PM23
2217-2
Pg. 1 of 12

AMINE 400
2,4-D
WEED KILLER

ACTIVE INGREDIENT	
*Dimethylamine Salt of 2,4-dichlorophenoxyacetic acid . . .	46.4%
INERT INGREDIENTS	53.6%
TOTAL	100.0%

This Product Contains:
*3.8 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 38.6%

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

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

Statement of Practical Treatment

IF IN EYES: In case of eye contact, immediately flush eyes with plenty of water for 15 minutes. Call a physician at once.

IF ON SKIN: Wash promptly with soap and water. Rinse thoroughly. If irritation develops, get medical attention.

IF INHALED: Remove victim to fresh air and apply respiration if indicated.

IF SWALLOWED: Drink one or two glasses of water. Induce vomiting by touching back of throat with finger. Call a physician at once. Do not induce vomiting or give anything by mouth to an unconscious person.

See Additional Precautionary Statements elsewhere on this label.

NET CONTENTS GALLONS

814/590 AP030988+

EPA REG. NO. 2217-2
EPA EST. NO. 2217-KS-1

Mfd. by PBI/GORDON CORPORATION
KANSAS CITY, KANSAS 66118

NOTIFICATION
LABEL NOT REVIEWED
PER PR NOTICE 88-6
DATE AUG 13 1990

8/13/90

STOP! READ THE ENTIRE LABEL FIRST.
OBSERVE ALL PRECAUTIONS AND
FOLLOW DIRECTIONS CAREFULLY.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals
DANGER: Corrosive, causes eye damage and skin irritation. Do not get in eyes, on skin or clothing. Wear goggles or face shield and chemical resistant gloves when handling. This product harmful or fatal if swallowed.

ENVIRONMENTAL HAZARDS: Do not apply directly to water except as directed in labeling. Do not apply when weather conditions favor drift away from target area. Do not contaminate domestic or irrigation waters.

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water except as specified on this label. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE:
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

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.

STORAGE & DISPOSAL
STORAGE: Store in original container in a locked storage area inaccessible to children or pets. Keep from freezing. To prevent cross-contamination, do not store near other herbicides, fertilizers, insecticides, fungicides, or near seeds.
PESTICIDE DISPOSAL: Do not contaminate water, food, or feed by storage or 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

USE PRECAUTIONS:

Do not apply this product through any type of irrigation system. Do not overdose! Avoid spray drift to cotton, soybeans, tomatoes, tobacco, grapes, fruit trees, flowers, garden crops, ornamental plants, shrubs, trees and other hormone herbicide-sensitive desirable plants. Do not apply near these plants since small quantities of wind-drifted herbicide may cause severe injury. Do not apply when wind speed is sufficient to cause drift. Do not apply when a temperature air inversion exists. An air inversion may be detected by creating a smoke column and observing for a layering effect. Do not apply when temperature exceeds 90°F and humidity is high. To aid in avoiding spray drift, use coarse sprays and lower pressure. Do not use nozzles which produce fine spray droplets under high pressure. The use of thickening agents or antidrift additives and drift-reducing equipment is of value in preventing spray drift. Care should be taken not to make applications where runoff could carry the chemical to non-target areas. Local spray conditions will vary. Check local recommendations first.

WEEDS CONTROLLED:

Annual and Biennial Weeds:

Beggarticks	Jewelweed	Radish (Wild)
Bitterweed	Jimsonweed	Ragweed (Common)
Broomweed	Kochia	Russian Thistle
Bull Thistle	Knotweed	Shepherdspurse
Burdock	Lambsquarters	Smartweed
Carpetweed	Lettuce (Wild)	Sneezeweed
Cinquefoil	Mallow	Sowthistle (Common)
Cockle	Marshelder	Spanish Needles
Cocklebur	Marijuana	Sunflower
Coffeeweed	Morningglory (Annual)	Tumbleweed
Croton	Mustard	Velvetleaf
Devil's Claw	Parsnip	Vervains
Fleabane (Daisy)	Pennycress	Vetch
Flixweed	Peppergrass	Wild Carrot
Frenchweed	Pigweed	Witchweed
Galinsoga	Prickly Lettuce	Wormwood
Goatsbeard	Primrose	Yellow Starthistle
Goosefoot	Puncturevine	

Perennial Weeds:

pg. 4c, 12

Artichoke	Goldenrod	Rushes
Aster	Ground Ivy	Southern Wild Rose
Austrian Field Cress	Gumweed	Sowthistle
Bindweed	Heal-All	Stinging Nettles
Blackeyed Susan	Hoary Cress	Strawberry (Wild)
Blue Lettuce	Horsetail	Tall Buttercup
Bull Thistle	Ironweed	Tan Weed
Canada Thistle	Loco Weed	Toad Flax
Catnip	Musk Thistle	Vervains
Chicory	Nettles	Yellow Rocket
Clover (many types)	Orange Hawkweed	Wild Garlic
Dandelion	Plantains	Wild Onion
Docks	Poverty Weed	Wild Parsnip
Dogbane	Ragweed	Wild Sweet Potato

WEEDS IN CROPS	PINTS/ ACRE	GALS./ WATER	INSTRUCTIONS
Wheat, Barley, Rye, Oats, Winter Grain: Annual and biennial weeds	½ to 2*	8 or more	Apply after grain is fully tillered (about 4" to 8" high) but nc forming joints in the stem. Oats are more sensitive to 2,4-D than other grains and should be sprayed in spring when well established and tillered and before jointing; (use ½ - 1 pint per acre).
Perennial Broadleaf weeds	1 to 2*	8 or more	Apply when weeds are near bud stage. Do not spray grain in boot to dough stage.
Spring Grain: Annual broadleaf weeds.	½ to 2*	8 or more	Appl- after grain is fully tillered (about 4" to 8" high) but not forming joints in the stem.
Perennial broadleaf weeds	1 to 2*	8 or more	Apply when weeds are near bud stage. Do not spray gain in boot to dough stage.

*NOTES ABOUT THE ABOVE: Use the 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 forage or graze treated grain fields within 2 weeks after treatment. Do not feed treated straw to livestock.**

CORN (Field & Sweet): Pre-emergence	2 to 3	15 to 30.	Apply just before corn emerges. Do not use on light sandy soil, or where soil moisture is low.
Postemergence annual broad-leaf weeds.	½ to 1	8 to 15	Apply when most weeds have germinated. Corn is susceptible to injury at time of emergence and shortly after unfolding of leaves. Do not spray during this period nor after 1st tassels appear. Use drop nozzles when corn is 10" tall to place spray below its tops. Do not cultivate soon after spraying while corn is brittle. Do not forage or feed corn fodder for 7 days following application.
Perennial broadleaf weeds	1 to 1½	8 to 15	Apply when weeds are in bud to bloom stage. Use drop pipes after corn is 10" tall. Do not spray corn in tassel. 2,4-D may cause brittleness to corn. Winds or cultivation may cause stalk breakage while brittle. Certain single cross corn hybrids may be more susceptible to 2,4-D injury than others.
Sorghum — Postemergence	1	6 to 10	Apply when sorghum is 4" to 12" tall. Use drop pipes to keep spray off sorghum plants, when sorghum is over 10" high.
Rice	1½ to 2½	5 to 10	To control curly indigo and other broadleaved weeds, apply 7 to 10 weeks after planting when rice is fully tillered. Do not spray rice in boot stage.
Sugarcane Preemergence	4	15 to 30	
Postemergence	1½ to 2	10 to 30	Apply when cane is 1 to 2 feet tall.

Non-Cropped land, Fence Rows, Roadsides, Farm Buildings, Drainage Ditch Banks, Right-of-Ways, and similar places. Annual broadleaf weeds.	2 to 3	15 to 30	Apply when weeds are young and growing vigorously.
Perennial broadleaf weeds	4 to 8	15 to 30	Apply when weeds are growing rapidly — generally near the bud stage. Repeated applications may be necessary.
Rangelands, Pastures & Turf Areas: Golf Courses, Parks, Cemeteries (Do not use on golf greens nor on dichondra or other broadleaf herbaceous ground cover)	2 to 4*	3 to 60	Do not apply to newly seeded turf until grass has been cut several times. Where bentgrass predominates, make 2 applications of 1 pint per acre at 3 week intervals. Do not use on susceptible southern grasses such as St. Augustine, Bentgrass, dichondra, and clover may be injured by this treatment. Observe the following intervals: a. A 7-day grazing interval after treatment for dairy cattle; for grass cut for hay; and c. A preslaughter interval for meat animals of 3 days.

NOTES ABOUT THE ABOVE:
Aerial Applications on Grain: Apply in 3 to 10 gallons of water per acre.
*Use the lower rate if annual and biennial weeds are the major problem, the higher rate for perennial weeds.

To convert local recommendations into terms of Amine 2,4-D use the following table.

2,4-D Acid	1 lb.	3/4 lb.	½ lb.	3/8 lb.	¼ lb.	1/6 lb.	1/8 lb.
Amine 2,4-D	2 Pt.	1½ Pt.	1 Pt.	3/4 Pt.	½Pt.	3/8 Pt.	¼ Pt.

PA. 7912

For Emergency Weed Control in Wheat
Perennial broadleaf weeds: Apply 3 pints per acre when weeds are approaching bud stage, but do not spray grain in the boot to dough stage. The 3 pint (1.5 lb. acid equivalent) per acre application of any 2,4-D product 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.

WEEDS & 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 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 ush and patches of perennial broadleaf weeds, mix one gallon in 150 gallons of water. Wet foliage thoroughly using about one gallon of solution per square rod.

Spraying Instructions: Apply with low pressure (10 to 40 psi) power spray equipment mounted on a truck, tractor or boat. Apply while traveling upstream to avoid accidental concentration of chemical into water. Spray when the air is fairly calm; 5 mph or less. Do not use on small canals (less than 10 cfs) where water will be used for drinking purposes.

Boom spraying onto water surface must be held to a minimum and no cross-stream spraying to opposite banks should be permitted. When spraying shoreline weeds, allow no more than two-foot overspray to prevent introduction of greater than negligible amounts of chemical into the water.

Do not allow dairy animals to graze on treated areas for at least 7 days after spraying. Water within treated banks should not be fished.

For spot-spraying general weeds in non-cropped areas such as fence rows, ditch banks and roadsides, mix 2 to 3 fluid ounces in 3 gallons of water. Wet all weeds and stems thoroughly. For best results, treat when weeds are growing actively.

FORESTRY — TREE INJECTION:
Make injections as near the root collar as possible using one injection per inch of trunks dbh (4½ feet). For resistant species such as hickory, injections should overlap. For best results, injections should be made during the growing season — May 15 to Oct. 15.

For Dilute Injection: Mix 1 gallon in 19 gallons water for dilute injections. p2.60 12

For Concentration Injection: Use 1 to 2 ml of concentrate per injection. The injector bit must penetrate the inner bark.

CONTROL OF WOODY PLANTS OR BRUSH AND BROADLEAF WEEDS ON ROADSIDES, DRAINAGE DITCHBANKS, RIGHTS-OF-WAY, RAILROADS, FIREBREAKS, FORESTS (Forest Site Prep.), FENCEROWS, INDUSTRIAL SITES & OTHER SIMILAR NON-CROP AREAS:
HIGH VOLUME: Mix at the rate of 1 to 2 gallons per 100 gallons of water (1 - 2 % solution). Rate per acre depends on the density of brush and/or weeds. For small broadleaf weeds, use the lower rate. Heavy dense stands of brush require the high rate with higher water volume. For small applications with small tank sprayers use at the rate of 1.25 - 2.5 ounces per gallon of water.

To effectively control brush, all leaves, stems and suckers should be thoroughly wetted to the ground. Apply when plants come into full leaf (spring) to the time plants begin to go dormant. Best results are obtained when brush and broadleaf weeds are young and actively growing. Do not cut brush until the herbicide has translocated throughout the plant causing root death. DO NOT APPLY as a stand release or cover spray to established conifers as injury may result.

AERIAL APPLICATIONS:

Forestry Site Preparation — For use in dessication/controlled burning programs, use ½ to 2 gallons of AMINE 400 in tank mixes with other herbicides labeled for forestry site preparation (e.g. Garlon, Tordon, Arsenal). Use sufficient water to achieve uniform wetting of target brush species. Do not exceed 25 gallon total spray per acre.

Utility & Pipeline rights-of-way — Use ½ to 2 gallons of AMINE 400 in tank mix combination with other herbicides labeled for rights-of-way sites and apply in a total spray volume of 5 to 30 gallons per acre.

TANK MIXTURES

AMINE 400 can be applied as a tank mixture with other recommended herbicides such as Garlon(R), Tordon(R), and Banvel(R) to broaden the spectrum of control. In order to assure maximum safety and weed control, follow all precautions and limitations on this label and the labels of products used in tank mixtures with AMINE 400. Where a rate range is given, the rate should be varied according to the density and target species.

Products	Rates
AMINE 400 + Garlon(R) 3A	½-2 gal./A + ½-1 gal./A
AMINE 400 + Garlon(R) 4E	½-2 gal./A + 2-4 qts./A
AMINE 400 + Tordon(R) K	½-2 gal./A + ½-4 qts./A
AMINE 400 + Banvel(R)	½-2 gal./A + 1 qt.-2 gal./A

Garlon(R) and Tordon(R) are registered trademarks of Dow Chemical Company. Banvel(R) is a registered trademark of Sandoz Crop Protection Corporation.

HOME LAWNS

To control weeds in established lawns and other ornamental turf grasses such as Bluegrass, Ryegrass, and Fescue, mix according to the following dilution chart and apply during active weed growth. Apply in spring, summer or fall when weeds are actively growing. Spray to give a uniform application. Delay mowing for several days before and after treatment. Do not use on newly seeded areas or on grass seedlings. Do not use on new lawns until mowed twice. Creeping grasses such as Zoysia, Bermuda, St. Augustine, dichondra, and clovers may be injured severely by this product, spot treat only on these types of grasses.

Do not use on golf greens nor on dichondra or other broadleaf herbaceous ground cover.

Reseeding of treated areas should be delayed following treatment. With spring application reseed in fall; with fall application reseed in the spring.

Deep-rooted perennials may require repeat applications.

TO PREPARE THE SPRAY:

1) Fill the sprayer about half full with water.
2) Add the required amount of Amine 400.
3) Add the rest of the water and mix well.

DILUTION CHART

Area to be Treated	Amount of Amine 400 2,4-D to Use	Amount of Water to Use
500 sq.ft.	1 tablespoon (½ fl. oz.)	2 gal.
1,000 sq.ft.	2 tablespoons (1 fl. oz.)	4 gal.
5,000 sq.ft.	9 tablespoons (4½ fl. oz.)	20 gal.

NEVER USE EATING, DRINKING, OR HOUSEHOLD KITCHEN UTENSILS FOR MIXING OR MEASURING PESTICIDES.

<u>For Spot Treatment In Lawns & Turf</u>

For spot treatment only in lawns and turf, mix 4 fl. oz. of Amine 400 in 2 to 3 gallons of water and spray the weeds when they are small. Be sure to thoroughly wet all foliage.

Follow all label precautions for general lawn and turf spraying. P8,10092-

WATER HYACINTH CONTROL

To be applied by federal, state or local public agency personnel, trained in aquatic weed control, or by licensed commercial applicators under contract to the above agencies. For use in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, rivers, and streams that are quiescent or slow moving.

NOTE TO APPLICATORS:
State and Local Coordination — Before application under any project program, coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

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

WIND VELOCITY: Ground or Surface Application - Do not apply when wind speeds are at or above 10 mph. Air Application: Do not apply when wind speeds are at or above 5 mph.

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 .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 3 weeks or until such time as an approved assay shows that the water contains no more than .1 ppm 2,4-D acid.

DIRECTIONS: AMINE 400 will control water hyacinth with surface and air applications.

WATER HYACINTH (Elchornia crassippe): Amounts to use - 2 to 4 qts. (3.8 lb. acid equivalent per gallon) per acre. Spray the weed mass only. Use 4 qts. 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.

pg. 11c, 12

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 gals./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.

How to Use (Air Application): Use drift control spray equipment or thickening agents mixed into the spray solution. Apply 1 gallon per acre of Amine 2,4-D through standard boom systems with a minimum of 5 gallons of spray mix per acre.

2,4-D Acid	½ lb.	1 lb.	2 lb.	3 lb.	4 lb.
Equivalent Amine 2,4-D	1 Pt.	2 Pt.	2 Qt.	3 Qt.	4 Qt.

For Eurasian Water Mifoil programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system.

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

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

DIRECTIONS: AMINE 400 will control water milfoil with surface, subsurface and air applications.

WATER MILFOIL (Myriophyllum Spicatum): How to Use – To control water milfoil when less than 5 gallons of concentrate per acre is recommended, dilute the concentration with water to apply a minimum 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 away from target area.

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

Amounts to Use: Apply 2.5 to 10 gallons concentrate 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 per acre as a concentrate directly into the water through boat-mounted distribution systems.

Surface Application: Apply 2.5 to 10 gallons per acre; minimum spray volume, 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 concentrate per acre. For microfoil drift control spray systems, apply in 12 to 15 gallons spray mix per acre.

LIMITED WARRANTY. Manufacturer warrants that the chemical composition conforms to the ingredient statement given on the label and that this product is suited for the labeled use when applied according to label directions. Because of widely varying use conditions, it is impossible to eliminate all risks even when label directions are followed.

EXCLUSION OF OTHER WARRANTIES AND REMEDIES. Except where such disclaimers and exclusions are specifically prohibited by applicable law. THE FOREGOING IS THE ONLY GUARANTEE OR WARRANTY APPLICABLE TO THIS PRODUCT AND IS GIVEN EXPRESSLY AND IN LIEJ OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH WARRANTIES WHICH EXCEED OR DIFFER FROM SAID LIMITED WARRANTY ARE DISCLAIMED BY MANUFACTURER, and, upon Manufacturer's compliance with said limited warranty. BUYER SHALL HAVE NO REMEDY AGAINST MANUFACTURER FOR ANY TYPE OF DAMAGE OR LOSS, and, IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL DAMAGE OR LOSS.