

Helping the World Grow Better®



ORTHO

PM 23
239-1663

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**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS
WARNING**

May be fatal if swallowed, inhaled or absorbed through skin. Causes substantial but temporary eye injury. Causes skin irritation. Contact with irritated skin, or a cut, or repeated contact with intact skin may result in poisoning. Do not get in eyes or on skin or clothing. Do not breathe spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse. Wear face shield or goggles; protective clothing; rubber gloves, rubber apron, and shoe coverings impermeable to diquat when handling concentrate. When spraying, wear waterproof footwear and clothing, except when using aquatic subsurface application methods. Do not feed forage from treated crops to livestock. Keep livestock and pets out of treated fields and crop areas.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: IMMEDIATELY give water or milk to drink and induce vomiting by inserting finger in throat. Take person and product container to the nearest hospital or physician fast. PROMPT TREATMENT IS ESSENTIAL TO COUNTERACT POISONING and should be initiated before signs and symptoms of injury appear. Note to Physicians: call the Chevron Poison Information Center (415) 233-3737 at any hour to obtain toxicology information and a diquat analysis. To be effective, treatment for diquat poisoning must begin IMMEDIATELY. Treatment consists of binding diquat in the gut with suspensions of activated charcoal or bentonite clay, administration of cathartics to enhance elimination, and removal of diquat from the blood by charcoal hemoperfusion or continuous hemodialysis. **SKIN CONTACT:** IMMEDIATELY wash with soap and water. Remove and wash all contaminated clothing with soap and hot water before reuse. See a doctor if diquat contacts a skin cut, abrasion or area of irritation.

EYE CONTACT: IMMEDIATELY wash eyes with water for at least 15 minutes and get medical attention.

INHALATION: IMMEDIATELY get away from spray mist. Stop and check spray procedure. See a doctor if irritation persists.

WORKER SAFETY RULES

Keep all unprotected persons and children away from treated area or where there may be drift. Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away (See Practical Treatment Section).

ENVIRONMENTAL HAZARDS (AQUATIC AND NON-AQUATIC USES)

This pesticide is toxic to wildlife. Do not apply directly to water except as specified on this label. For Non-Aquatic Use do not apply directly to water or wetlands (swamps, bogs, marshes and potholes). Do not contaminate water by cleaning of equipment or disposal of wastes. Do not use treated water for animal consumption, spraying or irrigation within 14 days after treatment. Do not use treated water for drinking purposes until 14 days after treatment. Treatment of dense weed areas can result in oxygen loss from decomposition of dead weeds. This loss can cause fish suffocation. Therefore, treat only 1/3 to 1/2 of the dense weed areas at a time and wait 14 days between treatments. **DO NOT APPLY TO MUDDY WATER.** Avoid creating muddy water during application. Do not apply under conditions of high wind and wave action. Do not apply where plants are covered with mud deposits. Consult your State Fish and Game Agencies before applying this product to public waters.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Diquat

Water Weed Killer

TO PREVENT ACCIDENTAL POISONING, NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS AND USE STRICTLY IN ACCORDANCE WITH ENTIRE LABEL.

Active Ingredient	By Wt.
Diquat dibromide [6, 7-dihydrodipyrido (1,2-a:2',1'-c') pyrazinedium dibromide]	35.3%
Inert Ingredients	64.7%
Contains 2 lbs. Diquat cation per gal. as 3.73 lbs. salt per gal.	

Not For Homeowner Use.

**KEEP OUT OF REACH OF CHILDREN
WARNING - AVISO**

**SEE SIDE PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS**

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

ACCEPTED
OCT 29 1987
239-1663

Manufactured for

Chevron Chemical Company © 1983

Ortho Agricultural Chemicals Division

San Francisco CA 94120-7144

Product 1000-2

Made in U.S.A.

R Form 7843-V

EPA Est. 239-MO-1

EPA Reg. No. 239-1663-AA

NET CONTENTS 55 GALLONS

Department of Agriculture for further information.

Written or oral warnings regarding use of protective clothing and accidental exposure must be given to workers who are expected to be in treated areas or in areas about to be treated. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers.

If oral warnings are given, warnings shall be given in a language commonly understood by workers and must indicate the specific period of time that treated areas may not be entered without protective clothing.

Oral warnings must also include appropriate first aid instructions in case of accidental exposure. These instructions are given in the STATEMENT OF PRACTICAL TREATMENT at the beginning of this label.

Written warnings must include the following information, "WARNING: Do not enter treated areas without appropriate protective clothing until sprays have dried (or other reentry interval if your State has more restrictive interval for this product). If accidental exposure occurs, follow the instructions below." (Written warnings must include the STATEMENT OF PRACTICAL TREATMENT given at the beginning of this label).

DIRECTIONS

ORTHO Diquat Water Weed Killer is a non-volatile herbicidal chemical used in the desiccation of certain plants in preharvest application in order to facilitate both mechanical and hand harvesting. It is also recommended for use as a general weed killer and as an aquatic weed killer. Absorption and herbicidal action is usually quite rapid with effects visible a few days. Do not use on lawns. Rinse all spray equipment thoroughly with water after use. AVOID SPRAY DRIFT to crops which may be damaged by application. Use ORTHO X-77 Spreader (non-ionic). ORTHO X-77 Spreader is recommended, but a similar and suitable labeled non-ionic sprayer may be substituted. Do not use dirty or muddy water for dilution as Diquat will be inactivated.

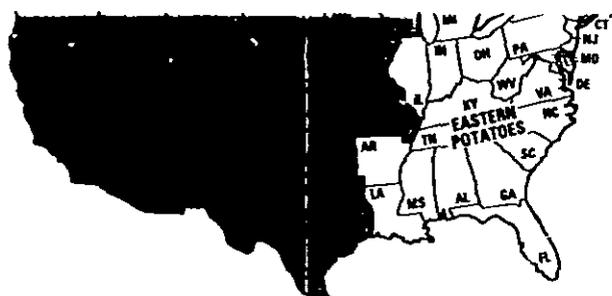
Do not apply this product through any type of irrigation system. **DO NOT APPLY TO CROPS OR NON-PLANTED AREAS:** Rights-Of-Way, Including Railroads, Highways, Roads, Dividers and Medians, Pipelines, Public Utility Lines, Sewage Pumping Stations, Transformer Stations and Substations. Around Electric Utilities, Commercial Buildings, Manufacturing Plants, Storage Yards, Rail Yards, Fence Lines and Parkways. Edges and Non-Flooded Portions of Ponds, Lakes and Ditches. Also Around Ornamental Gardens, Walkways, Patios, Beneath Greenhouse Benches, Along Driveways and Golf Courses. To Kill Undesirable Above Ground Grass and Broadleaf Weed Growth—1 to 2 qts. plus 8 to 16 oz. ORTHO X-77 Spreader (non-ionic) per 100 gals. water (4 tsp. ORTHO Diquat Water Weed Killer plus 1/2 tsp. ORTHO X-77 Spreader (non-ionic) to 1 gal. water). Apply for full coverage and thorough weed contact. Apply to young weeds since control decreases as weeds mature. Retreatment may be necessary to control grasses and established weeds. Avoid any contact with foliage of food crops or ornamental plants.

ALFALFA, CLOVER, GRAIN SORGHUM, SOYBEANS (Seed Crops Only): 1 1/2 to 2 pts. per acre. On thin Stands of Seed Alfalfa—1 pt. per acre.

ALFALFA (Seed Crops Only): 1 pt. per acre. Preharvest Desiccation of Alfalfa—Use specified dosage in 15 to 30 gals. water by ground spray application and 5 to 10 gals. water by air. On Alfalfa, Clover and Vetch, desiccation is complete in 3 to 10 days. On Grain Sorghum, apply within 1 to 2 weeks of harvest and when seeds have not more than 50% moisture. On Soybeans, apply 1 week before harvest. Do not graze treated areas or feed treated forage to livestock. Do not use seed from treated plants for food, feed or oil purposes.

POTATOES (Eastern): For Desiccation of Potato Plants to Facilitate Harvest—Apply 1 pt. per acre in 20 to 100 gals. of water with ground equipment or in 5 to 10 gals. with aerial equipment. Use higher volumes (10 to 100 gals.) for thorough coverage of heavy vine growth or when low cone type nozzles are used. Make a second application if necessary to obtain adequate desiccation where vine growth is dense. Allow a minimum of 5 days between applications. Do not apply to drought stressed potatoes. Applications should be made at least 7 days before harvest. Add ORTHO X-77 Spreader (non-ionic) at 8 to 16 fl. oz. per 100 gals. of spray water.

POTATOES (Western): For Desiccation of Potato Plants to Facilitate Harvest—Apply 1 pt. per acre in 20 to 100 gals. of water with ground equipment or in 5 to 10 gals. with aerial equipment. Use sufficient water for



SUGARCANE (HAWAII ONLY): To Prevent Flowering (tasseling) of Cane—1 pt. ORTHO Diquat Water Weed Killer plus 1 oz. ORTHO X-77 Spreader (non-ionic) per acre. Apply during flower initiation period, first 3 weeks of September. Apply by aircraft in 7 to 10 gals. water per acre. Some leaf burn will occur following this treatment. Do not apply within 5 months of harvest.

SUGARCANE (HAWAII ONLY): For Control of emerged annual weeds and suppression of sedges, six inches or less in height, using a directed spray—1 to 2 qts. in 50 to 100 gals. water per acre. Add 8 oz. ORTHO X-77 Spreader (non-ionic) per 100 gals. water. Repeat as necessary. Use power sprayer with boom, or hand sprayer with wand, directed as a coarse spray to thoroughly wet weeds in fields, roadways and borders. Avoid contacting sugarcane foliage. Spray drift on sugarcane leaves will cause injury. Use lower rate for control of weed seedlings and suppression of sedges. Use higher rate when weeds are 3 to 6 inches tall. Do not apply after crop closes in.

SUGARCANE (FLORIDA AND PUERTO RICO ONLY): To Prevent Flowering (tasseling) of Cane—1 pt. ORTHO Diquat Water Weed Killer plus 1 oz. ORTHO X-77 Spreader (non-ionic) per acre. Apply during flower initiation period. Apply by aircraft in 3 to 10 gals. of water per acre. Some leaf burn will occur following this treatment. Do not apply within 3 months of harvest.

AQUATIC USE DIRECTIONS

For application only to ponds, lakes, and drainage ditches where there is little or no outflow of water and which are totally under the control of the product's user. Do not use the treated water for animal consumption, spraying, irrigation, or domestic purposes for 14 days after treatment.

WEED SPECIES

SUBMERSED WEEDS (Infesting Still Ponds, Lakes, Ditches or Portions Thereof):

Bladderwort (Utricularia spp.)	1-2
Coontail (Ceratophyllum demersum)	2
Elodea (Elodea spp.)	2
Naiad (Najas spp.)	1
Pondweeds (Potamogeton spp.)†	2

†Except P. robbinsii; also Richardson Pondweed (P. richardsonii) in Minnesota.

Watermilfoil (Myriophyllum spp.)

1-2
APPLICATION: In early season where submersed weed growth has not reached the surface apply ORTHO Diquat Water Weed Killer by pouring directly from the container into the water while moving slowly over the water surface in a boat. Distribute evenly over infested areas in strips 40 feet apart. In mixed weed population, use the high rate of application as indicated by weeds present.

In late season or where submersed weed growth has reached the water surface throughout the area to be treated apply ORTHO Diquat Water Weed Killer by pouring as above or injecting a diluted (10-20 to 1) solution below the water surface in strips no more than 20 feet apart. Use the high rate of application as indicated by the weeds present. Where algae are present along with the submersed weeds, pre-treatment with Copper Sulphate at recommended rates is advised for best results with ORTHO Diquat Water Weed Killer.

APPLICATION: For control, apply overall spray in 50 to 150 gals. (non-ionic) per acre. Care should be taken to avoid contact with desirable plants on water; and on dammed water weed occurs readily from under Diquat Water Weed Killer material control.

WEED SPECIES

MARGINAL WEEDS (Infesting Lakes and Ditches):

Cattails (Typha spp.)
APPLICATION: For top kill, apply 1 pt. ORTHO Diquat Water Weed Killer plus 1 pt. ORTHO X-77 Spreader (non-ionic) per 100 gals. water plus 1 pt. ORTHO X-77 Spreader (non-ionic) per 100 gals. water plus 1 pt. ORTHO X-77 Spreader (non-ionic) per 100 gals. water. Repeat as necessary. Use power sprayer with boom, or hand sprayer with wand, directed as a coarse spray to thoroughly wet weeds in fields, roadways and borders. Avoid contacting sugarcane foliage. Spray drift on sugarcane leaves will cause injury. Use lower rate for control of weed seedlings and suppression of sedges. Use higher rate when weeds are 3 to 6 inches tall. Do not apply after crop closes in.

ALGAE: ORTHO Diquat Water Weed Killer plus 1 pt. ORTHO X-77 Spreader (non-ionic) per 100 gals. water plus 1 pt. ORTHO X-77 Spreader (non-ionic) per 100 gals. water plus 1 pt. ORTHO X-77 Spreader (non-ionic) per 100 gals. water. Repeat as necessary. Use power sprayer with boom, or hand sprayer with wand, directed as a coarse spray to thoroughly wet weeds in fields, roadways and borders. Avoid contacting sugarcane foliage. Spray drift on sugarcane leaves will cause injury. Use lower rate for control of weed seedlings and suppression of sedges. Use higher rate when weeds are 3 to 6 inches tall. Do not apply after crop closes in.

Formula For Parts Per Million
Gals. to use = p.p.m. recommended of water x 1.4. For example—1/2 x 2 x 1.4 = 1.4. For 4 feet average depth: 1/2 x 2 x 1.4 = 1.4. Do not apply under conditions where other plantings that might be considered unfit for sale, use or consumption.

STORAGE

PROHIBITIONS
Do not contaminate water, food, or clothing with equipment. Open dumpsites are prohibited.

STORAGE

Keep pesticide in original container. Do not use for drinking water. Do not store at temperatures above 100°F. For help with any spill, leak, or other emergency, call day or night (415) 233-3333.

PESTICIDE DISPOSAL

This product is acutely hazardous. Do not use for drinking water. Do not store at temperatures above 100°F. For help with any spill, leak, or other emergency, call day or night (415) 233-3333. Contact your State Pesticide Control Agency for hazardous waste representation for guidance.

CONTAINER DISPOSAL

Triple rinse (or equivalent). Do not reuse or puncture and dispose of in accordance with other procedures allowed by local, state, or federal regulations. Stay out of smoke.

CONDITIONS OF SALE: 1. Check this material conforms to the label. It is reasonably fit for use as directed. The manufacturer authorizes any agent or representative to sell, distribute, or apply this material. 2. Critical and unforeseeable risks in connection with the use of this material are not limited to the material is applied, lack of control of drift to other plants or crops, or other procedures allowed by local, state, or federal regulations. Buyer and user assume liability (except those assumed by the manufacturer) for handling, storage, and use of this material.