

1386-43

10/08/58

With letter

SEP 8 1956

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UNICO

Farm Chemicals

2,4-D AMINE WEED KILLER

INGREDIENTS

ACTIVE INGREDIENTS:

Dimethylamine salt of 2,4-dichlorophenoxyacetic acid\*... 49%

INERT INGREDIENTS..... 51%

Total..... 100%

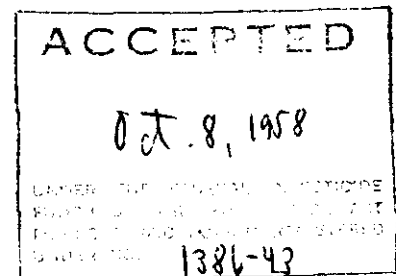
\*Equivalent to 40.7% 2,4-dichlorophenoxyacetic acid

CONTAINS 4 POUNDS 2,4-D ACID EQUIVALENT PER GALLON

CAUTION

AVOID CONTACT WITH EYES, SKIN, OR CLOTHING. DO NOT STORE NEAR  
FERTILIZERS, SEEDS, INSECTICIDES, OR FUNGICIDES.

Manufactured By  
United Co-Operatives, Inc.  
Alliance, Ohio



Net Volume

1 U. S. Gallon

UNICO 2,4-D AMINE WEED KILLER

DIRECTIONS FOR USE

UNICO 2,4-D Amine Weed Killer should be used as a diluted spray for selective control of susceptible weeds growing in small grain crops, corn, sorghum, established grasses, lawns and turf, and for non-selective control of certain weeds not in growing crops, such as roadsides, fence rows, and ditchbanks.

Apply UNICO 2,4-D Amine Weed Killer when the weeds are young and are in a succulent, rapidly growing condition, since best results are obtained when soil moisture and temperature conditions are favorable for rapid growth of weed plants. Sprays applied when weeds have stopped growing rapidly, or when they are affected by a lack of moisture in the soil, are often not effective against many kinds of weeds. Spray perennial weeds after they are completely emerged, but before the bloom stage. Kill of weeds may not be evident for 2 to 3 weeks after spraying. Retreatment of areas infested with perennial weeds may be necessary.

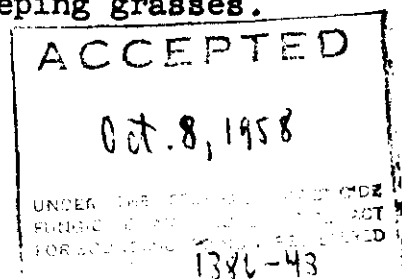
SMALL GRAIN CROPS (Wheat, Oats, Barley, Rye) -- Use 1 pint per acre to control susceptible broadleafed weeds, such as mustard, ragweed, lambsquarter, cocklebur, plantain, morning glory (annual), daisy fleabane, pigweed, wild radish, buckhorn, bull thistle, burdock, dandelion, stinging nettle, and sunflowers. Apply in the spring after grain plants are well tillered (usually 4 to 8 inches tall), but before the boot stage. Do not apply during seedling stage, late jointing stage, or after heading begins. Do not use on grain interplanted with legumes, unless probable injury to the legume crop can be tolerated.

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CORN -- For post-emergence treatment, use 1 pint per acre to control susceptible broadleafed weeds, such as ragweed, lambsquarter, morning glory (annual), cocklebur, and pigweed, listed under small grain crops. Apply when weeds are up, but still small, and corn is 4 to 18 inches tall. Corn at 4 to 5-inch stage is more resistant to injury and the broadleafed weeds are more susceptible to control than at earlier or later stages. Avoid direct spraying of growing point of corn. In corn 10 inches or more tall, use drop nozzles to keep spray off corn leaves. Avoid spraying immediately after a period of hot, moist weather. Injury to corn may occur when hot, dry weather closely follows treatment. Avoid cultivation for 10 to 14 days after spraying to reduce possibility of stalk breakage. Hybrid corn should be sprayed only if the cross or line is known to be tolerant to 2,4-D at the recommended dosage, or after experience has shown the particular crosses or lines being grown to be tolerant to 2,4-D treatment.

SORGHUM -- Use same rate of application as directed for post-emergence treatment of corn, and apply when sorghum is in the 4 to 12-inch stage of growth to control the susceptible broadleafed weeds. Precautions regarding application in corn also apply to sorghum.

ESTABLISHED GRASSES, PASTURES, GOLF FAIRWAYS, AND PARKS -- Use 1 to 1 1/2 pints per acre applied as a spray after grasses are well tillered, but before reaching the boot stage, to control most susceptible broadleafed weeds. Do not apply in the seedling or heading stages. Do not apply to bent and creeping grasses.



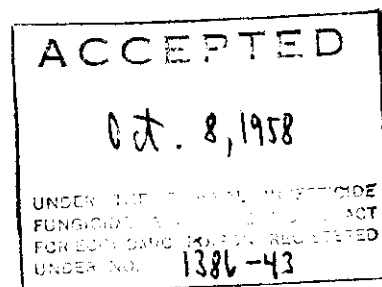
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To control wild garlic and wild onion, two applications each year for 2 or more years are usually required. One application should be made during the fall period, October to December, and the other during the period, February to May.

This treatment is likely to cause injury to legumes interplanted with grass.

ROADSIDES, FENCE ROWS, AND DITCHBANKS -- To control susceptible broadleafed weeds on unplanted areas, use 1 1/2 to 2 pints per acre to control susceptible broadleafed weeds, and apply during early stage of growth. Repeat as necessary to maintain control. Application by hand or knapsack sprayer may be made by using 1 to 2 teaspoonfuls per gallon of water; apply spray at rate of 1 gallon per square rod.

RESISTANT WEEDS -- To control certain broadleafed weeds, such as jimsonweed, prickly lettuce, mallow, purslane, shepherd's purse, smartweed, henbit, buttercup, wild carrot, docks, pokeweed, common mullein, and sheep sorrel usually requires a considerably higher dosage rate than is recommended for growing crops. These resistant weeds usually may be controlled in localized areas or spots by applying 4 to 6 pints per acre ( 1 to 1 1/4 tablespoonful per gallon per square rod) when the plants are young and growing vigorously. THIS HIGH DOSAGE RATE CANNOT BE USED IN SMALL GRAIN CROPS, CORN, SORGHUM AND GRASS, WITHOUT CAUSING SEVERE INJURY, AND CONSEQUENTLY ITS USE MUST BE EXCLUSIVELY FOR SPOT TREATMENT WHERE SUCH INJURY CAN BE TOLERATED. Repeated treatments, if new weed growth occurs, may be necessary to maintain control.



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PREPARATION OF SPRAY AND APPLICATION -- Above quantities of UNICO 2,4-D Amine Weed Killer should be added to water in the spray tank at time of application. Agitate or stir to assure a good mixture, and continue some agitation during application. The quantity of spray solution to make up will depend upon the equipment to be used. When using a low volume sprayer, the proper dosage should be applied in at least 15 gallons of water per acre, although as little as 5 to 10 gallons per acre have been used successfully in certain instances. When using a high pressure sprayer, apply in 150 to 200 gallons of water per acre. Always use the proper amount of this 2,4-D weed killer per unit area regardless of the quantity of water.

SMALL QUANTITIES -- For mixing and applying small quantities, use the following equivalents:

<u>Dosage per</u> <u>Acre</u>	<u>Amount per</u> <u>1,000 Sq. Ft.</u>	<u>Dosage per</u> <u>Acre</u>	<u>Amount per</u> <u>1,000 Sq. Ft.</u>
1 1/2 Pint	1 1/8 Teaspoonful	2 1/2 Pint	3 Teaspoonful
1 "	2 1/4 "	4 "	3 Tablespoonful
2 "	4 1/2 "	6 "	4 "

The dosage rates applied with low-volume power sprayers in 15 gallons of water per acre may usually be applied by means of hand or knapsack sprayers in 3 to 4 gallons of water per 1,000 square feet.

#### CAUTION

Considerable caution must be exercised in using 2,4-D sprays to avoid injury to crops and desirable plants. Do not apply directly to vegetables, flowers, grapes, fruit trees, ornamentals, cotton, or other desirable plants which are sensitive to 2,4-D, and do not permit spray mist to drift onto them since even minute quantities may cause severe injury. Coarse sprays are less likely to drift.

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Do not use on creeping grasses, such as bent. Most legumes, including white clover, are usually damaged, and, under some conditions, killed.

Do not contaminate domestic or irrigating water supplies.

Excessive amounts of 2,4-dichlorophenoxyacetic acid in the soil may temporarily inhibit seed germination or plant growth.

CLEANING SPRAY EQUIPMENT -- It is almost impossible to remove residues of 2,4-D from sprayers and spray equipment, particularly from non-metallic parts (wood, rubber, fibre), and it is advisable NOT to use the same equipment for applying other materials to plants or crops. However, if metal equipment only which was used for applying 2,4-D must be used also for other purposes, it first should be cleaned, as follows:

1. Immediately after use, flush equipment thoroughly with water.
2. Fill tank with water, add and mix thoroughly, either  
(a) 1 quart household ammonia per 25 gallons of water  
(2 1/2 tablespoonfuls per gallon), or (b) 2 pounds soda ash per 100 gallons of water (2 teaspoonfuls per gallon).
3. Spray out small amount of solution and leave remainder in tank, pump, boom, hose, and attachments for 18 to 24 hours.
4. Then, drain and rinse several times with water, spraying considerable quantities through nozzles each time.

This cleaning procedure is generally adequate for 2,4-D tolerant crops, such as corn, grasses, and small grains, but often does not render the equipment safe for 2,4-D sensitive plants or crops, such as alfalfa, beans, and tomatoes, and use of such cleaned equipment on 2,4-D sensitive plants is entirely at users own risk.

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# NOTICE

Seller makes no warranty of any kind, expressed or implied, concerning the use of this product by the buyer or others. Seller shall not be liable for any claims arising out of the use of such materials, whether used singly or in combination with other substances. Buyer assumes all risk from use or handling of this product. Use only for the purposes and in the manner stated in this label.

U. S. Pat.    2,390,941    2,396,513    2,472,347    2,394,916  
                 2,412,510    2,453,983    U. S. Re. 23,116

