

DEC 14 1987

Mr. J.S. Lovell
Union Carbide Agricultural Products Company, Inc.
T.W. Alexander Drive
P.O. Box 12014
Research Triangle Park, NC 27709

Dear Mr. Lovell:

Subject: Labeling Amendment
Sevin Brand ULV Carbaryl Insecticide
EPA Registration No. 264-422
Your Application Dated June 15, 1987

The labeling amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act. is acceptable provided that you:

1. Add an aspiration hazard statement to the Statement of Practical Treatment for oral exposure.
2. Change first sentence in Bee Caution statement to:

This product is highly toxic to bees exposed to direct treatment or residue on blooming crops and weeds.

Submit five (5) copies of revised labeling.

Sincerely yours,

Dennis H. Edwards, Jr.
Product Manager (12)
Insecticide-Rodenticide Branch
Registration Division (TS-767C)

91827:ITKUBAT:1-4:KENCOT:12/8/87:1/20/88:AK:iftdyrek
CONCURRENCES

SYMBOL	ORIGINATOR							
SURNAMS								
DATE								

SEVIN® brand ULV
Carbaryl Insecticide

ACCEPTED
with COMMENTS
in EPA Letter Dated

DEC 14 1987

For Agricultural or Commercial Use Only

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

ACTIVE INGREDIENTS:

Carbaryl (1-naphthyl N-methylcarbamate) 264-422 47.5% by wt.

INERT INGREDIENTS: 52.5% by wt.

This product contains petroleum distillates

(Contains 4 pounds carbaryl per gallon)

E.P.A. Reg. No. 264-422

E.P.A. Est. No. 264-MO-02

KEEP OUT OF REACH OF CHILDREN

CAUTION

See page 2 for additional PRECAUTIONARY STATEMENTS.

IN CASE OF EMERGENCY TELEPHONE (24 HOURS A DAY) IN U.S.A.
1-800-UCC-HELP
FOR GENERAL PRODUCT INFORMATION CALL 800-334-9745.

NET CONTENTS: _____

Made in U.S.A.

©UNION CARBIDE AGRICULTURAL PRODUCTS COMPANY, INC.
P. O. Box 12014, T. W. Alexander Drive
Research Triangle Park, NC 27709

SEVIN is a registered trademark of Union Carbide Agricultural Products
Company, Inc. insecticides.

APC Form No. _____

PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

MAY BE HARMFUL IF SWALLOWED. Avoid breathing of spray mist. Do not take internally. Avoid contact with eyes, skin or clothing. Wear regular long-sleeved work clothing. Change to clean clothing daily. Wash hands and face before eating. Wash thoroughly after handling.

ANTIDOTE STATEMENT

ATROPINE SULFATE IS HIGHLY EFFECTIVE AS AN ANTIDOTE. See NOTE TO PHYSICIAN below.

STATEMENT OF PRACTICAL TREATMENT

GENERAL

Contact a physician immediately in all cases of suspected poisoning. Transport to a physician or hospital immediately and SHOW A COPY OF THIS LABEL TO THE PHYSICIAN.

IF SWALLOWED: Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting.

IF IN EYES: Flush eyes with plenty of water. Get medical attention if irritation persists.

IF ON SKIN: Wash thoroughly with soap and water.

IF INHALED: Move from contaminated atmosphere and call a physician.

NOTE TO PHYSICIAN

Carbaryl is a carbamate insecticide, which is a cholinesterase inhibitor. Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible.

Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent overatropinization. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30 to 60 minutes to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours.

Narcotics and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are NOT recommended.

To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analyses will be arranged by Union Carbide Agricultural Products Company, Inc.

Consultation on therapy can be obtained at all hours by calling the Union Carbide emergency number 1-800-UCC-HELP.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to aquatic and estuarine invertebrates. Do not apply directly to water and wetlands, except under the forest canopy. Do not apply when weather conditions favor drift from area treated. Do not contaminate water by cleaning equipment or disposal of wastes.

BEE CAUTION: MAY KILL HONEYBEES IN SUBSTANTIAL NUMBERS.

This product is highly toxic to bees exposed to direct treatment on blooming crops and weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Contact your Cooperative Agricultural Extension Service or your local Union Carbide Agricultural Products Company representative for further information.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

GENERAL INFORMATION

SEVIN® brand ULV Carbaryl Insecticide is a dispersion of finely ground technical carbaryl in a non-aromatic, low volatile oil. It is designed for air application as a low volume or ultra low volume spray. It may also be applied by ground mist blower or cold fogging, if diluted with diesel fuel, kerosene or #2 fuel oil. READ THIS LABEL BEFORE USE. USE IN STRICT ACCORDANCE WITH DIRECTIONS AND CAUTIONS.

GENERAL WORKER PROTECTION STATEMENT

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until sprays have dried.

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 treated area or in an area about to be treated with this product. Advise workers to stay out of fields during application and until sprays have dried. Regular long-sleeved work clothing should be worn when working in treated fields. See PRECAUTIONARY STATEMENTS, STATEMENT OF PRACTICAL TREATMENT AND NOTE TO PHYSICIAN for information on accidental exposures. When oral warnings are given, warnings shall be given in a language customarily understood by workers. 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: Appropriate signal work (CAUTION), area treated with SEVIN® brand ULV Carbaryl Insecticide, date of application, appropriate clothing, and re-entry interval (i.e., until sprays have dried).

PRE-HARVEST AND GRAZING USE INFORMATION AND LIMITATIONS

Tolerances established under the Federal Food, Drug and Cosmetic Act permit the sale of crops bearing probable carbaryl residues when this product is used in accordance with label directions. If used as directed, treated forage may be grazed or used as feed for dairy and meat animals without causing illegal residues in meat or milk. This product may be applied up to and including the day of harvest or grazing of forage crops.

Do not plant rotational food and feed crops not listed on this or other carbaryl labels in carbaryl treated soil.

Do not use reclaimed irrigation water from crops treated with carbaryl on upland crops for which carbaryl tolerances are not established.

PLANT RESPONSE PRECAUTION

To avoid possible injury to tender foliage, do not apply to wet foliage or when rain or high humidity is expected during the next two days.

SPRAY PREPARATION

SEVIN® brand ULV Carbaryl Insecticide thickens during storage. Roll or agitate drums or recirculate product in bulk tanks before use to reduce viscosity and restore homogeneity. SEVIN® brand ULV Carbaryl Insecticide may be held prior to use and transferred in any materials of construction suitable for use with fuel oil, kerosene or diesel oil. Protect from water. Before and after use, flush nurse tanks, pumps, lines, hoses and entire spray systems with diesel fuel, kerosene or #2 fuel oil until clean. Water, scale, rust and other residue must be removed from pumps, mixing and spray systems before use.

COMPATIBILITY

"SEVIN®" BRAND ULV CARBARYL INSECTICIDE COMPATIBILITY INSECTICIDE IS NOT COMPATIBLE WITH AND SHOULD NOT BE MIXED WITH WATER, ALCOHOL OR AROMATIC SOLVENTS, but can be diluted with aliphatic oils (diesel fuel, kerosene or #2 fuel oil). Compatibility with other pesticides has not been thoroughly tested. DO NOT USE IN TANK MIX COMBINATIONS UNLESS YOUR EXPERIENCE INDICATES THAT THE MIXTURE IS EFFECTIVE AND WILL NOT RESULT IN PLANT INJURY OR MECHANICAL DIFFICULTY. For best mixing when preparing diluted SEVIN® brand ULV Carbaryl Insecticide, add diluent oil to mix tank before adding proper

volume of SEVIN® brand ULV Carbaryl Insecticide. Provide complete recirculation of diluted suspensions once every 24 hours to maintain uniformity.

APPLICATION

On all crops use sufficient gallonage to obtain thorough and uniform coverage. Calibrate equipment to deliver the desired spray volume. Flat fan nozzles may be used to apply both undiluted and diluted SEVIN® brand ULV Carbaryl Insecticide. Rotary atomizing and hollow cone nozzles are not recommended for applying undiluted SEVIN® brand ULV Carbaryl Insecticide but can be used if 1 to 1 dilution is made. Use of a high-volume 50-mesh in-line strainer is suggested. Use of screens behind nozzles is not recommended. Apply by air undiluted, or diluted with kerosene, diesel fuel or #2 fuel oil. At temperatures below 50°F (10°C) dilution of 4 volumes of SEVIN® brand ULV Carbaryl Insecticide with 1 volume of diluent oil is recommended to assure uniform flow and spray distribution. Dilutions greater than 1 to 1 by volume are not recommended; higher dilutions will reduce residual properties. Dilute 1 to 1 by volume when applying with ground equipment. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

INSECT CONTROL

Apply when insects or their damage appear. To maintain control repeat at 7 to 14 day intervals or as necessary unless a shorter interval is specified below. Where a dosage range is indicated, use lower rate on young plants and early instars and higher rate on mature plants, advanced instars and adults. Thorough and uniform spray coverage is essential for effective control.

SEVIN® brand ULV Carbaryl Insecticide does not control spider mites. If spider mites are a problem, use a registered miticide.

Regional differences have been noted in the susceptibility of certain strains of fall armyworm to SEVIN® brand ULV Carbaryl Insecticide. If local experience indicates inadequate control, use an alternative pesticide.

Follow directions for most effective use. DOSAGES LISTED REFER TO QUARTS OF "SEVIN® BRAND ULV" CARBARYL INSECTICIDE PER ACRE, NOT TO VOLUME OF FINISHED SPRAY PER ACRE.

ALFALFA AND CLOVERS INSECT CONTROL

For grasshoppers: Apply 1/2 to 1 1/2 quarts of this product per acre. To avoid possible injury to tender alfalfa foliage, do not apply to wet foliage or when rain or high humidity is expected during the next two days.

Do not apply to alfalfa within 3 days of harvest.

CORN (field, pop) INSECT CONTROL

For corn rootworm beetles: Apply 1 quart of this product per acre as needed at first silking if populations are at economic levels and/or apply later when needed to control adult population buildup to reduce larval damage to next year's crop. Do not make more than two applications.

For western bean cutworm: Apply a single application of 2 quarts of this product plus 2 quarts diesel fuel, kerosene or #2 fuel oil per acre when an average of 1 in 7 plants have western bean cutworm egg masses or newly hatched larvae and 90 to 100% of the tassels have emerged. Application after 100% of the silks have emerged will reduce effectiveness.

For Japanese beetle: Apply 1 quart of this product per acre when adult beetles are present.

For grasshoppers: Apply 1/2 to 1 1/2 quarts of this product per acre. Lower rate is suggested for nymphs on small plants. Use 1 1/2 quarts when grasshoppers of foliage are mature and greater coverage is required.

FOREST INSECT CONTROL

For control of gypsy moth, fall and spring cankerworms, saddled prominent, forest tent caterpillar, elm spanworm, oak leafroller complex and Japanese beetle: Apply 1 quart of this product per acre when larvae are in early instars and leaves are at least 1/3 grown, or when adult Japanese beetles are present.

For spruce budworm and western spruce budworm: East of the Rocky Mountains apply 1/2 to 1 quart of this product per acre when a majority of the larvae are in the third through sixth instars. Lower rate is suggested for heavy spruce budworm infestations where 2 applications are necessary for adequate foliage protection. In the Rocky Mountains and west of the Rocky Mountains apply 1/2 to 1 quart of this product per acre when a majority of the larvae are in the third through fifth instars.

For Douglas-fir tussock moth: For maximum foliage protection apply 2 quarts of this product per acre when larvae are in first and second instars. Application to later instars will provide control but with reduced foliage protection.

For population control and foliage protection of high value trees using ground mist blower application: Apply 0.8 pint of spray mixture containing equal volumes of this product and diesel fuel, kerosene or #2 fuel oil per 20 to 30 foot tree (0.2 lb. ai/tree) when larvae are in early instars. Cover foliage thoroughly, but avoid runoff.

PASTURE, RANGELAND AND WASTELAND INSECT CONTROL

Apply 0.375 quarts (12 fl. oz.) to 1.50 quarts (48 fl. oz.) of SEVIN® brand ULV Carbaryl Insecticide per acre. Lower rate is suggested for nymphs, low to moderate populations, or application to small plants or sparse vegetation. Use higher rate for adult grasshoppers, high populations, or applications to dense vegetation. Apply sufficient spray volume for thorough coverage.

For Japanese beetle: Apply 1 quart of this product per acre when adult beetles are present.

For black grass bugs: Apply 1/2 to 1 1/2 quarts of this product per acre. Use lower rate for control of immature bugs in sparse vegetation. Use higher rate for mature bugs or when vegetation is thick.

WHEAT INSECT CONTROL - (NOT FOR USE IN CALIFORNIA.)

Do not apply within 21 days of harvest of grain. No time limitation on green wheat used as pasture or forage.

For grasshoppers: Apply 1/2 to 1 1/2 quarts of this product per acre. Lower rate is suggested for nymphs on small plants. Use higher rate when grasshoppers are mature or vegetation is thick.

For cereal leaf beetle: Apply 1 quart of this product per acre. Application is effective against eggs, larvae and adults.

For armyworm and fall armyworm: Apply 1 to 1 1/2 quarts of this product per acre.

STORAGE AND DISPOSAL

STORAGE

Store Unused SEVIN® brand ULV Carbaryl Insecticide in original container only, in cool, dry area out of reach of children and animals. Do not store in areas where temperatures frequently exceed 100°F.

PESTICIDE DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Decontaminate empty bulk tanks. For drums: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Consult Federal, State or local disposal authorities for approved alternative procedures.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and of residues on food crops, and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES, NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

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