

HIVOL-44™

PLANT GROWTH REGULATOR

Do Not Use As A Herbicide



ACCEPTED
MAR 26 1991
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 400-444

COMPOSITION

Active Ingredients: (% by weight)	
Isopropyl Ester of 2,4-Dichlorophenoxyacetic Acid*	44%
Inert Ingredients**	56%
Total:	100%
*Equivalent to: 2,4-Dichlorophenoxyacetic Acid	37%

**Contains Petroleum Distillate

UNIROYAL CHEMICAL COMPANY, INC., Middlebury, CT 06749
 EPA REG. NO. 400-444
 EPA EST. NO.

004

NET CONTENTS

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

STATEMENT OF PRACTICAL TREATMENT

- IF SWALLOWED:** Do not induce vomiting. See a physician immediately.
- IF INHALED:** Remove to fresh air. Administer artificial respiration, if necessary. Contact physician if abnormal reaction occurs.
- IF ON SKIN:** Wash thoroughly with soap and water. Get medical attention.
- IF IN EYES:** Immediately flush eyes with plenty of water. See a physician.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid inhaling fumes or spray. When handling this product, wear chemical resistant gloves. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling, spraying and before eating or smoking. Remove contaminated clothing and wash contaminated clothing before reuse. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Drift or runoff may adversely affect nontarget plants. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water when disposing of equipment washwaters. Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination. Vapors from this product may injure susceptible plants in the immediate vicinity. Avoid spray drift. This product may injure cotton, beans, peas, grapes, ornamentals, etc. (Coarse sprays are less likely to drift).

DIRECTIONS FOR USE

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

CHEMIGATION: Do not apply this product through any type of irrigation system.

REENTRY STATEMENT

Do not enter treated areas without protective clothing until sprays have dried. Protective clothing as defined in 40 CFR 170.2 means at least a hat or other suitable head covering, a long-sleeved shirt, and long legged trousers or a coverall type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Written or oral warnings must be given to workers who are expected

to be in a treated area or in an area about to be treated with this product. When oral warnings are given, warnings shall be given in a language customarily understood by workers and must inform workers of areas or fields that may not be re-entered without the specific protective clothing, period of time field must be vacated, and appropriate actions to take in case of accidental exposure, all three of which are described below in written warnings. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "CAUTION" Areas to be treated with 2,4-D on (date of application). Do not enter without appropriate protective clothing (as described above) until sprays have dried. In case of accidental exposure remove all contaminated clothing (do not wear again until completely free of all material). Wash thoroughly with soap and water and put on clean clothing."

DIRECTIONS FOR USE

TO BE USED AS A PLANT GROWTH REGULATOR ON CITRUS.

DO NOT USE ON CITRUS TREES YOUNGER THAN SIX YEARS. DO NOT APPLY WITHIN 7 DAYS OF HARVEST.

PRE-HARVEST FRUIT DROP CONTROL: Add the recommended quantity of HIVOL-44 per 100 gallons of water and spray to give outside coverage. (See chart below to convert to tank dosages.)

Variety/Species	Location	Time	ppm Water Spray	Amount of HIVOL-44 per 100 Gallons	
				ml	fl. oz.
Navel Oranges	Central, So. Calif.	Sept. - Nov.	16	15.2	or in hydrated lime
	Central Calif.	Sept. - Nov.	24	22.8	
	Central, So. Calif.	Dec. - Jan.	8	7.5	
Valencia Oranges	So. Calif.	Young fruit at least 1/2" dia.	8	7.5	0.256
Grapefruit (Summer drop)	Central, So. Calif.	Young fruit at least 3/4" dia.	16	15.2	0.512
Grapefruit (Winter drop)	Central Calif.	Sept. - Nov.	16	15.2	or in hydrated lime
			24	22.8	
Lemons	Inland So. Calif.	Nov. - Dec.	8	7.5	0.256

AIR APPLICATION (ORANGES)

Sept. through January. Apply in a minimum of 20 gallons of water per acre. Do not exceed a concentration of 200 ppm (38 ml. or 1.28 fl. oz. in 20 gallons of water). Do not apply within 7 days of harvest.

LEAF DROP AND FRUIT DROP CONTROL FOLLOWING PESTICIDE OIL SPRAYS: For Lemons, Navel Oranges, Valencia Oranges, Grapefruit. Add 3.8 ml or 0.128 fl. oz. per 100 gallons in the pesticide treatment (4 ppm). Apply thorough coverage.

FRUIT SIZE INCREASES: Apply outside coverage.

VALENCIA & NAVEL ORANGES			Amount of HIVOL-44 Per 100 Gallons	
When Fruit Diameter Is	ppm Water Spray	ml		fl. oz.
3/16 - 1/8 inch	12	11.5	or	0.384
1/8 - 1/4 inch	16	15.2	or	0.512
1/4 - 5/16 inch	20	19.0	or	0.640
5/16 - 3/8 inch	24	22.8	or	0.768
GRAPEFRUIT			Amount of HIVOL-44 Per 100 Gallons	
When Fruit Diameter Is	ppm Water Spray	ml		fl. oz.
1/8 - 3/16 inch	12	11.4	or	0.384
3/16 - 1/4 inch	16	15.2	or	0.512
1/4 - 5/16 inch	20	19.0	or	0.640
5/16 - 1 inch	24	22.8	or	0.768

PACKING HOUSE USE TO MAINTAIN HEALTHY BUTTONS ON LEMONS: Use a concentration of 500 ppm (45 ml or 1 1/2 fl. oz. in 10 gal. of water). May be added to wax emulsion on lemons waxed prior to storage. Otherwise use a special treatment (flush or spray) following the final fresh water rinse of the fruit. Do not use with Nitrogen Trichloride (Decco). Do not use on fruit for short-term storage.

WARNING

Do not use equipment used in spraying HIVOL-44 to spray 2,4-D sensitive plants. Use caution in disposing of solutions as they can kill or cause extreme injury to sensitive plants. Dispose of residues in a

manner to avoid contamination of underground water supplies.

CAUTION

Avoid spray drift to susceptible plants as this product may injure cotton, bean, peas, alfalfa, ornamentals, etc. (Coarse sprays are less likely to drift.) Thoroughly clean spray equipment, using hot soap suds followed by soaking and washing with ammonia or baking soda before using for other purposes. Do not store near fertilizers, seeds, insecticides or fungicides. Vapors from this product may injure susceptible plants in the immediate vicinity. Protect from freezing.

USE THIS CHART TO FIND THE AMOUNT OF HIVOL-44 TO ADD TO THE SPRAY TANK

Tank Size	Add This Much HIVOL-44 To Obtain The Desired Concentration					
	for: 4 ppm	8 ppm	12 ppm	16 ppm	20 ppm	EC ppm
400 Gallons	15 ml.	30.5 ml.	45.5 ml.	61 ml.	76 ml.	91 ml.
500 Gallons	19 ml.	38.0 ml.	57.0 ml.	76 ml.	95 ml.	114 ml.
800 Gallons	23 ml.	45.5 ml.	68.5 ml.	91 ml.	114 ml.	137 ml.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Do not store near food, feed, fertilizers, seeds, insecticides or fungicides. Store in the original container in a secure, dry and temperate area. Keep container closed when not in use. Do not store or use around the home. Do not store 30-gallon drums over two high. In case of spill or leak, soak up with sand, earth or synthetic absorbent (do not use alkaline absorbents) and dispose of wastes in compliance with local, State and Federal Regulations. Avoid contact with water.

This product may crystallize if stored at cold temperatures. If crystallization occurs, call Uniroyal Chemical for instructions before using.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal Law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities by burning. If burned, stay out of smoke.

Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved State and local procedures.

IMPORTANT NOTICE—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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