



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 30 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Allen R. Blem
UNIROYAL CHEMICAL CO. INC.
74 AMITY ROAD
BETHANY, CT 06524

Subject: Label Amendment Submission of 08/08/93 in Response to PR Notice 93-7
EPA Reg. No. 400-444
HIBOL 44

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

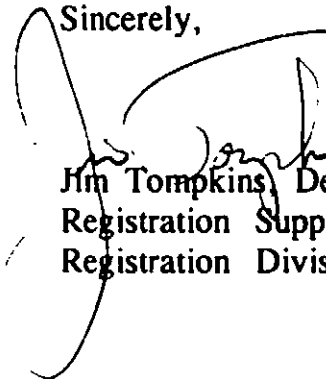
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Allen R Blem
UNIROYAL CHEMICAL CO INC
74 AMITY RD
BETHANY CT 06524

Comment for: EPA Reg Nr.400-444
HIVOL 44

The following specific comments pertain to your WPS
labeling submission concerning the product
cited above:

Please conform with the special 2,4-D guidance issued by
EPA on September 13, 1993 for adding WPS statements.

Delete the crossed-out statements on your proposed label.
They are redundant statements or phrases.

HIVOL-44™

PLANT GROWTH REGULATOR
Do Not Use As A Herbicide



COMPOSITION

Active Ingredient: (% 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.

006WPS

NET CONTENTS

KEEP OUT OF REACH OF CHILDREN CAUTION

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. Avoid contact with skin, eyes, or clothing.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical resistance category selection chart.

Applicators and Other Handlers (other than mixers and loaders) Must Wear: A long-sleeved shirt and long pants; chemical-resistant gloves such as barrier laminate, or nitrile rubber, or neoprene rubber, or viton; shoes plus socks; and protective eyewear.

Mixers and Loaders Must Wear: A long-sleeved shirt and long pants; chemical-resistant gloves such as barrier laminate, or nitrile rubber, or neoprene rubber, or viton; shoes plus socks; protective eyewear, and chemical-resistant apron when mixing or loading.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified by WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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).

ACCEPTED
 COMMENTS
 EPA Letter Dated
 30 1991
 For the Federal Insecticide,
 Fungicide, and Rodenticide Act
 under EPA Reg. No.
 400-444

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.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls; chemical-resistant gloves such as barrier laminate or nitrile rubber, or neoprene rubber, or viton; shoes plus socks; and protective eyewear.

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	Amount of HIVOL-44 per 100 Gallons		fl. oz.
			ppm Water Spray	ml	
Navel Oranges	Central, So. Calif.	Sept. - Nov.	16	15.2	0.512
	Central Calif.	Sept. - Nov.	24	22.8	0.768
	Central, So. Calif.	Dec. - Jan.	8	7.6	0.256
Valencia Oranges	So. Calif.	Young fruit at least 1/2" dia.	8	7.6	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	0.512
			24	22.8	0.768
Lemons	Inland So. Calif.	Nov. - Dec.	8	7.6	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.

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VALENCIA & NAVEL ORANGES		Amount of HIVOL-44 Per 100 Gallons	
When Fruit Diameter Is	ppm Water Spray	ml	fl. oz.
1/8 - 1/4 inch	12	11.4	0.384
1/4 - 1/2 inch	16	15.2	0.512
1/2 - 3/4 inch	20	19.0	0.640
3/4 - 1 inch	24	22.8	0.768

GRAPEFRUIT		Amount of HIVOL-44 Per 100 Gallons	
When Fruit Diameter Is	ppm Water Spray	ml	fl. oz.
1/4 - 1/2 inch	12	11.4	0.384
1/2 - 3/4 inch	16	15.2	0.512
3/4 - 1 inch	20	19.0	0.640
1 - 1 1/2 inch	24	22.8	0.768

PACKING HOUSE USE TO MAINTAIN HEALTHY BUTTONS ON LEMONS: Use a concentration of 500 ppm (45 ml or 1½ 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.

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: <u>4 ppm</u>	<u>8 ppm</u>	<u>12 ppm</u>	<u>16 ppm</u>	<u>20 ppm</u>	<u>24 ppm</u>
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.
600 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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