# ALAPON GRASS KILLER

**ACTIVE INGREDIENTS:** 

Sodium salt of dalapon
(2,2-Dichloropropionic Acid) 85%
[DALAPON (2,2-Dichloropropionic Acid) equivalent 74%]

INERT\_INGREDIENTS: 15%

100%

# -259

EPA Reg. No. 3125-259

iplications 10 to 20 days ring grass. Tillage two s suggested if the land is or the next spring crop nd sorghum.

a preemergence or postcontrol such grasses as dexander. Use proporer acre in a band or drill ys, designed to wet the cane as little as possible, use information, consult periment station.

MENTS: Dissolve the vater for good spray

rol Quackgrass: Use 15 cre on land to be planted beets, beans, corn and ring. Application can be or October and possibly be quackgrass should be 1. Treated areas can be lays, or plowing can be a some established sods otained if the sod is first s regrowth sprayed.

ntrol Quackgrass: Early ids of DALAPON peracre and to be planted to crops corn and potatoes, about hen grass is 4 to 6 inches a spraying, wait at least 4 and another 4 to 5 weeks eptible to DALAPON. If per waiting period will be niury

nsongrass: Use on land to beans, corn or sorghum.
ALAPON per acre as a when johnsongrass is 8 to well. After spraying wait

are very small and growing actively. Apply with leaf-lifting equipment. This will minimize spray contact on the beet leaves.

NOTE: The spray may be applied broadcast or in bands. For band treatments the amount of DALAPON needed per acre will be reduced in proportion to the reduction in amount of area actually sprayed. Use no more than 8 pounds DALAPON post-emergence per acre in any single growing season. Beet 'ops (or roots) may be fed to livestock.

# DECIDUOUS FRUIT ORCHARDS AND GRAPE PLANTINGS

GENERAL RECOMMENDATIONS: To control perennial grasses such as quackgrass, johnsongrass and bermudagrass use rates of DALAPON grass killer as recommended for each crop listed below plus 2 to 4 pints of a non-ionic wetting agent in 75 to 100 gallons of water per acre. Apply as a directed spray to the orchard floor after grasses have begun to grow well in the spring but before seed heads form. In all cases spray to just wet grass without runoff. Do not disturb by mowing or cultivating early spring grass growth before spraying. Apply when soil moisture is high such as soon after rainfall or irrigation. Re treat as needed, but apply no more than twice in any growing season. Do not disc or disturb treated grass sooner than 4 weeks after spraying. Discing after this interval may improve control.

APRICOTS, PEACHES, PLUMS (PRUNES): Bearing and nonbearing in western areas. Use at rate of 6 to 7 pounds of DALAPON per acre on broadcast basis. Apply as a directed spray to a 4 to 8 foot wide band on each side of tree row or apply as a spot treatment only to areas where grasses are a problem. For band or spot treatment the amount of spray should be reduced proportionate to the area actually sprayed. Spray to just wet without runoff Apply when grasses have begun growing well in the spring but before heading. Re-treat as needed, but use no more than twice in any one growing season. Keep spray off crop foliage and fruit and do not apply within 30 days of harvest. Do not graze livestock on treated areas.

PEACHES: Bearing and non-bearing in other than western areas. For apot treating use 1 pound of DALAPON per 20 gallons of water and spray grass

This is equivalent to an over-all rate of 2 pounds of DALAPON plus 1/2 pound of 2, 4-D per acre for band application. The amount used should be propor. tionate to area actually sprayed. Keep spray off corn leaves by using a leaf-lifter equipped with 95 degree even coverage flat fan nozzle tips, and directing the spray. Spray only the lower half of the corn stalks below the lifted leaves but in no case higher than 7 inches above the ground. Apply carefully with emphasis on sprayer calibration, spray pattern width, height of spray on corn and rate of DALAPON. Best results are obtained by spraying when grass and weeds are small and not as tall as the corn. Use of a rotary hoe soon after corn emergence will delay grass and weed growth so that the corn will be taller than the weeds and grass when spray is applied. Quick kill should not be expected,

but treated grass and weeds will be stunted or die

back and remain in a non-competitive condition. This

also discourages reinvasion of new seedlings.

CAUTION: Do not use on corn grown for seed.

CAUTION

KEEP OUT OF REACH OF CHILDREN

Read Complete Precautions On Side Panel

FIELD CORN: Early Postemergence: To control seedlings of annual grasses such as green, yellow, and giant foxtail and of annual broadleaf weeds such as lambsquarters, pigweed, and wild mustard use 12 pound of DALAPON plus 1 to 2 pounds of Atrazine 80 percent wettable powder plus 1 to 112 gallons of emulsifiable crop oil per acre as a tank mix combination with water to make 10 to 20 gallons total spray. Apply as an overall spray when weeds and grass are less than 11/2 inches tall and corn is in the spike to 4-leaf stage. Consult your State agricultural experiment station or extension service weed specialist for local use directions. Prepare the spray by dissolving DALAPON in the required amount of water contained in a spray tank. Using a convenient container, make a thin slurry of Atrazine 80 percent wettable powder in water, thoroughly wetting the Atrazine, and add to the solution of DALAPON. Add the oil last. Provide continuous agitation in the spray tank during mixing, holding, and spraying operations to keep the spray uniformly mixed.

ASPARAGUS: To control quackgrass, apply 10 pounds of DALAPON per acre before cutting and 3 to 4 weeks later as needed. With a single treatment, use 20 pounds of DALAPON either before or after the cutting season. For bermudagrass control, apply 20 pounds of DALAPON per acre either before or after the cutting season, and a second spray of 10 pounds as needed. NOTE: During the cutting

CRANBERRIES: Ditch and Shore Treatment: Use 20 pounds of DALAPON in 200 to 300 gallons of water per acre to control cattails, cutgrass, poverty grass, bur reed and common rushes and sedges in irrigation and drainage ditches and along shore areas of cranberry bogs. Make the first application usually in early June, when weeds are growing well but before seed heads form. Make second application as needed but not later than July 31. Apply the spray to throughly wet the weedy vegetation. Keep spray off cranberry foliage.

Vine Treatment: Use ten pounds of DALAPON in about 300 gallons of water per acre on cranberry bogs to control summergrass, cutgrass, povertygrass, wamsy, warty panicgrass, bunchgrass, wide leaf grasses, round rush and sedge weeds. Treatment should be made only after harvest in October and early November. Caution: This treatment may reduce the next season's crop. For example, on the Howes variety the crop may be reduced only slightly whereas on Early Blacks it may be reduced up to 75 percent and on certain varieties as much as 90 percent. Follow recommendations of Agricultural Experiment Stations.

Swab Treatment: Apply DALAPON (to the grass and not to the cranberry foliage) at the rate of 2 pounds in 5 gallons of water (up to 5 gallons mixture per acre) as a swab treatment as soon as the grassy weeds appear above the vines. Two applications at two-week intervals are suggested. Swab applications will suppress growth of grassy weeds, and may result in crop reduction in the year following application if the concentrated solution is applied carelessly or drips onto the cranberry vines. Do not apply within 60 days of harvest. Do not use more than two applications per season. Follow recommendations of Agricultural Experiment Stations.

citals: Use DALAPON to control grasses including bermudagrass, johnsongrass, pangolagrass, guineagrass, paragrass and maidencane in orange, grape fruit, tangerine, and lime groves. Apply 2 to 4 pounds of DALAPON per acre in 50 to 100 gallons of water as a broadcast directed spray to the grove floor or apply at the same rate per acre as a spot treatment using 1 pound of DALAPON in 20 gallons of water and spray to wet the grass without runoff. Make initial application when grasses are growing well but before seed heads form. In Florida and Texas, make up to 3 applications per season, if needed, at 2 to 10 day

CAUTION: During harvest periods, spray only immediately after gleaning nuts from the graound. Do not spray directly on fallen nuts.

BANANA PLANTINGS: To control perennial grasses such as guinea (Panicum maximum), amargo (Axonopus sp.) and gamalote (Paspalum sp.), use 10 to 15 pounds of DALAPON per acre in enough water to obtain good coverage. Often rates of 6 to 8 pounds per acre applied in the same manner give very satisfactory results. A first treatment should be made when grass is growing well, but before heading. Repeat treatments, usually spot applications, should be made where needed in about a month to six weeks and later on as required. Use no more than a total of 30 pounds of DALAPON per acre per year. Keep spray off banana fruits, foliage or young plants. Use sufficient spray to wet grass foliage thoroughly, but avoid run-off.

### WARNING

DALAPON IN THE SOIL MAY INHIBIT SEED GERMINATION AND PLANT GROWTH FOR 30 DAYS OR MORE, DEPENDING ON DOSAGE APPLIED, SOIL TYPE, TEMPERATURE, AND AMOUNT OF SOIL MOISTURE AND RAINFALL. ACCORDINGLY, ON LAND TO BE PLANTED TO SENSITIVE CROPS SUCH AS GRASS, SMALL GRAINS, CORN OR BEANS, DELAY PLANTING FOR AT LEAST 30 DAYS AFTER PLOWING AREAS SPRAYED WITH DALAPON, DECOM POSITION OF DALAPON PROCEEDS MOST RAPIDLY IN WARM, MOIST SOIL. IF SOIL REMAINS COOL OR DRY, DECOMPOSITION MAY BE SLOWER, AND MORE TIME WILL BE REQUIRED AFTER PLOWING BEFORE CER. TAIN CROPS CAN BE PLANTED SAFELY TO AVOID THE POSSIBILITY OF RESIDUES IN MEAT OR MILK, DO NOT GRAZE MEAT OR DAIRY ANIMALS ON VEGETATION TREATED WITH DALAPON.

To avoid injury to desirable plants, do not allow spray or spray drift containing DALAPON to contact foliage or roots of such plants, including lawns and other desirable turf. Flush spraying equipment with plenty of water immediately after use to avoid contamination of later sprays or possible corrosion.

When using DALAPON in a combination spray with other herbicides be sure to read the directions and

entrol Quackgrass: Early inds of DALAPON peracre land to be planted to crops is, corn and potatoes, about when grass is 4 to 6 inches er spraying, wait at least 4, and another 4 to 5 weeks iceptible to DALAPON, if ger waiting period will be injury.

hasongrass: Use on land to *r*beans, corn or sorghum. DALAPON per acre as a when johnsongrass is 8 to well. After spraying wait sk. One or more additional are suggested. Cotton can delay.For corn or soybeans, plowing before planting. it 21/2 weeks after plowing lanting. If soil remains rdown or deep disking a y be needed before planihum to avoid crop injury. ay planting these crops at ng a minimum of 0.5 inch

nt for perennial grasses id bermudagrass: Use 1 allons of water and spray Spray after the grass has nd is growing vigorously. ntrol escaped plants. An ly take up to three apn. Cotton plants wet with l, but adjacent plants are Control new seedlings by cotton to control annual **ed areas:** Use 5 pounds of of water per acre. Cover irected spray which wets cotton. Spray after last up but still small.

anytime from emergence
To control wild oats and bunds DAL APON per acre
th ground equipment in grass coverage. Some sible yield reduction may ons from these rates. To her than wild oats, apply 2 per acre overall by air or he 4 pound rate if grasses stage or are not growing hs. For aerial application, ons of spray mixture per ation, use enough water to ge.

stage until beets are about annual grasses apply as a of 3 to 5 pounds DALAPON asis, in enough water for the lower rate if grasses control.

APRICOTS, PEACHES, PLUMS (PRUNES): Bearing and nonbearing in western areas. Use at rate of 6 to 7 pounds of DALAPON per acre on broadcast basis. Apply as a directed spray to a 4 to 8 foot wide band on each side of tree row or apply as a spot treatment only to areas where grasses are a problem. For band or spot treatment the amount of spray should be reduced proportionate to the area actually sprayed. Spray to just wet without runoft Apply when grasses have begun growing well in the spring but before heading. Re-treat as needed, but use no more than twice in any one growing season. Keep spray off crop foliage and fruit and do not apply within 30 days of harvest. Do not graze livestock on treated areas.

PEACHES: Bearing and non-bearing in other than western areas. For spot treating use 1 pound of DALAPON per 20 gallons of water and spray grass to wet, without run-off. As directed spray use no more than 3½ pounds of DALAPON per acre per application on a broadcast basis. Keep spray off foilage and fruit and do not apply within 30 days of harvest. Apply no more than twice in any growing season. Do not graze livestock on treated areas.

APPLES AND PEARS: In orchards less than 4 years old use DALAPON as directed broadcast spray at rate of 5 poulids per treated acre; or apply as a directed spray to a 4 to 8 foot wide band on each side of tree row; or as a spot treatment only to areas where grasses are a problem. With band or spot treatment the amount of spray should be reduced in proportion to the area actually treated. In orchards at least 4 years old use 10 pounds DALAPON per treated acre as directed broadcast spray; or apply in a band as a directed spray from each side of the tree row, or as a spot treatment only to areas where grasses are a problem. With band or spot treatment the amount of spray should be reduced in proportion to the area actually treated. Apply when grasses have begun growing well in the spring, but before heading. Spray to just wet grass without runoff. Re treat as needed but use no more than twice in any one growing season. Keep spray off crop foliage and fruit, and do not apply within 30 days of harvest. Do not graze livestock on treated areas.

GRAPES:Bearing, in California and Arizona. Use DALAPON at the rare of 10 pounds per treated acre on a broadcast basis. Apply as a directed spray to a band 30 inches wide centered on vine row. Keep spray off grape foliage and fruit. Do not apply more than twice in any growing season. Do not appl, within 30 days of harvest. Keep spray out of irrigation furrows. Do not graze livestock on treated areas

corn-directed spray: For control of seedlings of green, yellow and giant foxtail and broadleafed weeds such as pigweeds, lambsquarters and wild mustard apply two thirds pound DALAPON plus recommended amount of 2,4-D weed killer referred to in General Instruction per acre of corn to a 14-inch band in 40 to 42 inch corn rows when corn is 8 o 20 inches tall ground to whorl.

grass are less than 1½ inches tall and corn is in the spike to 4-leaf stage. Consult your State agricultural experiment station or extension service weed specialist for local use directions. Prepare the spray by dissolving DALAPON in the required amount of water contained in a spray tank. Using a convenient container, make a thin slurry of Atrazine 80 percent wettable powder in water, thoroughly wetting the Atrazine, and add to the solution of DALAPON. Add the oil last. Provide continuous agitation in the spray tank during mixing, holding, and spraying operations to keep the spray uniformly mixed.

ASPARAGUS: To control quackgrass, apply 10 pounds of DALAPON per acre before cutting and 3 to 4 weeks later as needed. With a single treatment, use 20 pounds of DALAPON either before or after the cutting season. For bermudagrass control, apply 20 pounds of DALAPON per acre either before or after the cutting season, and a second spray of 10 pounds as needed. NOTE: During the cutting season, spray immediately after cuttings. Later sprays should be directed under the fern growth. Use enough water to provide uniform wetting of the grass. Spot spray patches of grass with 1 pound of DALAPON in 10 gauons of water.

PEAS: To control seed ing grasses, use one pound of DALAPON per acre in enough water for good spray coverage. Apply at least 25 days prior to harvest when the grass seedlings are voung and the peas are 2 to 6 inches tall. DALAPON can be used in a combination spray with a dinitro pre-emergence weed killer to control both weeds and grasses. Fresh pea vines or pea silage may be fed to 1: 'estock if desired, but do not feed pea vine hay.

POTATOES: To control seedling grasses, use 3 pounds of DALAPON per acre in enough water to wet the grass evenly. Apply before emergence of the potatoes when grass plants are small. This application can be a combination spray with a dinitro pre emergence weed killer. Where quackgrass comes up after planting but before potatoes emerge, use up to 10 pounds of DALAPON per acre and wet the grass well. Do not apply DALAPON after potato plants emerge. Spring pre-planting treatment of quackgrass with 8 pounds of DALAPON per acre is effective. After 4 days land can be plowed and potatoes planted immediately if normal soil moisture is present. Late Season Grass Control: Use 5 pounds of DALAPON in 15 to 25 gallons of water per us "Take application after lay-by when grass seeds have germinated but before the grass seedlings are 3 inches tall. Use a vine lifter and direct the spray on the grass up to the base of the potato plants so that it will cover the tops of the rows and the middles but will get a minimum of spray on the potato foliage. Note: Do not use DALAPON on land planted or to be planted to red skinned varieties or White Rose.

FLAX: To control pigeongrass or green, yellow and giant foxtails in flax, use 1 pound of DALAPON per acre in 5 to 10 gallons of water when flax is 1 to 6 inches tall. For best results, use when the young grass seedlings are less than 2 inches tall and growing actively. Do not expect rapid grass kill. NOTE: To avoid injury to flax, follow application directions carefully and do not exceed stated dosage. MCP or 2,4-D can be used with DALAPON where broad-leaved weed control is desired.

two-week intervals are suggested. Swab applications will suppress growth of grassy weeds, and may result in crop reduction in the year following application if the concentrated solution is applied carelessly or drips onto the cranberry vines. Do not apply within 60 days of harvest. Do not use more than two applications per season. Follow recommendations of Agricultural Experiment Stations.

CITRUS: Use DALAPON to control grasses inbermudagrass, johnsongrass, pangolagrass, guineagrass, paragrass and maidencane in orange, grape fruit, tangerine, and lime groves. Apply 2 to 4 pounds of DALAPON per acre in 50 to 100 gallons of water as a broadcast directed spray to the grove floor or apply at the same rate per acre as a spot treatment using 1 pound of DALAPON in 20 gallons of water and spray to wet the grass without runoff. Make initial application when grasses are growing well but before seed heads form. In Florida and Texas, make up to 3 applications per season, if needed, at 2 to 10 day intervals. In California and Arizona, only spotspraying is recommended and to cover no more than one half the area over the root zone of individual trees, to minimize herbicide symptoms which occasionally occur on citrus foliage. Make up to 3 applications per season, if needed, at 4 to 8 week intervals. CAUTION: Use only the lower rates listed on very light soil. Do not use under newly transplanted citrus trees or trees less than 4 years old. Do not use in groves which are under drought stress, diseased, in decline or suffering from cold damage. Do not spray bare soil under citrus trees. Keep spray off citrus foliage and fruit. Do not graze livestock on treated areas.

Dissolve approximately 5 pounds of DALAPON per 100 gallons of water and apply at rates to give 5 to 10 pounds of DALAPON per acre actually treated. Spray to wet the foliage uniformly. Make two applications one to two weeks apart to control cattails and grasses such as phragmites, paragrass and guinegrass. DALAPON can be used with 2,4-D or silvex weed killers for over-all control of grasses, cattails, weeds and woody plants. See these product labels for detailed use directions. Do not graze livestock on treated area.

COFFEE: To control crabgrass, bermudagrass, kikuyugrass, para (California) grass and other grasses in established coffee plantations in Hawaii, dissolve one pound DALAPON in 10 gallons water. Apply as directed spray to just weithe grass without run off out not to exceed 100 gallons per acre. Keep the spray off the coffee foliage. Make initial application to grasses which are growing well and prior to seed head formation. Respray 4 to 6 weeks later or when regrowth warrants, but do not apply more than two sprays in any one crop year and do not apply within 8 months of harvest.

GRASS CONTROL IN MACADAMIA: To control crabgrass, bermudagrass, kikuyagrass, para (California) grass, dallisgrass in macadamia or chards in Hawaii, use DALAPON in concentrations of 1/8 to 1 1/5 pounds per 10 gallons of water. Spray to just wet the grass without run off, but not to exceed 100 gallons per acre. Make first application before harvest and respray at intervals as regrowth warrants. Do not exceed 24 pounds of DALAPON per acre per year.

FOR AT LEAST 30 DAYS AFTER PLOWING AREAS SPRAYED WITH DALAPON. DECOMPOSITION OF DALAPON PROCEEDS MOST RAPIDLY IN WARM, MOIST SOIL. IF SOIL REMAINS COOL OR DRY, DECOMPOSITION MAY BE SLOWER, AND MORE TIME WILL BE REQUIRED AFTER PLOWING BEFORE CERTAIN CROPS CAN BE PLANTED SAFELY TO AVOID THE POSSIBILITY OF RESIDUES IN MEAT OR MILK, DO NOT GRAZE MEAT OR DAIRY ANIMALS ON VEGETATION TREATED WITH DALAPON.

To avoid injury to desirable plants, do not allow spray or spray drift containing DALAPON to contact foliage or roots of such plants, including lawns and other desirable turf. Flush spraying equipment with plenty of water immediately after use to avoid contamination of later sprays or possible corrosion.

When using DALAPON in a combination spray with other herbicides be sure to read the directions and precautions on the herbicide container.

Local conditions affect use of herbicides. State agricultural experimental station or extension service weed specialists in may states issue recommendations to fit local conditions.

### CONTAINER DISPOSAL

Dunot reuse empty container. Destroy it by burying with wastes or burning. Stay away from smoke or fumes.

### WARRANTY AND LIMITATION OF DAMAGES

Chemagro warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use and Conditions of Sale; subject to the risks referred to therein. CHEMAGRO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, and no agent of Chemagro is authorized to do so except in writing with a specified reference to this warranty. Any damages arising from a breach of this warranty shall be limited to direct damages, and shall not include consequental commercial damages such as loss of profits or values, etc.

To Avoid Caking, Keep Inner Polyethylene Bag Tightly Closed.

### CAUTION

CAUSES EYE IRRITATION MAY CAUSE SKIN IRRITATION HARMFUL IF SWALLOWED. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. KEEP OUT OF REACH OF CHILDREN. In case of contact, flush was with plenty of water for at least 15 minutes and get medical attention. For skin, remove contaminated clothing and wash skin with plenty of water. Wash clothing before reuse. If poisoning occurs, get prompt medical attention.

## **CHEMAGRO**

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