

GORDON'S

LV 400 2,4-D WEED KILLER

A LOW VOLATILE ESTER
FOR AGRICULTURAL & SERVICE USE ONLY.

OCT 2 1982
EPA Reg. No. 2217-77

ACTIVE INGREDIENT:

*Isooctyl ester of 2,4-Dichlorophenoxyacetic acid.....65.5%
INERT INGREDIENTS.....34.5%
TOTAL 100.0%

This Product Contains:

*3.8 lbs. 2,4-Dichlorophenoxyacetic acid per gallon or 43.5%
isomer specific by AOAC Method No. 6.D01-5.

KEEP OUT OF REACH OF CHILDREN ← 14 pt. bold

CAUTION ← 18 pt. bold

Statement of Practical Treatment

If Swallowed: Do not induce vomiting. Call a physician
immediately. Do not induce vomiting or give anything by mouth
to an unconscious person.

If On Skin: Wash with soap and water. Get medical attention if
irritation persists.

If In Eyes: Flush with water 15 minutes and get medical attention.

See side panels for additional precautionary statements.

NET CONTENTS ONE U.S. GALLON

5958

BEST DOCUMENT AVAILABLE

2217-77



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

PRECAUTIONARY STATEMENTS

Hazards to Humans & 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 directly to water. 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. Do not contaminate water by cleaning of equipment or disposal of wastes.

Physical Or Chemical Hazards

Do not use, pour, spill or store near heat or open flame.

DIRECTIONS FOR USE

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

STORAGE & DISPOSAL ← 14 pt. bold

This product may be stored in an unheated building.

Prohibitions: Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Do not store near pesticides or seeds.

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, State or local procedures.

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

USE PRECAUTIONS:

Don't 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 because 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. Do not apply if rain is expected within the hour.

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Although this is a low volatile ester, all high temperatures (above 45°F) vapors may injure susceptible plants growing nearby.

GENERAL:

Apply LV 400 as a water or oil spray during warm weather when weeds or brush are actively growing. Application under drought conditions often will give poor results. Use low spray pressure to minimize drift. On cropland and along roadsides, do not exceed 20 psi pressure. Apply enough spray volume to provide uniform coverage of weeds and brush, usually 5 to 20 gallons per acre by ground equipment and 3 to 5 gallons by aircraft. Higher gallonage may be used if desired to improve spray coverage. Generally, the low dosages recommended on this label 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. For crop uses, do not mix with oil or other adjuvants unless specifically recommended on this label. Deep-rooted perennial weeds such as Canada thistle and field bindweed, and many woody plants usually require repeated applications for maximum control. Do not apply LV 400 where spray drift may contact nearby susceptible crops or other desirable plants, or may contaminate water used for irrigation or domestic purposes. Read and follow all precautions on this label. Local conditions may affect the use of herbicides. Consult your State Agricultural Experiment Station or Extension Service weed specialists for advice in selecting treatments from this label to best fit local conditions. Be sure that use of this product conforms to all applicable regulations. Apply this product only as specified on this label.

WEEDS:

ARROWHEAD
BINDWEED
BUCKBRUSH
BUCKHORN
BUCKWHEAT
CANADA THISTLE
COCKLEBUR
COFFEEWEED
CORNFLOWER
COYOTE BRUSH
CROTON
DANDELION
DOCKS
DOGFENNEL
ELDERBERRY
FANWEED
GALINSOGA
GOATSBEARD
HALOGETON
HORSE NETTLE
JEWELWEED
JIMSONWEED
KNOTWEED
KOCHIA
LAMBSQUARTER
LOCOWEED
MALLOW, VENICE

MANZANITA
MARSHLEDER
MILKWEED
MILKVETCH
MORNINGGLORY, ANNUAL
MUSTARDS
NETTLES
PENNYCRESS
PEPPERWEED, FIELD
PIGWEEED
PLANTAINS
POISON IVY
POORJOE
RABBITBRUSH
RAGWEED
RAPE, WILD
REDSTEM
SAGE, COASTAL
SAGEBRUSH, BIG
SAGEBRUSH, SAND
SALSIFY
Sand
Shinnery Oak
SHEEP SORREL
SHEPHERDSPURSE
SICKLEPOD
SMARTWEED

SNEEZEWEED, BITTER
SOWTHISTLE, ANNUAL
SPANISHNEEDLES
SUMAC
SUNFLOWER
SWEETCLOVER
TANSYMUSTARD
TANSYRAGWORT
THISTLE, BULL
THISTLE, MUSK
THISTLE, RUSSIAN
TUMBLEWEED
VELVETLEAF
VERVAINS
VETCH
WATER PLANTAIN
WILD CARROT
WILD GARLIC
WILD HEMP
WILD ONION
WILD RADISH
WILD SWEET POTATTO
WILLOW
WITCHWEED
WORMWOOD
YELLOW ROCKET
YELLOW STAR THISTLE

NOTES ABOUT WIND DRIFT:

Ground Equipment--Spray drift can be lessened by: Keep the spray boom as low as possible and by applying 20 gallons or more of spray per acre. Use no more than 20 pounds spraying pressure with flat fan or flooding flat fan nozzle tips. Spray when wind velocity is low. Do not spray with oil 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--Spray drift can be lessened by: Apply not less than 5 gallons of spray per acre. Use no more than 20 pounds spray pressure at the nozzles. Use nozzles which produce a coarse spray pattern. Spray only when wind velocity is less than 5 miles per hour.

Note--The use of thickening agents or anti-drift additives and drift-reducing equipment is of value in preventing spray drift. Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination or plant growth. To avoid injury to desirable plants, do not handle or apply other agricultural chemicals with the same equipment used for this product.

PREPARATION OF THE SPRAY:

With Water--Fill the spray tank about half full with water. Add the required amount of LV 400 with agitation. Then, add the rest of the water.

Note: LV 400 in water forms an emulsion which tends to separate unless the mixture is kept agitated.

With Water & Oil--Mix LV 400 and the oil first. Add this mixture to the water. However, with adequate agitation, the oil can be added after the LV 400 is mixed in the water.

With Oil--If straight oil is used, a solution is formed and separation does not occur. Do not allow any water to get into the herbicide-oil solution to avoid formation of an invert emulsion.

With Liquid Nitrogen Fertilizer--LV 400 may be combined with liquid nitrogen fertilizer suitable for foliar application to accomplish weeding and feeding of corn, small grains or grass pastures in one operation. Use LV 400 in accordance with recommendations for these crops as given on this label. Use liquid fertilizer at rates recommended by supplier or Extension Service Specialist. Fill spray tank about half full of liquid fertilizer. Add LV 400 with agitation and complete filling the tank with fertilizer. Apply immediately and continue agitation in the spray tank during application. Application during very cold weather (near freezing) is not advisable. Do not store the spray mixture.

minimum
spray volume
10 gal/acre

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SMALL GRAINS (not underseeded with a legume):

Note: Do not permit dairy 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.

✓ Spring Wheat & Barley--Apply $\frac{1}{2}$ to 1 pint per acre. Spray when grain is in full tiller stage (usually 4 to 8 inches tall) but before the boot stage, and when weeds are small. Do not apply before the tiller stage nor from early boot to the dough stage. Higher rates ($\frac{3}{4}$ to $1\frac{1}{2}$ pints per acre) may be required to control certain weeds but crop injury may occur.

✓ Winter Wheat & Rye--Apply $\frac{1}{2}$ to $\frac{3}{4}$ pint per acre in the spring at the full tiller stage but before the early boot stage.

✓ Spring Seeded Oats--Apply $\frac{1}{2}$ pint per acre at the full tiller stage but before the early boot stage. Oats are less tolerant to 2,4-D than wheat or barley and more likely to suffer some injury.

✓ Fall Seeded Oats (Southern) Grown for Grain--Apply $\frac{3}{4}$ to $1\frac{1}{2}$ pints per acre after full tillering but before the early boot stage. Some difficult weeds may require the higher rate for maximum control but crop injury may result. Do not apply during or immediately following cold weather.

✓ Preharvest Treatment--Apply 1 to 2 pints per acre when grains are in the hard dough stage to control large weeds that may interfere with harvest. Best results are obtained when soil moisture is sufficient to cause succulent weed growth.

✓ CORN: Hybrids vary in response to 2,4-D and some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Contact seed company or your Agricultural Experiment Station or Extension Service weed specialists for this information.

Use one of the following programs for weed control in corn:

✓ Preemergence--Apply 1 to 2 quarts per acre to soil anytime after planting but before corn emerges. Do not use on light sandy soil. Do not cultivate until necessary.

✓ Emergence--Apply 1 pint per acre just as corn plants are breaking ground.

✓ Postemergence--After emergence of corn, use $\frac{1}{2}$ pint per acre. Application of $\frac{3}{4}$ to 1 pint per acre may be needed for maximum control of some weeds but such rates are more likely to injure the corn. Do not apply from the tasseling to dough stage. Do not use with oil, Atrazine or other adjuvants. Crop injury is more likely to occur if corn is growing rapidly under high temperature and high soil moisture conditions. To reduce breakage of stalks from temporary brittleness caused by 2,4-D, delay cultivation for 8 to 10 days after treatment.

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✓ Early Spraying: When corn is 2 to 4 inches high, apply as soon as possible after most weeds have emerged. Use $\frac{1}{2}$ pint per acre. Corn drop nozzles are not necessary at this time.

✓ Lay-By Spraying: When corn is 2 to 3 feet high, use $\frac{1}{2}$ pint per acre. At this stage of corn growth, since stalks may become brittle from exposure to 2,4-D, there is always a chance that high winds may damage the crop 1 to 3 days after spraying. Use drop nozzles. Cultivation should be completed before applying this spray. o/c

*Too early for
staggered application?*

High-Clearance Spraying: Apply 1 pint per acre when weeds get started after lay-by. Adjust spray nozzles to hit highest weeds.

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✓ Pre-Harvest Treatment--After the hard dough or denting stage, apply 1 to 2 pints per acre by air or ground equipment to suppress perennial weeds, decrease weed seed production, and control tall weeds such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, smartweed, velvetleaf, and vines that interfere with harvesting. Do not forage or feed corn fodder for 7 days following application.

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✓ SORGHUM (Milo): Apply $\frac{1}{2}$ pint per acre when sorghum is 5 to 15 inches tall. A higher rate of $\frac{3}{4}$ to 1 pint per acre may be needed to control some weeds but the chance for crop injury is likewise increased. Do not use with oil. Do not treat before the sorghum is 5 inches tall nor during the boot, flowering, or early dough stages. If sorghum is taller than 8 inches, use drop nozzles to keep the spray off the foliage as much as possible. Temporary crop injury may occur under conditions of high soil moisture and high air temperatures. Varieties vary in tolerance to 2,4-D and some hybrids are quite sensitive. Spray only varieties known to be tolerant to 2,4-D. Some hybrids are quite sensitive. Contact seed company or your Agricultural Experiment Station or Extension Service weed specialists for information.

✓ GRASS SEED CROPS: Use 1 to $1\frac{1}{2}$ pints per acre in the amount of water required for uniform application by air or ground equipment. Apply to established stands in spring from the tiller to early boot stage. Do not spray in loot stage. New spring seedlings may be treated with the lower rate after the grasses have at least five leaves. Perennial weed regrowth may be treated in the fall.

✓ WEED AND BRUSH CONTROL IN RANGELANDS & GRASS PASTURES: Do not graze dairy animals on treated areas within 7 days after application. 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.

✓ Bitterweed, Broomweed, Croton, Docks, Kochia, Marshweed, Musk-thistle and Other Broadleaf Weeds--Use 2 quarts of LV 400 per acre in the amount of water needed for uniform application. If

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the weeds are young and growing actively, 1 quart per acre will provide control of some species. Deep-rooted perennial weeds may require repeated treatments in the same year or in subsequent years.

Wild Garlic and Wild Onion--Apply 2 to 3 quarts per acre making three applications (fall-spring-fall) or (spring-fall-spring), starting in late fall or early spring.

Weed Control in Newly Sprigged Coastal Bermudagrass--Apply 1 to 2 quarts per acre preemergence and/or postemergence.

Sand Shinnery Oak and Sand Sagebrush--On the oak, use 1 quart in 5 gallons of oil or in 4 gallons of water plus 1 gallon of oil per acre. Apply by aircraft between May 15 and June 15. On the Sagebrush, use 1 quart in 3 gallons of oil per acre and apply by aircraft when foliage is fully expanded and the brush is actively growing.

Big Sagebrush and Rabbitbrush--Use 2 to 3 quarts per acre in 2 to 3 gallons of oil or in 3 to 5 gallons of oil-water emulsion spray. For rabbitbrush, the 3 quart rate is usually required. Brush should be leafed out and growing actively when treated. Retreatment may be needed.

Chamise, Manzanita, Buckbrush, Coastal Sage, Coyotebrush and Certain Other Chaparral Species--Use 2 to 3 quarts per acre in 5 to 10 gallons of water. One gallon of fuel oil may be included in the spray mixture for added effectiveness. Make applications by aircraft or ground equipment to obtain uniform spray coverage. For effective control the brush must be fully leafed out and growing actively when sprayed. Retreatment may be needed.

WOODY PLANT CONTROL IN NON-CROP AREAS: To control species susceptible to 2,4-D in right-of-ways, fencerows, roadsides, and along drainage ditchbanks, spray brush up to 5 to 8 feet tall after spring foliage is well developed, using 3 to 4 quarts of LV 400 in 100 gallons of water and wetting all parts of the brush including foliage, stems and bark. This may require up to 400 gallons of spray per acre for adequate coverage of solid stand of brush. Make application in such a way as to prevent drift of the spray away from the area being treated. Spraying can be effective at any time up to 3 weeks before frost as long as soil moisture is sufficient for active growth of the brush. Control will be less effective in mid-summer during hot dry weather when soil moisture is deficient and plants are not actively growing. Oil or wetting agent may be added to the spray, if needed, for increased effectiveness.

1990-76 FOREST CONIFER RELEASE: After northern conifers, jack pine, red pine, black spruce, and white spruce cease growth and "harden off" in late summer, a spray of 1 1/2 to 3 quarts of LV 400 in 8 to 25 gallons of water per acre may be applied by air to control certain competing hardwood species such as alder, aspen, birch, hazel and willow. Since this treatment may cause occasional conifer injury, do not use if such injury cannot be tolerated. Consult your regional or extension forester or state herbicide specialist for recommendations to fit local conditions.

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WEED CONTROL IN NON-CROP AREAS SUCH AS LAWNS, GOLF COURSES, CEMETERIES, PARKS, AIRFIELDS, ROADSIDES, VACANT LOTS, DRAINAGE DITCH BANKS: Apply 1 to 3 quarts per acre in the amount of water needed for uniform application. Usually 2 quarts per acre provides good weed control under average conditions. Treat when weeds are young and growing well. Do not use on golf greens nor on dichondra or other broadleaf herbaceous ground covers. Do not use on creeping grasses such as bent and St. Augustine except for spot treating, nor on newly seeded turf until grass is well established.

Reseeding of treated areas 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 so do not treat areas where the legumes are desired. Deep-rooted perennial weeds may require repeated treatment in the same season or in subsequent years.

TULE (BULRUSH) AND OTHER RUSHES: Mix 2 quarts of LV 400 and 1 gallon of diesel oil or kerosene, then add this mixture to 100 gallons of water. Spray to wet all foliage (400-800 gallons per acre). Addition of a wetting agent may be advisable. Apply in the spring during flower head emergence. Respray if needed when regrowth is 3 to 5 feet tall.

SPOT TREATMENT: To control broadleaf weeds in small non-cropland areas with a hand sprayer, use $\frac{1}{2}$ pint of LV 400 in 3 gallons of water and spray to thoroughly wet all weed foliage. Keep spray mixture agitated to prevent separation.

WARRANTY:

The manufacturer warrants that the chemical composition conforms to the ingredient statement given on the label and that this product is suited for the labeled uses 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. Therefore, the manufacturer makes no other implied or express warranty nor is any agent of the manufacturer allowed to do so. Upon purchase of this product the buyer assumes all risks associated with use of this product. In the event of damage resulting from a breach of warranty the buyer agrees to accept a refund of the purchase price of the product as full discharge of the manufacturer's liability.