Page 1 7 7

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

OFFICE OF PREVENTION, PESTICIDES

AND TOXIC SUBSTANCES

JUL 2 9 2008

Ms. Kristie Raymond Loveland Products Inc. P.O. Box 1286 Greeley, Colorado 80632-1286

Dear Ms. Raymond:

Subject:

AMINE 4 2,4-D Weed Killer

Label Amendment – PR 2007-4 EPA Registration No. 34704-120 Submission Dated: March 27, 2008

The labeling referred to above, submitted in accordance with registration under the Federal Insecticide, Fungicide, and Rodenticide act, as amended is acceptable provided the following revisions are made:

1. Under the heading Environmental Hazards, revise to read as follows:

This pesticide may adversely affect non-target 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 wash waters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around cistern or well may result in contamination of drinking water or groundwater.

2. On page 4, under the heading Application Restrictions, include the following text:

For broadcast treatments:

Limited to 2 applications per year.

Maximum of 0.75 lb ae 2,4-DP-p/A per application (or the respective lb ae 2,4-DP-p/1000 sq ft.

Minimum of 30 days between applications.

For spot treatments for all use sites:

Limited to 2 applications per year.

Maximum of 2.0 lbs ae 2,4-DP-p/A per application (or the respective lb ae 2,4-DP-p/1,000sq ft.

Minimum 30 days between applications

Broadcast application is prohibited at this use rate.

Spot treatment is defined as a treatment area no greater than 1,000 sq ft per acre.

Aerial application is prohibited.

3. Under the heading Directions for Use, General Application Restrictions, include the following text:

Do not use this product on or near desirable plants, including within the dripline of the roots of desirable trees and shrubs, since injury may result.

Submit 1 (one) copy of your final printed labeling before you release your product. A stamped copy of your label is enclosed for your records.

Sincerely,

Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505P)



## AMINE 4 2,4-D WEED KILLER

ACCEPTED with COMMENTS in EPA Letter Dated

JUL 29 2008

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Rég. No.

34704-120

# For Selective Broadleaf Weed Control in Certain Crops, Turf and Non-Crop Areas.

#### ACTIVE INGREDIENT:

\*Dimethylamine salt of 2,4-Dichloro-phenoxyacetic acid ... 46.5% INERT INGREDIENTS: ... 53.5% TOTAL 100.0%

\*Equivalent to 38.6% 2,4-D acid or 3.74 pounds per gallon. \*Isomer specific by AOAC Method No. 6.275-6.279 (13th Ed.)

# KEEP OUT OF REACH OF CHILDREN DANGER — PELIGRO

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

(See Below for Additional Precautionary Statements)

EPA REG. NO. 34704-120

EPA EST. NO. 37507-MT-001

NET CONTENTS 21/2 GALS. (9.46 L)

IH.

101101 V9D 03P08

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## DANGER — PELIGRO

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Do not contaminate water used for irrigation, domestic or spray purposes.

Personal Protective Equipment:

Applicators and other handlers must wear: Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and protective eyewear. Follow manufacturer's instructions for cleaning/maintaining 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.

For containers over 1 gallon and less than 5 gallons in capacity: 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 other required PPE.

## Engineering controls statements:

When handlers use enclosed cabs or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (5-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

For containers of 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. If the mechanical system is used in manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **USER SAFETY RECOMMENDATIONS**

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing 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 clothing.

## **FIRST AID**

If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 –20 minutes.</li> <li>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>
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If Inhaled:	<ul> <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>

## FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.

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

Note to Physician: If in eyes, specialized ophthalmologic attention may be necessary. If swallowed, probable mucosal damage may contraindicate gastric lavage. There is no specific antidote; treat symptomatically.

#### **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.

### **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 spil's. Placement of the mixing/loading equipment on an impairing a vious pad to contain spills will help prevent groundwater contamination.

Do not use the same spray equipment for other nurposes unless thoroughly cleaned.

Do not use in or near a greenhouse.

Do not contaminate water used for irrigation or domestic purposes (except as specifically recommended on this label) especially in areas where susceptible plants are grown.

# AMINE 4 2.4-D WELD KILLER

Do not treat irrigation ditches in areas where water will be used to overhead (sprinkler) irrigate susceptible crops.

Do not apply AMINE 4 directly to, or permit mist to drift onto desirable crops or ornamental plants which are susceptible to 2,4-D herbicide. Crops contacted by AMINE 4 sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

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 application.

Use coarse sprays to minimize drift. Do not apply with hollow cone type insecticide or other nozzle that produce fine spray droplets.

Drift from aerial or ground application may be reduced by: (1) applying as near the target as possible in order to obtain coverage; (2) by increasing the volume of spray mix per acre; (3) by decreasing the pounds of pressure at the nozzle tips; (4) by using nozzles which produce a coarse spray pattern; (5) by not applying when wind is blowing toward susceptible crops or valu-

Applications by airplane, ground rigs, and hand dispensers should be carried out only when there is no hazard from drift. Do not spray when the wind is blowing across the area to be sprayed towards susceptible crops or ornamental plants. Violent windstorms may move soil particles. If 2,4-D is on these particles and they are blown onto susceptible plants, visible symptimes particles and filey are blown unto susceptible plants, visible symp-toms may appear. Serious injury is unlikely. The hazard of movement of 2,4-D on dust during violent windstorms is reduced if treated fields are irrigated or if rain occurs shortly after application.

Large amounts of 2,4-D in the soil may temporarily inhibit seed germination. Do not use in any manner other than recommended on the label to avoid possible crop injury or residues at harvest.

#### **DIRECTIONS FOR USE**

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

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

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

Do not 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.

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, waterproof gloves, shoes plus socks and protective eyewear.

## **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. USE REQUIREMENTS FOR PASTURE, RANGELAND AND NON-CROP AREAS OTHER THAN TURF: Do not enter treatment areas until spray has dried or dust has settled. For early entry to treatment areas, wear eye protection, chemical resistant gloves, long sleeved shirt, long pants, sock and shoes

TURF USE REQUIREMENTS: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried.

NOTE: For application to turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes, follow AGRICULTURAL USE REQUIREMENTS on this label.

## SPRAY PREPARATIONS

Mix AMINE 4 only with water to obtain adequate coverage, unless otherwise directed on this label. 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.

#### APPLICATION PROCEDURES

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. Apply AMINE 4 during warm weather when weeds are young and growing actively. Apply a minimum of 2 gallons of spray solution per acre by air or a minimum of 5 gallons of spray solution per acre by ground unless directed

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

#### PLANTING INTREATED AREAS

Labeled Crops: Crops listed as use sites on this or other registered 2,4-D labels may be planted within 29 days of AMINE 4 application. Follow more specific limitations (if listed) provided in the directions for individual crops. Labeled crops may be at risk for crop injury or loss when planted soon after application, especially in the first 14 days.

Degradation factors described below should be considered in weighing

Other Crops: All other crops may be planted 30 or more days following an application without concern for illegal residues in the planted crop. However, under certain conditions, there may be a risk of injury to susceptible crops. Degradation factors described below should be considered in weighing this risk. Under normal conditions, any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed since application.

Degradation factors: When planting into treated areas, the risk of crop

injury is less if lower rates of product were applied and conditions following application have included warm, moist soil conditions that favor rapid degradation of 2,4-D. Risk is greater if higher rates of product were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application.

Consult your local Agricultural Extension Service for information about susceptible crops and typical soil conditions in your area.

## WEED LIST

The degree of control is dependent upon the species, stage of growth and overall growing conditions. Best results are obtained when weeds are young and actively growing. AMINE 4 may be applied to control the following listed

Artichoke	Hairy galinsoga	Ragweed (common)
Aster	Heai-all	Rough fleabane
Austrian Fieldcress	Hoary Cress*	Russian Thistle*
Beggarticks*	Horse Tail	Salsify
Bindweed*	Iron Weed*	Sicklepod
Bittersweet	Jerusalem artichoke	Smartweed*
Bitterweed	Jimson Weed	Sowthistle
Blue Lettuce	Knotweed*	Spanishneedles
Broomweed	Lambsquarters	Stinging Nettles
Bull Thistle	Lettuce (wild)	Strawberry (wild)
Burdock	Loco Weed	Sunflower
Canada Thistle*	Mallow*	Tansy Mustard
Catnip	Many flowered aster	Tan Weed
Chicory	Marsh Elder	Toadflax
Cockle	Morningglory	Tumble Weed
Cocklebur	Musk Thistle	Velvet leaf
Coffee Weed	Mustard*	Venice Mallow
Common evening	Nettles**	Vervains*
primrose	Orange hawkweed	Vetch
Croton	Parsnip	Wild Carrot
Dandelion	Pennywort	Wild Garlic*
Docks*	Peppergrass	Wild Lettuce
Dogbane*	Pigweed**	Wild Onion*
Fleabane (Daisy)	Plantains	Wild Parsnips
Flix Weed	Poverty Weed	Wild Radish
Frenchweed	Prickly Lettuce	Wild Rape
Galinsoga 1	Primrose	Wild Sweet Potato
Goatsbeard	Puncturevine	Worm Wood
Goldenrod*	Radish	
Ground Ivy*	Ragweed	

\*These species may require repeated applications or use the higher rate recommended on this label.

\*\*Control of these species in areas which are locally resistant, may not be satisfactory with this product.

APPLE AND PEAR ORCHARDS—Non-Bearing trees (well established, one year or older) and Bearing Trees before and after bloom: Use 3 pts. product in 20 to 50 gals. of water per acre of ground sprayed. For band or spot treatment calculate rates according to the actual portion of an acre treated. Apply as a directed spray onto the wands to point of runoff when weeds are young and actively growing (pre-buil to early stage). A maximum of 2 applications per season may be applied with a ninimum retreament interval of 75 days. Do not apply within 14 days of harvest.

STONE FRUIT AND NUT ORCHARDS (including pistachios,—Fc. control of annual broadleaf weeds in the orchard floor, upply 3 pints product per acre. Apply using coarse sprays and low preceive in sufficient volume of water to obtain thorough wetting of weeds. Do not make more inari two applications per year. Do not harvest stone fruit within 40 days of application or harvest nuts within 60 days of application.

1½ pints

1½ to 2½ pints

1½ to 2 pints

2 to 3 pints

## Precautions in applying Amine 4 in Orchards

When applying AMINÉ 4 in orchards, apply only after irrigation and allow maximum time before the next irrigation. Do not apply around fruit trees with handgun. Use only flat, fan-typed nozzles and low pressure-20 to 30 lbs. Use a fixed boom application which can be calibrated and will deposit the spray uniformly. Apply precisely and uniformly to prevent damage to the trees and to obtain satisfactory weed control. Do not apply during windy periods or extremely high temperature. Do not use on light sandy soil. Application to bare ground may result in injury. Do not allow spray to drift or contact foliage, fruit, stems, trunk of trees, or exposed roots as injury may result. Trees must be at least 1 year old and in vigorous conditions before application is made. Do not apply during bloom. Do not graze or feed cover crops from treated orchards.

#### ASPARAGUS

Apply 3 to 4 pts. AMINE 4 in about 60 gallons of water per acre for ground application and 12 gallons per acre for air application. Apply on actively growing weeds, usually in April or May. If spears are present, treat immediately after cutting. Make no more than 2 applications during the harvest season and these should be spaced at least one month apart. Spears contacted by the spray may be malformed and off-flavored. If malformed, spears should be cut immediately and discarded. Post-harvest spraying should be only by ground rig using drop nozzles to avoid spraying the fern.

WEED CONTROL IN SMALL GRAINS NOT UNDERSEEDED WITH A LEGUME (Barley, Oats, Rye, Wheat) See Table for recommended use rates. Spray after grain begins tillering and before the boot stage (usually 4 to 8 inches tall) and weeds are small. Do not apply before the tiller stage nor from early boot through the milk stage. To control large weeds that will interfere with harvest or to suppress perennial weeds, 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.

Note: Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 2 weeks after treatment. Do not feed treated straw to livestock.

WEED CONTROL IN CORN: See Table for recommended use rates. Preemergence - Apply to soil any time after planting but before corn emerges. Do not use on very light, sandy soil. Emergence: Apply just as corn plants are breaking ground. Postemergence - Apply to emerged corn. When corn is over 8 inches tall or the fifth leaf collar is visible, whichever occurs first, use drop nozzles to keep spray off corn foliage. Do not apply from 7 to 10 days before tasseling to dough stage. Injury to corn is most likely to occur if Amine 4 is applied when corn is growing rapidly under high temperature and high soil moisture conditions. In such situations, use the low rate of ½ pint per acre. After application, delay cultivation for 8 to 10 days to allow the corn to overcome any temporary brittleness.

NOTE: 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.

With Liquid Nitrogen Solutions: For late season control of young smartweeds, cocklebur, annual morningglory and other annual broadleaf weeds less than 1 inch high. Field should be as clean as possible and corn 20 to 30 inches tall. Apply 1 pint with 80 to 120 lbs. Nitrogen per acre. The spray MUST be prepared by first adding required amount of liquid nitrogen solution to spray tank. Next dilute 1 pint of AMINE 4 with 2 quarts of 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

Use spray equipment designated to handle corrosive liquid nitrogen solutions. After spraying, remove any remaining solution and rinse spray rig thoroughly with water. Mix only one tank at a time. Do not spray during or immediately following cold weather.

WEED CONTROL IN SORGHUM (MILO): See Table for recommended use rates. Treat only after the sorghum is 6 inches high and preferably before it is 15 inches high. Do not treat during the boot, tasseling, or early dough stages. Reduce spray drift by keeping the boom and spray nozzles as low as possible. If crop is taller than 8 inches, use drop nozzles to keep the spray off the leaves. Temporary crop 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 % pint per acre.

Note: Hybrids vary in tolerance in 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.

WEED CONTROL IN RICE\*: See Table for recommended use rates. 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. NOTE: Some rice varieties under certain conditions can be injured by 2,4-D. Therefore before spraying consult local Extension Service or university specialists for appropriate rates and timing of 2,4-D sprays.

\*Not for use in California

Higher rate for Normal rates special situations<sup>2</sup> (More likely to (usually safe CROP to crops) injure crop) SMALL GRAINS Spring postemergence wheat, barley, rye % to 11/3 pints 2 to 3 pints nats 1/2 to 1 pint 1½ to 2 pints Preharvest (dough stage) wheat, barley, oats CORN<sup>1</sup> 2 to 3 pints Preemergence 2 to 4 pints

1 pint

nia 1

1 pint

1/2 to 1 pint

2/3 to 1 pint

1½ to 2 pints

DOSAGE PER ACRE

1 Corn and sorghum varieties vary in tolerance to 2,4-D; some are easily injured. Before spraying, get information on 2,4-D tolerance of specific varieties and spray only those known to be resistant to 2,4-D injury. If plants are more than 8 inches tall, use directed spray and keep spray off corn and sorghum foliage.

<sup>2</sup> These higher rates may be needed to handle difficult weed problems in certain areas such as under dry conditions especially in western areas. However, do not use unless possible crop injury will be acceptable. Consult State Agricultural Experiment Station or Extension Service weed specialists for recommendations or suggestions to fit local conditions.

WEED CONTROL IN SUGARCANE: Use 1 to 2 quarts of product in 5 to 25 gallons of water per acre as a pre- or postemergence spray in the spring after cane emerges and through lay-by. Consult local Agricultural Experiment Station or Extension Service Weed Specialist on specific use of this product. Do not apply within 6 weeks of harvest.

#### SUGARCANE-HAWAII ONLY

Amount of AMINE 4 to use ii

Emergence<sup>1</sup>

Postemergence<sup>1</sup>

up to 8 inches tall

directed spray)
SORGHUM (Mile)<sup>1</sup>

Postemergence 6 to 8 inches tall

8 to 15 inches tall

(use only directed spray)

8 inches to tasseling (use only

Apply 1 to 3 pts. Amine 4 per acre per application as required, but not to exceed a total of 8 qts. per acre per crop. Do not apply within 6 weeks of harvest.

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

AMINE 4 is a phenoxy-type herbicide that provides postemergence control of many susceptible annual and perennial broadleaf weeds. AMINE 4 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 of soybeans.

## Mixing Instructions

Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal effectiveness of AMINE 4 on certain weeds and may be added to the spray tank. Read and follow all directions and precautions on this label and on the label of each product added to the spray mixture.

### **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 spray mixture per acre for ground equipment.

Application Timing and Use Rates

(Days prior to planting soybeans)
NOT LESS THAN 15 DAYS
NOT LESS THAN 30 DAYS

# AMINE 4 2,4-D WEED KILLER EPA REG. NO. 34704-120

#### WEEDS CONTROLLED

alfalfa"
bindweed"
bullnettle
bittercress, smallflowered
buttercup, smallflowered
Carolina geranium
cinquefoil, common
and rough
clover, red"
cocklebur, common
dandelion"
dock, curly"
eveningprimrose, cutleaf

garlic, wild'
horseweed or marestail
ironweed
lambsquarters, common
lettuce, prickly
morningglory, annual
mousetail
mustard, wild
onion, wild'
pennycress, field
peppergrass'
plantains
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.

In general, weeds should be small, actively growing and free of stress caused by extremes in climatic conditions, diseases, or insect damage at the time of treatment. The response of individual weeds 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 previously 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 at the time of application. Do not apply AMINE 4 as described on this label unless you are prepared to accept soybean injury, including loss of stand and yield.

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

Do not use on sandy soils with less than 1% organic matter.

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

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 previously treated with AMINE 4, plant soybean seed as deep as practical or at least 1 inch deep. Adjust the planter, if necessary, to ensure that planted seed is completely covered.

## STRAWBERRIES

To control broadleaf weeds in established strawberry plantings, apply 2 to 3 pts. AMINE 4 in 25 to 50 gallons of water per acre. Apply in early spring when strawberries are dormant or immediately after the last picking. Do not apply unless possible injury to the crop is acceptable. Follow recommendations of State Extensions Weed or Horticultural Specialist in your area.

AQUATIC WEED CONTROL (ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, rivers, and streams that are quiescent or slow moving) (NOT REGISTERED FOR AQUATIC USE IN NEW YORK STATE) Use 4 to 8 pts. AMINE 4 per acre to control weeds including water hyacinth. Spray the weed mass only. Use 8 pts. per acre when plants are matured or when the weed mass is dense. Spray when weeds are actively growing. Repeat as necessary to kill regrowth.

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 gals, per acre of spray mixture. Special precautions, such as the use of lower pressure, large nozzles, and thickening agents should be taken to avoid spray drift in areas of sensitive crops.

Air Application: Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 8 pts. AMINE 4 per acre through standard boom systems with a minimum of 5 gallons of spray mixture per acre.

## **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: 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. Irrigation: Delay the use of treated water for irrigation for three weeks after

Irrigation: Delay the use of treated water 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.

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.

## FALLOWLAND AND CROP STUBBLE

Apply 1 to 4 pts. AMINE 4 per acre on annual broadleaf weeds and up to 6 pts. per acre on established perennial species. Apply to actively growing

weeds. See Planting In Treated Areas section. Do not graze dairy animals on treated areas within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 30 days after application.

## FOREST SITE PREPARATION

To control alder, susceptible broadleaf weeds, and susceptible woody plants before planting forest seedlings, apply 4 to 8 pts. AMINE 4 in 5 to 25 gallons of water, per acre. To provide uniform uptake of product, apply when sufficient foliage exist.

#### FOREST CONIFER RELEASE

To control alder, susceptible broadleaf weeds, and susceptible woody plants in conifer plantations, apply 2 to 6 pts. AMINE 4 per acre in a minimum of 5 gallons spray mixture per acre. For best results, apply in the spring before budbreak or after budset in late summer to help reduce risk of conifer injury. Certain conifer species are less tolerant to 2,4-D and injury will occur with application. Consult your local university or Agricultural Extension Service specialist for more specific information on rates and timing of applications.

#### **FORESTRY-TREES INJECTION**

For controlling species such as alder, aspen, birch, blackgum, cherry, oak, poplar spp., sweetgum, and tulip poplar, make injections or cuts around the tree or stem, using one injection or cut per inch of trunk diameter. For resistant species such as hickory, injection cuts should touch. For best results, injections should be made during the growing season, May 15 to October 15.

For Concentrate Injections or Stump Treatments: Use 1 to 2 ml. of undituted AMINE 4 per injection. The injection bit must penetrate the inner bark.

## GRASS PASTURES, RANGELAND, AND CONSERVATION RESERVE PROGRAM

Apply 2 to 4 pts. AMINE 4 per acre, when weeds are small and actively growing and prior to bud stage. Do not apply to newly seeded areas until grass is well established. Do not apply to grass in the early boot through milk stage if grass seed production is desired. Use lower rates on annuals or use higher rate on perennials or when weeds are taller.

Bentgrass and legumes may be injured by this treatment. When using on Conservation Reserve Land, follow all applicable state and Federal regulations. Follow the most severe grazing restrictions imposed either by the pesticide label or by USDA Acreage Conservation Reserve Program, whichever is longest. Do not graze dairy cattle in treated areas for 7 days after application. Do not cut forage for hay within 30 days after application. Do not permit meat animals being finished for slaughter to forage treated fields within 3 days of slaughter.

GRASS.SEED CROPS: Use 1 to 4 pints per acre 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 ¾ 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, apply when soil moisture is adequate for good growth.

**Note:** Do not use on bentgrass unless grass injury can be tolerated. Do not graze dairy animals on treated areas within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 30 days after application.

NON-CROPLAND (FENCEROWS, HEDGEROWS, ROADSIDES, DRAINAGE DITCHES, ROADSIDES ADJACENT TO ORCHARDS, RIGHTS-OF-WAYS, UTILITY POWER LINES, RAILROADS, AND OTHER NON-CROP AREAS)

Treat annual broadleaf weeds, when young and actively growing, with 2 to 4 pts. AMINE 4 per acre. Apply 4 to 8 pts. AMINE 4 per acre for control of biennial and perennial broadleaf weeds. Do not apply to newly seeded area until grass is well established. Bentgrass, clover, legumes and dichondria may be injured by this treatment. Do not graze dairy animals for 7 days following application. Use sufficient gallonage for thorough and uniform coverage.

#### ORNAMENTAL AND RECREATIONAL TURF

For weed control on golf courses, cerneteries, parks, and lawns, apply 2 to 4 pts. AMINE 4 per acre when weeds are young and actively growing. Do not apply to newly seeded areas until grass is well established. Use sufficient gallonage for thorough and uniform coverage. Do not apply more than 2 broadcast applications per year per treatment site.

PINE RELEASE: To control hardwoods, such as Oak, Hickory, Maple, Pecan, Elm, Sumac, and Hawthorn in Southern pine stands, use AMINE 4 undiluted in a concentrate tree injector calibrated to apply 0.75 ml. per injection. Space injections 2" apart, edge to edge, completely around the tree and close to the base. The injector bit must penetrate the inner bark. Cn hard-to-kill species such as Hickory, Dogwood. Hed Maple, Blue Beech and Ash, make injections 1" to 1½" apart, edge to edge, retiment may be made at any time of year.

CONTROL OF SOUTHERN WILD ROSE: On rangelands, roadsteas, and fencerows, use 1 gallon of AMINE 4 plus 4 to 8 fluid bunces of an agricultural surfactant per 100 gallons of water and spray thoroughly abused as foliage is well developed. Two or more treatments may be required. On rangeland, apply a maximum of 2 quarts of AMINE 4 per acre per application. Do not graze dairy animals on treated cross within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 30 days after application.

WEEDS AND BRUSH ON IRRIGATION CANAL DITCHBANKS-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 3 to 4 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 Instructions: Low pressure (10 to 40 psi) power spray equipment should be used and mounted on a truck, tractor or boat. Apply while traveling upstream to avoid accidental concentration of chemical into water. Spray when the air is calm, 5 mph or less. Do not use on small canals (less than 10 cts) where water will be used for drinking purposes. Boom spraying onto water surface 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.

Do not graze dairy animals on treated areas within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 30 days after application.

SPOT TREATMENT IN NON-CROP AREAS: To control broadleaf weeds in small areas with hand sprayer, use ¼ pint of AMINE 4 in 3 gallons of water and spray to thoroughly wet all foliage.

## SMALL QUANTITY DILUTION TABLE

To spray small areas use the following dilution table Use this Amount for If Dosage on Label shows: each Gallon of water 2 pints (1 quart) 34 ounces (4 teaspoons)/1,000 sq. ft. 3 pints (1½ quarts) 1¼ ounces (21/2 tablespoons)/1,000 sq. ft. 4 pints (2 quarts) 1½ ounces (3 tablespoons)/1,000 sq. ft. 6 pints (3 quarts) 21/4 ounces (4½ tablespoons)/1,000 sq. ft.

## STORAGE AND DISPOSAL

**PROHIBITION:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container. Do not store under conditions which might adversely affect the container or its ability to function properly.

PESTICIDE STORAGE: Do not store below temperature of 25° F. If frozen, warm to 70° F. and redissolve before using by rolling or shaking the container. Store in a safe manner. Store in original container only. Store in cool, dry place. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength. Personnel should use clothing and equipment consistent with good pesticide handling.

good pesticide handling.

PESTICIPE 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: Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acre-vele.cm

cycle.org.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ½ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over

Storage & Disposal cont'd.:

application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container '¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 56 gallons: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

For refiliable containers: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT. read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL, THIS PRODUCT IS SOLD AS IS TO THE EXTENT ALLOWED BY APPLICABLE LAW. LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE ISSAGE

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVE-LAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL, BUYER OR USER MUST SEND, TO THE EXTENT REQUIRED BY APPLICABLE LAW, WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, 7251 WEST 4TH STREET, GREELEY, CO 80634.

TO THE EXTENT ALLOWED BY APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT ALLOWED BY APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

FORMULATED FOR



P.O. BOX 1286, GREELEY, COLORADO 80632-128C ( )