply 1-2 pints per acre in 15-30 gallons of water to control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 7 to 14 days before planting. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth. Use high rate for less susceptible weeds or cover crops such as alfalfa.

Preemergence (For annual grasses and broadleaf weeds) – Apply 2-4 pints in 15-30 gallons of water per acre to soil anytime after planting but before corn emerges. Do not use on light sandy soil, or where soil moisture is low.

**Emergence** – Apply one pint in 15 to 30 gallons of water per acre ground application, 1 to 5 gallons of water by air, just as corn plants are breaking ground.

Post-emergence (For broadleaf weeds) – Apply ½ to 1 pint in 8 to 15 gallons of water per acre, when most weeds have germinated. Spray after corn emerges and until 8" tall. Spray sweet corn before 6" in height. Use low rates on inbreeds. Corn is susceptible to injury shortly after emergence and after unfolding of leaves. Do not spray

during this period nor after first tassels appear. When corn is over 8" tall or beyond the five-leaf stage, use drop nozzle to keep spray off corn foliage. Spray must strike tops of weeds but should not drench corn plants. Do not apply from tasseling to dough stage. injury to corn is most likely to occur if AMINE 4 is applied when corn is growing rapidly under high temperatures and high soil moisture conditions. In such conditions, use the low rate. For resistant weeds, use up to 2 pints per acte though coth injury may result. Do not use higher rates unless possible crop injury will be acceptable. After application, delay cultivation for 8 to 10 days to allow the corn to overcome any temporary brittleness. During Post-emergent application, do not use this product with atrazine, oil or other adjuvants unless approved by seed company. Pre-harvest: After the hard dough or denting stage, apply by air or ground equipment to suppress perennial weeds, decrease weed seed production and control tall weeds such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower, velvetleaf and vines that interfere with harvesting. Use 1 to 2 pints in 1 to 5 gallons of water per acre by air to 5 to 30 gallons of water by ground equipment.

CROP STUBBLE AND FALLOW LAND: On established perennial species such as Canada thistle and Field bindweed, apply up to 3 quarts of product per acre. NOTE: Do not forage for 14 days following application. Apply to weeds actively growing. Do not plant any op for three months after treatment or until 2,4-D has disappeared om soil.

GRASSES IN ESTABLISHED PASTURES AND RANGELANDS: Use 1 to 4 pints of product in 25 gallons of water or more to give good coverage to one acre depending on type of weeds and stage of growth. Use only on established stands of perennial grasses. Do not use on bentgrass, alfalfa, clover or other legumes. Do not use from early boot to milk stage where grass seed production is desired. NOTE: For small areas, use 3/4 to 1 fluid ounce (1-½ to 2 Tablespoons) per 1,000 square feet; mix 1 to 3 gallons of water and apply uniformly over 1,000 square feet.

GRASSES IN CONSERVATION RESERVE PROGRAM AREAS: To control or suppress annual broadleaf weeds, apply when seeds are actively growing. Use ½-1 pint per acre when weeds are small. Use higher rates on older weeds. Excessive injury may result if applied to young grasses with fewer than six leaves or prior to grasses being well established. To control or suppress biennial and perennial broadleaf weeds in established grasses, apply at a rate of 1-2 quarts per acre. Apply to actively growing weeds. Treat when bien-

al weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage. NOTE: Suggest at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground. Do not harvest or graze treated Conservation Reserve Program areas. Do not apply to grasses in the boot to dough stage if grass seed production is desired.

GRASS SEED CROPS: Use 1 to 4 pints in up to 30 gallons of water per acre by air or ground equipment in spring or fall to control broadleaf weeds in grass being grown for seed. Do not apply from early boot to the milk stage. Spray seedling grass only after the five-leaf stage, using 3/4 to 1 pint per acre to control small seedling weeds. After the grass is well established higher rates of up to 4 pints can be used to control hard-to-kill annual or perennial weeds. For best results, do not use on bentgrass unless grass injury can be tolerated.

### SOYBEANS: FOR USE IN CROP RESIDUE MANAGEMENT SYSTEMS IN SOYBEANS (Preplant only)

GENERAL INFORMATION: AMINE 4 is a herbicide that provides control of many emerged susceptible annual and perennial broadleaf weeds. AMINE 4 spray may be applied prior to planting soybeans to provide foliar burndown control of susceptible annual and perennial broadleaf weeds and certain broadleaf cover crops such as those listed on this label. AMINE 4 should only be applied preplant to soybeans in situations such as reduced tillage production systems, where emerged weeds are present. Apply only according

to the application instructions given below. Do not use any tillage operations between application of AMINE 4 and planting soybeans. MIXING INSTRUCTIONS: Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal effectiveness of 2,4-D on certain weeds and may be added to the spray tank. Read and follow directions and precautions on this label and on all labels of adjuvants or fertilizers mixed with this product.

APPLICATION PROCEDURES: Apply using air or ground equipment in sufficient gallonage to obtain adequate coverage of weeds. Use 2 or more gallons of water per acre in aerial equipment and 10 or more gallons of water per acre in ground equipment.

#### APPLICATIONS TIMING AND USE RATES

2,4-D Formulation Used	Maximum Rate (per acre)	When to apply (Days prior to planting Soybeans)
AMINE 4	1 pint (16 fl. oz.)	NOT LESS THAN 15 DAYS
	2 pints (32 fl. oz.)	NOT LESS THAN 30 DAYS

WEEDS CONTROLLED: Alfalfa\*, Bindweed\*, Bullnettle, Bittercress-smallflowered, Buttercup-smallflowered, Carolina geranium, Cinquefoil-common and rough, Clover-red\*, Cocklebur-common, Dandelion\*, Eveningprimrose-cutleaf, Garlic-wild\*, Horseweed or Marestail, Ironweed, Lambsquarters-common, Lettuce-prickly, Morningglory-annual, Mousetail, Mustard-wild, Onion-wild\*, Pennycress-field, Peppergrass\*, Purslane-common, Ragweed-common, Ragweed-giant, Shepherdspurse, Smartweed-Pennsylvania\*, Sowthistle-annual, Speedwell, Thistle-Canada\*, Thistle-bull, Velvetleaf, Vetch-hairy\*, Virginia copperleaf.

\* These species are only partially controlled.

For best weed control at time of treatment, weeds should be small, actively growing, and free of stress caused by extremes in climatic conditions, diseases or insect damage. The response of individual weed species to AMINE 4 is variable. Consult your local County or State Agricultural Extension Service or crop consultant for advice.

APPLICATION RESTRICTIONS AND PRECAUTIONS: Important Notice – Unacceptable injury to soybeans planted in fields treated with AMINE 4 may occur. Whether or not soybean injury occurs and the extent of the injury will depend on weather (temperature and rainfall) from herbicide application until soybean emergence and agronomic factors such as the amount of weed vegetation and previous crop residue present. Injury is more likely under cool, rainy conditions and where there is less weed vegetation and crop residue present.

Do not use on low organic sandy soils (<1.0%).

Apply a maximum of one application per growing season regardless of the treatment rate.

Do not apply AMINE 4 when weather conditions such as temperature air inversions or wind favor drift from treated areas to susceptible plants.

Livestock Grazing Restriction: Do not feed hay, forage or fodder. Restrict livestock from grazing treated fields. Livestock should be restricted from feeding/grazing of treated cover crops.

In fields treated with AMINE 4, plant soybean seed as deep as practical or at least 1-½ to 2" deep. Adjust the planter, if necessary, to ensure that planted seed is completely covered.

If desired, this product may be applied preplant to soybeans in tank mixtures with other herbicides that are registered for preplant soybean use. Observe all precautions on other product labels when used with AMINE 4.

Do not apply AMINE 4 prior to planting soybeans, if you are not prepared to accept the results of soybean injury, including possible loss of stand and yield.

Do not replant fields treated with AMINE 4 in the same growing season with crops other than those labeled for 2,4-D.

Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal activity of 2,4-D on certain weeds and may be added to the spray tank. Read and follow all directions and precautions on this label and on all labels of adjuvants or fertilizers mixed with this product.

SORGHUM (Milo): Post-emergence — Apply <sup>2</sup>/<sub>3</sub> to 1 pint with suggested water at 5 gallons of water by air or 5 to 20 gallons of water with ground equipment per acre when sorghum is 6" to 8" tall. Use 1 pint when sorghum is 8" to 15" tall. Treat only after the sorghum is 6" high and preferably before it is 15" high. Do not treat during the boot, tasseling, or early dough stages. Reduce spray drift by keeping the boom and spray nozzle as low as possible. If crop is taller than 8", use crop nozzle to keep the spray off the leaves. Temporary spray injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply AMINE 4 under these conditions, use no more than <sup>2</sup>/<sub>3</sub> pints per acre. NOTE: Corn and Sorghum Hybrids vary in tolerance to 2,4-D. Some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service Weed Specialist for this information.

UGARCANE: Preemergence – Use 4 pints in 15 to 20 gallons of water per acre as a blanket spray through lay-by, to aid in control of Johnsongrass seedlings and susceptible broadleaf weeds. Postemergence – Use 1-½ to 2 pints in 10 to 30 gallons. Apply when cane is 1' to 2' tall.

RICE: Use 1-½ to 2-½ pints of AMINE 4 in 5 to 10 gallons of water per acre to control curly indigo and other broadleaf weeds. Apply in the late tillering stage of rice development, at the time of first joint development (first to second green ring), usually 6 to 9 weeks after emergence. Do not apply after panicle initiation, after rice internodes exceed ½ inch at early seedling, early panicle, boot, flowering or early heading growth stages. Do not apply nitrogen during 7 to 21 days before application of 2,4-D. Do not use in rice paddies where shellfish are of economic importance or where flood water is used for irrigation of other crops.

NOTE: Some rice varieties under certain conditions can be injured by 2,4-D. Therefore, before spraying, consult local Extension Service or University specialist for appropriate rates and timing of 2,4-sprays.

TONE FRUIT AND NUT ORCHARDS (Except in California): To control annual broadleaf weeds on the orchard floor, apply 3 pints per acre using coarse sprays and low pressure in sufficient volume of water to obtain thorough wetting of weeds. Treat when weeds are small and actively growing. Do not use on light, sandy soil.

NOTE: Do not apply (1) to bare ground as injury may result, (2) to newly established or young orchards. Trees must be at least one-year-old and in vigorous condition, (3) during bloom, (4) more than twice a year, (5) immediately before irrigation and withhold irrigation for two days before and three days after treatment. Also, do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots, as injury may result. Do not graze or feed cover crops from treated orchards. Do not harvest stone fruit within 40 days of application or nuts within 60 days of application.

control of southern wild rose: On rangelands, roadsides and fence rows, use 1 gallon of AMINE 4 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water and spray thoroughly as soon as foliage is well developed. Two or more treatments may be required. On rangeland, apply a maximum of 4 pints of AMINE 4 per acre per application.

#### SELECTIVE WEEDING IN NON-CROP AREAS

BROADLEAF WEED CONTROL IN NON-CROPLAND GRASS AREAS SUCH AS AIRFIELDS, RIGHTS-OF-WAY, FENCE ROWS, ROADSIDES, VACANT LOTS, DRAINAGE DITCH BANKS, INDUSTRIAL SITES AND SIMILAR PLACES.

Do not use on dichondra or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treatment, or on freshly seeded turf until grass is well established. Reseeding of Lawns should be delayed following treatment. With spring application, reseed in the fall. With fall application, reseed in the spring. Legumes are usually damaged or killed. Thoroughly wet weeds when applying this mixture. Bindweed, Whitetop, Perennial sow thistle, Blue lettuce, Bur Ragweed, Canada thistle and other noxious perennials somewhat resistant to 2,4-D will require repeated treatments to control or suppress them.

Use 1/2-1 gallon of this product in 5 to 50 gallons of water, or more to obtain thorough coverage, per acre. Treat when weeds are young and growing well.

ORNAMENTAL TURF such as Lawns, Golf Courses (Fairways, Aprons, Tees and roughs), Sod Farms, Cemeteries and Parks: Use 2 to 4 pints of product in a minimum of 10 gallons of water to give good coverage to one acre on established stands of perennial grasses. Usually 4 pints per acre provides good weed control under average conditions. On turf, apply a maximum of 4 pints of this product per acre per application per site. Treat when weeds are young and actively growing. Do not apply to newly seeded grasses until well established. Use higher rate for hard-to-control weeds. Use higher rate when using higher volume of water per acre. Do not exceed specified application dosages for any area. Deep-rooted perennial weeds may require repeat treatments in the same season or in subsequent years. Spray when air temperature does not exceed 85°F. Avoid applying during excessively dry or hot periods unless irrigation (watering) is used before treatment: Reseed no sooner than 3 to 4 weeks after application of this product. Adding oil, wetting agent or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Maximum control of weeds will be obtained by applying in Spring and early Fall when weeds are actively growing. Do not use on golf greens or on dichondra or other broadleaf herbaceous ground cover. Do not use on creeping grasses such as bent and St. Augustine except for spot treating or on newly seeded turf until grass is well established. The maximum number of broadcast applications per treatment site is two per year.

#### **AQUATIC APPLICATIONS**

AQUATIC WEED CONTROL: For use in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, 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 breath 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 of 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 four to five 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 m.p.h..

Air Application: Do not apply when wind speeds are at or above 5 m.p.h.. 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 purposes for a period of three weeks or until such time as an approved assay shows that the water contains no more than 0.1 ppm 2,4-D acid.

WATER HYACINTH (Eichornia crassine) – Directions for use – 2,4-D AMINE 4 will control water hyacinth with surface and air applications.

Amounts to Use: 2 to 4 quarts (4 lb. acid equivalent per gallon) per acre. Spray the weed mass only. 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.

How to Use – 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 100 to 400 gal./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. For DIRECTA-SPRA<sup>TM</sup> operation use AMINE 4 with 1 pint of drift control agent in 50 to 100 gallons of water. For other applications, 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 AMINE 4 through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL® drift control systems, apply AMINE 4 in 12 to 15 gallons spray mix per acre.

	4 4 44				
,4-D Acid Equivalent	½ lb.	1 lb.	2 lbs.	3 lbs.	4 lbs.
AMINE 4	1 pt.	2 pts.	2 qts.	3 qts.	4 qts.

Water Milfoil (Myriophyllum spicatum) – Directions for use: For Eurasian Water Milfoil in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system.

AMINE 4 will control water milfoil with surface, subsurface and air application.

How to Use: To control water milfoil when less than 5 gallons of concentrate per acre is recommended, dilute the concentrate with water to apply a minium of 5 gallons of spray mix per acre. Do not treat within ½ mile of potable water intakes. Shoreline areas should be treated 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 undo exposure to fish and other aquatic organism, do not treat water reas that are not infested with aquatic weeds.

.mounts to Use: Apply 2.5 to 10 gallons of AMINE 4 per acre. The higher rate is used 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 to grow. This timing can be checked by sampling the lake bottom in areas heavily infested with weeds the year before.

Subsurface Application: Apply 2.5 to 10 gallons of AMINE 4 per acre as a concentrate directly into the water through boat mounted distribution systems.

Surface Application: Apply 2.5 to 10 gallons of AMINE 4 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 spray solution. Apply 2.5 to 10 gallons per acre of AMINE 4 through standard boom systems with a minimum of 5 gallons of spray mix per acre. For MICROFOIL® drift control spray systems apply AMINE 4 in 12 to 15 gallons spray mix per acre.

WEEDS AND BRUSH ON IRRIGATION CANAL DITCH BANKS – SEVENTEEN WESTERN STATES: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Nevada, 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 AMINE 4 per acre in approximately 20 to 100 gallons of water per acre. Treat when weeds are young and actively growing

before the bud or early bloom stage. For harder-to-control weeds, a repeat spray after three to four weeks using the same rates may be needed for maximum results. Apply no more than two treatments per season.

For woody brush and patches of perennial broadleaf weeds, mix one gallon of AMINE 4 in 150 gallons of water. Wet foliage thoroughly using about one gallon of solution per square rod.

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

Boom spraying onto water surfaces must be held to a minimum and no cross-stream spraying to opposite banks should be permitted. When spraying shoreline weeds, allow no more than two foot overspray onto water with an average of less than one foot overspray to prevent introduction of greater than negligible amounts of chemical into the water. Water within treated banks should not be fished.

#### **BRUSH CONTROL**

WOODY PLANT CONTROL: To control woody plants susceptible to 2,4-D such as Alder, Buckbrush, Elderberry, Sumac and Willow on non-crop areas, use 2-3 quarts of product per acre in 100 gallons of water. Wet all parts of the plants thoroughly, including stem and foliage to the point of runoff. Higher volumes of up to 400 gallons per acre are necessary where the brush is very dense and over 6 to 8 feet high. Applications are more effective when made on actively growing plants. Treatment should not be made during time of severe drought or in early Fall when leaves lose the green color.

Hard to control species may require re-treatment next season.

The maximum application rate for forestry site preparation is 1 gallon 6 ounces per acre per application per site.

NOTE: For rates to use in small areas with a hand-held sprayer see Grass Seed Section.

POPLAR/COTTONWOOD TREES GROWN FOR PULP-BROAD-LEAF WEED CONTROL – AMINE 4 may be applied through wick applicators or conventional ground sprayers (excluding irrigation systems). Do not allow AMINE 4 to contact leaves of the tree. Use ½ pint to 3 pints per acre prior to planting or after planting.

Two quarts or more of WILBUR-ELLIS R-11® SPREADER-ACTI-VATOR per 100 gallons of spray solution may be added to improve herbicide performance.

ACCORD® may be mixed with AMINE 4 to increase weed control.

#### STORAGE AND DISPOSAL

**Storage:** Always store pesticides in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides or fungicides. Store at temperatures above 32°F. If allowed to freeze, rewarm to 40°F, remix thoroughly before using. This does not alter this product. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not contaminate water, food or feed by storage or disposal.

Pesticide Disposal: Pesticide wastes are toxic. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to

Storage and Disposal, Continued:

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: Triple rinse for equivalent). Their offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or other procedures approved by State and Local authorities.

NOTICE: The statements made on this label are believed to be true and accurate, but because of conditions of use which are beyond our control, WILBUR-ELLIS COMPANY does not make, nor does it authorize any agent or representative to make, any warranty, guarantee or representation, expressed or implied, concerning this material or the use thereof, except in conformity with the statements on the label. Neither WILBUR-ELLIS COMPANY nor the seller shall be held responsible in any manner for any personal injury or property damage or loss resulting to the buyer or to the other person from handling, storage or use of this material, not in accordance with directions. The buyer assumes all risk and liability resulting from improper handling, storage or use and accepts and uses this material on these conditions.

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ACCEPTED
with COMMENTS
In FDA Letter Dated

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2935-512