MACCO

MID AMERICA CHEMICAL CO., INC.

2,4-D AMINE #4

ACTIVE INGREDIENT:

Dimethylamine salt of 2,4-dichlorophenoxyacetic acid*	47.29%
INERT INGREDIENTS	52.71%

* Equivalent to 39.28% 2,4-D acid

Isomer specific by AOAC Method No. 6.DD1.6 DO5

36480-53

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Wash thoroughly after handling. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash before reuse

ENVIRONMENTAL HAZARDS

Do not apply when weather conditions favor drift from target area. Use with care when applying in areas adjacent to any body of water. Do not contaminate water intended for irrigation or domestic purposes.

EPA Reg. No. 36480-53 **EPA Est. No. 36480-KS-1**

NET CONTENTS Gal. (litres

Manufactured by

MACCO

MID AMERICA CHEMICAL CO., INC.
402 South Fifth Street
Leavenworth, Kansas 66048

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

Prohibitions: Do not contaminate water, food, or feed by storage, disposal of wastes or cleaning of equipment

Pesticide Disposal: Pesticide, spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to Federal or approved state procedures under subtitle C of the Resource Conservation and Recovery Act

Container Disposal: Triple rinse (or equivalent) and offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by other approved State and local procedures

General, Consult Federal, State or Local disposal authorities for approved alternative procedures

Apply this product only as specified on this label. Do not forage or graze treated grain fields within 2 weeks after treatment with 2,4-D
Do not feed treated straw to livestock

GROUND EQUIPMENT

With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible, by applying 20 gallons or more of spray per acre, by using no more than 20 pounds spraying pressure with flat fan or flooding flat fan nozzle tips, by spraying when wind velocity is low, and by stopping all spraying when wind exceeds 6 to 7 miles per hour. Do not apply with low volume type insecticide or other nozzles that produce a fine [illegible] spray

AIRCRAFT APPLICATION

With aircraft application spray drift can be lessened by applying no less than 5 to 10 gallons of spray per acre, by using no more than 20 pounds spray pressure at the nozzles, by using nozzles which produce a coarse spray pattern, and by spraying only when the wind velocity is less than 5 miles per hour. Do not apply by aircraft when an air temperature inversion exists

Applications by aircraft, ground rig and hand dispenser should be carried out only when there is no hazard from spray drift. A spray thickening agent may be used with this product to reduce spray drift. Do not spray when the wind is blowing toward susceptible crops or ornamental plants

NOTE:
(Coarse sprays are less likely to drift than fine mist sprays.) Do not allow the concentrate or dilution of it to come in contact with desirable plants such as cotton, grapes, melons, tomatoes, beans, peas, other vegetables, flowers, ornamentals and fruit trees. Do not use the same spray equipment for other purposes where even trace amounts of this chemical may cause injury. Do not use in or around greenhouses

WEED LIST

Use Low-Vol 2,4-D herbicide to control many broadleaf weeds including:

ANNUAL AND BIENNIAL WEEDS

Beggarticks	Jewelweed	Radish (wild)
Bitterweed	Jimsonweed	Ragweed (common)
Broomweed	Kochia	Russian thistle
Bull thistle	Knotweed	Shepard's purse
Burdock	Lambsquarters	Smartweed
Carpetweed	Lettuce (wild)	Sneezeweed
Cranesbill	Mallow	Sowthistle (common)
Cocklebur	Marshelder	Spanish Needles
Clotbur	Marijuana	Sunflower
Coffeeweed	Morningglory (annual)	Tumbleweed
Croton	Mustard	Velvet leaf
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	

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EPA Est. No. 36480-KS-1

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General: Consult Federal, State or Local disposal authorities for approved alternative procedures

Apply this product only as specified on this label. Do not forage or graze treated grain fields within 2 weeks after treatment with 2,4-D
Do not feed treated straw to livestock

GROUND EQUIPMENT

With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying 20 gallons or more of spray per acre, by using no more than 20 pounds spraying pressure with flat fan or flooding flat fan nozzle tips, by spraying when wind velocity is low, and by stopping all spraying when wind exceeds 6 to 7 miles per hour. Do not apply with hollow cone type insecticide or other nozzles that produce a fine droplet spray.

AIRCRAFT APPLICATION

With aircraft application, spray drift can be lessened by applying no less than 3 to 5 gallons of spray per acre, by using no more than 20 pounds spray pressure at the nozzles, by using nozzles which produce a coarse spray pattern, and by spraying only when the wind velocity is less than 5 miles per hour. Do not apply by aircraft when an air temperature inversion exists.

Applications by aircraft, grounding and hand dispenser should be carried out only when there is no hazard from spray drift. A spray thickening agent may be used with this product to reduce spray drift. Do not spray when the wind is blowing toward susceptible crops or ornamental plants.

NOTE:
(Coarse sprays are less likely to drift than fine mist sprays.) Do not allow this chemical or dilution of it to come in contact with desirable plants such as cotton, grapes, melons, tomatoes, beans, peas, other vegetables, legumes, ornamentals and fruit trees. Do not use the same spray equipment for other purposes where even trace amounts of this chemical may cause injury. Do not use in or around greenhouses.

WEED LIST

Use Low-Vol 2,4-D herbicide to control many broadleaf weeds including:

ANNUAL AND BIENNIAL WEEDS

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Buffalo thistle	Knotweed	Shepard's purse
Burdock	Lambsquarters	Smartweed
Carpetweed	Lettuce (wild)	Sneezeweed
Cocklebur	Mallow	Sowthistle (common)
Cocklebur	Marshelder	Spanish Needles
Cocklebur	Marijuana	Sunflower
Coffeeweed	Morningglory (annual)	Tumbleweed
Croton	Mustard	Velvet leaf
Devil's claw	Parsnip	Vervains
Fleabane daisy	Pennycress	Vetch
Fluxweed	Peppergrass	Wild carrot
Frenchweed	Ragweed	Witchweed
Galinsoga	Prickly lettuce	Wormwood
Goatsbeard	Primrose	Yellow starthistle
Goosefoot	Puncturevine	

PERNNIAL WEEDS

Artichoke	Ground Ivy	Sowthistle
Aster	Gumweed	Stinging nettles
Austrian field cress	Healall	Strawberry (wild)
Bindweed	Hoary cress	Tall buttercup
Blakeyed Susan	Horsetail	Tan weed
Blue lettuce	Ironweed	Toad flax
Bull thistle	Loco weed	Vervains
Canada thistle	Musk thistle	Waterhyacinth
Catnip	Nettles	Water milfoil
Chicory	Orange hawkweed	Wild garlic
Clover (many types)	Plantains	Wild onion
Dandelion	Poverty weed	Wild parsnip
Dock	Ragweed	Wild sweet potato
Dogbane	Sorrel	Yellow rocket
Goldenrod		

Also Certain 2,4-D susceptible woody plants such as.

Big sagebrush	Locust	Sumac
Buckbrush	Manzanita	Tules (bulrush)
Chamise	Poison oak	Sand sagebrush
Coastal Sage	Rabbit brush	Willow
Elderberry	Sand sagebrush	
Hazel	Sand shinnery oak	

USE DIRECTIONS

Generally, the lower dosages given will be satisfactory for young succulent growth of sensitive weed species. For less sensitive species or under conditions where control is more difficult, the higher dosages should be used. Apply during warm weather when weeds are young and growing actively. Use enough spray volume for uniform coverage by ground or air application. If only bands or rows are treated, leaving middles unsprayed, the dosage per crop acre is reduced proportionately. Do not apply where drift may be a problem due to proximity of susceptible crops or other desirable plants. Read and follow all Use Precautions given with this label.

Prepare the Spray: mix only with water, unless otherwise directed on this label. Add about half the water to the mixing tank, then add the herbicide 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.

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

2,4-D	1 lb	¾ lb	½ lb	3/8 lb.	¼ lb	1/6 lb	1/8 lb
2,4-D Amine #4	2 pt	1½ pt	1 pt.	¾ pt.	½ pt.	3/8 pt.	¼ pt

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 pound 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.

WEED CONTROL IN SMALL GRAINS NOT UNDERSEEDED WITH 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 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: (Field) See Table for recommended use rates. **Preemergence**--Apply to soil anytime after planting but before corn emerges. Do not use on very light, sandy soil. **Emergence**--Apply just as corn plants are breaking ground. **Post-emergence**--Apply to emerged corn. When corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage. Do not apply from tasseling to dough stage. Injury to corn as

most likely to occur if applied when corn is ... temperature and high soil moisture conditions. Use the low rate of ½ pt. per acre. After application, delay cultivation 7 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.

WEED CONTROL IN SORGHUM (MILO): See Table for recommended use rates. Treat only after the sorghum is ... 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 pressure 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 under these conditions, use no more than 2 pints per acre.

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.

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.

WEED CONTROL IN SUGARCANE: See Table for recommended use rates. Apply as a pre-emergence or post-emergence spray in accordance with State recommendations. Always read the label directions and precautions for the use of these products before using.

AMOUNT OF HERBICIDE TO USE IN CROPS
By Air or Ground Application

NOTE: Do not apply when weather conditions favor drift from treated areas. Read complete directions and precautions before using.

CROP	DOSAGE PER ACRE	
	Normal Rates (usually safe to crops)	Higher rates for special situations 2 (more likely to injure crop)
SMALL GRAINS		
Spring postemergence		
wheat, barley, rye	⅔ to 1⅓ pints	2 to 3 pints
oats	½ to 1 pint	1½ to 2 pints
Preharvest (dough stage)		
wheat, barley, oats 1	1 to 2 pints	2 to 3 pints
CORN		
Preemergence 1	2 to 4 pints	
Emergence 1	1 pint	1½ pints
Postemergence		
up to 8 inches tall	½ to 1 pint	
8 inches to tasseling (use only directed spray)	1 pint	1½ to 2½ pints
Preharvest 3	1 to 2 pints	
SORGHUM (Milo) 4		
Postemergence		
6 to 8 inches tall	½ to 1 pint	
8 to 15 inches tall (use only directed spray)	1 pint	1½ to 2 pints
RICE	2 to 2½ pints	2 to 3 pints
SUGARCANE	2 to 4 pints	

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.

2 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.

3 Apply after the hard dough or denting stage 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, velvet leaf and vines that interfere with harvesting. Do not forage or feed corn fodder for 7 days following application.

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 2,4-D 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 4" of corn stalk.

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 ON FALLOW LAND: Use 1 to 2 quarts per acre on annual broadleaf weeds and up to 3 quarts per acre on established perennial species, such as Canada thistle and field bindweed. Apply to weeds actively growing. Do not plant any crop for 3 months after treatment or until chemical has disappeared from soil.

WEED CONTROL IN ESTABLISHED GRASS PASTURES AND RANGELANDS: Use at 2 to 4 pints per acre. Apply preferably when weeds are small and growing actively before the bud stage. Do not use on bentgrass, alfalfa, clover, or other legumes. Do not use on newly seeded areas until grass is well established. Do not use from early boot to milk stage where grass seed production is desired. Do not graze dairy animals on treated areas within 7 days after application.

CONTROL OF SOUTHERN WILD ROSE: On rangelands, roadsides, and fencerows, use 1 gallon 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 6 quarts per acre per application. Do not graze dairy animals on treated areas within 7 days after application.

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 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, apply when soil moisture is adequate for good growth.

NOTE: Do not use on bestgrass unless grass injury can be tolerated. Do not graze dairy animals nor cut forage for hay within 7 days after application.

BROADLEAF WEED CONTROL IN NON-CROPLAND GRASS AREAS SUCH AS LAWNS, GOLF COURSES, CEMETERIES AND PARKS, AIRFIELDS, ROADSIDES, VACANT LOTS DRAINAGE DITCH BANKS: Use 1 to 3 quarts per acre in the amount of water needed for uniform application. Treat when weeds are young and growing well. Usually 2 quarts per acre will provide adequate weed control. Do not use on dichondra or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treating nor 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. Deep-rooted perennial weeds such as bindweed and Canada thistle may require repeated applications.

SPOT TREATMENT IN NON-CROP A
small areas with a hand sprayer, u
to thoroughly wet all foliage.

FORESTRY-TREE INJECTION: Make ... possible using one injection per ... resistant species such as hickory ... results, injections should be made d... October 1st.
For Dioxide Injection: Mix 1 gallon in 1 ... injection. Use 1 to 2 ml. of concentra... penetrate the inner bark.

PINE RELEASE. To control hardwoo... Pecan, Elm, Sumac, and Hawth... herbicide undiluted in a concentrate ... ml. per injection. Space injections ... around the tree and close to the base ... inner bark. On hard-to-kill species ... Maple, Blue Beech, and Ash, make ... edge. Treatment may be made at a...

FOREST CONIFER RELEASE: Use 1 ... water. After northern conifers such a... and white spruce harden off in late su... air to control competing hardwood s... etc. This treatment may cause occ... State Extension Forester for recomm...

WEEDS AND BRUSH ON iRR... (SEVENTEEN WESTERN STATES): A... Kansas, Montana, Nebraska, New... Oklahoma, Oregon, South Dakota... Wyoming.

For control of annual and perennial b... per acre in approximately 20 to 100 ... are young and actively growing befor... harder-to-control weeds a repeat spra... rates may be needed for maximum... treatments per season.

For woody brush and patches of pe... gallon in 150 gallons of water. Wet ... gallon of solution per square rod.

SPRAYING INSTRUCTIONS-- Apply ... power spray equipment mounted on a... traveling upstream to avoid acciden... water. Spray when the air is fairly calm... canals (less than 10 cfs) where water...

Boom spraying onto water surface n... cross-stream spraying to opposite b... spraying shoreline weeds, allow no ... water with an average of less tha... introduction of greater than negligible...

Do not allow dairy animals to graze in t... spraying. Water within treated banks...

WATERHYACINTH CONTROL: In ... marshes)
Aerial application--Use 4¾ pints in 5... surface acre.
Boat Application--Use 4¾ pints in 50... Uniform coverage is essential. Avoid...

Consult your State Game and Fish De... prior to application of this product to...

Treatment of aquatic weeds can result ... of dead weeds. This loss can caus... minimize this hazard, treat ⅓ to ½ of ... and wait at least 10 to 14 days between ... the shore and proceed outwards in ... untreated areas.

en corn ... wing rates ... ...
... conditions. In such situations use the
... plication, delay cultivation for 8 to 10
... me any temporary brittleness. NOTE
... Some are easily injured. Spray only
... D. Consult the seed company or your
... Extension Service Weed Specialist for

(MILO). See Table for recommended
... rghum is 6 inches high and preferably
... at during the boot, tasseling or early
... keeping the boom and spray nozzles
... in 8 inches, use drop nozzles to keep
... crop injury can be expected under
... and high air temperatures. If it is
... itions, use no more than 2/5 pint per

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... 2 4 D. Consult the seed company or
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... See Table for recommended use
... post-emergence spray in accordance
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...CIDE TO USE IN CROPS
...und Application

...ditions favor drift from treated areas.
...autions before using

DOSAGE PER ACRE	
...al Rates ...ally safe to ...ns)	Higher rates for special situations 2 (more likely to injure crop)
...o 1⅓ pints ... 1 pint	2 to 3 pints 1½ to 2 pints
2 pints	2 to 3 pints
... pints ...t ... 1 pint	1½ pints
... 2 pints	1½ to 2½ pints
... 1 pint ...t	1½ to 2 pints
2½ pints	2 to 3 ...nts
4 pints	

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.

2. 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.

3. Apply after the hard dough or denting stage by air or ground equipment to suppress perennial weeds, decrease weed seed production, and control fall weeds such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower, velvet leaf and vines that interfere with harvesting. Do not forage or feed corn fodder for 7 days following application.

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 2,4-D 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 4" of corn stalk.

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 ON FALLOW LAND: Use 1 to 2 quarts per acre on annual broadleaf weeds and up to 3 quarts per acre on established perennial species, such as Canada thistle and field bindweed. Apply to weeds actively growing. Do not plant any crop for 3 months after treatment or until chemical has disappeared from soil.

WEED CONTROL IN ESTABLISHED GRASS PASTURES AND RANGELANDS: Use at 2 to 4 pints per acre. Apply preferably when weeds are small and growing actively before the bud stage. Do not use on bentgrass, alfalfa, clover, or other legumes. Do not use on newly seeded areas until grass is well established. Do not use from early boot to milk stage where grass seed production is desired. Do not graze dairy animals on treated areas within 7 days after application.

CONTROL OF SOUTHERN WILD ROSE: On rangelands, roadsides, and fencerows, use 1 gallon 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 6 quarts per acre per application. Do not graze dairy animals on treated areas within 7 days after application.

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 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, apply when soil moisture is adequate for good growth.

NOTE: Do not use on bestgrass unless grass injury can be tolerated. Do not graze dairy animals nor cut forage for hay within 7 days after application.

BROADLEAF WEED CONTROL IN NON-CROPLAND GRASS AREAS SUCH AS LAWNS, GOLF COURSES, CEMETERIES AND PARKS, AIRFIELDS, ROADSIDES, VACANT LOTS DRAINAGE DITCH BANKS: Use 1 to 3 quarts per acre in the amount of water needed for uniform application. Treat when weeds are young and growing well. Usually 2 quarts per acre will provide adequate weed control. Do not use on dichondra or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treating nor on freshly seeded turf until grass is well extablished. 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. Deep-rooted perennial weeds such as bindweed and Canada thistle may require repeated applications.

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

FORESTRY-TREE INJECTION: Make injections as near the root collar as possible using one injection per inch of trunk's 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 October 1st.
For dilute injection: Mix 1 gallon in 19 gallons of water. For concentrate injection: Use 1 to 2 ml of concentrate per injection. The injection bit must penetrate the inner bark.

PINE RELEASE: To control hardwoods, such as Oak, Hickory, Maple, Pecan, Elm, Sumac, and Hawthorn in Southern pine stands, use herbicide 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. On hard-to-kill species such as Hickory, Dogwood, Red Maple, Blue Beech, and Ash, make injections 1" to 1½" apart, edge to edge. Treatment may be made at any time of year.

FOREST CONIFER RELEASE: Use 1½ to 3 quarts to 8 to 25 gallons of water. After northern conifers such as jack pine, red pine, black spruce, and white spruce harden off in late summer, the spray may be applied by air to control competing hardwood species such as alder, birch, aspen, etc. This treatment may cause occasional conifer injury. Consult your State Extension Forester for recommendations to fit local conditions.

WEEDS AND BRUSH ON IRRIGATION CANAL DITCHBANKS (SEVENTEEN WESTERN STATES): Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Neveda, 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 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 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 purp... .

Boom spraying onto water surface must be held to a min...um 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 over-spray to prevent introduction of greater than negligible amounts of chemical into the water.

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

WATERHYACINTH CONTROL: In still water (lakes, ponds, and marshes)
Aerial application: Use 4¾ pints in 5 to 15 gallons of water to cover one surface acre.
Boat Application--Use 4¾ pints in 50 to 100 gallons of water per acre. Uniform coverage is essential. Avoid submerging plants after treatment.

Consult your State Game and Fish Department or Weed control Agency prior to application of this product for aquatic weed control.

Treatment of aquatic weeds can result in oxygen loss from decomposition of dead weeds. This loss can cause fish suffocation. Therefore, to minimize this hazard, treat ⅓ to ½ of the water area in a single operation and wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas.

SUPPLEMENTAL LABEL
FOR USE BY TVA IN TVA SYSTEM

2,4-D AMINE #4

EPA Reg. No. 36486-53

MACCO

MID AMERICA CHEMICAL CO., INC.
402 South Fifth Street
Leavenworth, Kansas 66048

WARNING Keep out of reach of children

DIRECTIONS FOR USE:

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING

WATER MILFOIL (For Eurasian Water Milfoil in programs conducted by the TVA in dams and reservoirs of the TVASystem):

Fish Toxicity - Oxygen Ratio -- Fish breathe oxygen in the water and a water oxygen ratio must be maintained. Decaying weeds use up oxygen. To avoid fish kill from decaying plant material, do not treat more than one half the lake or pond at one time. For large bodies of weed infested waters, leave buffer strips of at least 100 feet wide and delay treatment of these strips for 4-5 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 for Use: 2,4-D Amine #4 will control water milfoil with surface, subsurface, and air applications.

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 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 from target area. Do not contaminate water by cleaning of equipment of disposal of wastes.

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 20 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 such as to Drift Control to the spray solution. Apply 2.5 to 10 gallons per acre through standard [illegible] systems with a minimum of 5 gallons of spray mix per acre. For [illegible] systems apply in 12 to 15 gallons spray mix per acre.

[illegible] AND PRECAUTIONS FOR THE [illegible] ARE TO BE OBSERVED.

[illegible] THE USER AT THE TIME OF PURCHASE