OCT 23 1987

Mr. J.S. Lovell Union Carbide Agricultural Products Company, Inc. V.W. Alexander Drive 1.C. Box 12014 Research Triangle Park, NC 27709

Dear Mr. Lovell:

)، ار Subject: Sevin Brand 4 Oil 41 Carbaryl Insecticide EPA Registration No. 264-337 Your Applications Dated September 8, 1986, Narch 23 and June 15, 1987

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

- 1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a. Explain why you have specified a 14-day preharvest interval for aerial application on rangeland.
  - b. The lower rate for grasshopper control in pasture, rangeland, and wasteland as proposed in your letter dated March 23, 1987 is acceptable.
  - c. Change the first sentence in the Bee Caution statement to "This product is extremely toxic to bees exposed to direct treatment or residues on blooming crops or weeds."
  - d. Add an aspiration hazard statement to the Statement of Practical Treatment for oral exposure.

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EPA Form 1320-1 (12-70)

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3. Submit five (5) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

Stamped copies of labeling submitted with all three applications are enclosed.

Sincerely yours,

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

Enclosures

# ACCEPTED with COMMENTS in EPA Letter Dated:

## OCT 231987

SEVIN® brand 4-0il 41 Carbaryl Insecticide

Under the Federal In resticide	e,
Tanolcide, and Rodersoche Ac	ď
mended, for the perticid	le
detered under EPA Reg. N	D
264-337	

FOR GENERAL INFORMATION CAL	L 1-800-334-9745.
1-800-UCC-HE	ELP
IN CASE OF AN EMERGENCY, TELEPHONE COLLECT	(24 HOURS A DAY) IN THE U.S.A.
See page 2 for additional PRECA	AUTIONARY STATEMENTS.
CAUTION	
KEEP OUT OF REACH OF	CHILDREN
E.P.A. Reg. No. 264-337	E.P.A. Est. No. 264-MO-0
This product contains petroleum distillates. (Contains 3.2 pounds carbaryl per gallon)	
INERT INGREDIENT:	
Carbaryl (1-naphthyl N-methylcarbamate)	

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

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## 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 chloinesterase 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.

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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 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 or 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 on 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 4-OIL® brand 41 Carbaryl Insecticide is a pre-diluted product containing a finely ground dispersion of SEVIN Carbaryl Insecticide in non-aromatic, low volatile oils. It is designed for air application as a low volume or ultra low volume spray. READ THIS LABEL BEFORE USE. USE IN STRICT ACCORDANCE WITH DIRECTIONS AND CAUTIONS.

## PREHARVEST 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 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.



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#### SPRAY PREPARATION

Recirculate SEVIN 4-OIL® brand 41 Carbaryl Insecticide completely, once every 24 hours during storage and during or before use to maintain homogeneity. SEVIN 4-OIL® 41 brand Carbaryl Insecticide may be held prior to use and transferred in any materials of constructions suitable for use with fuel oil, kerosene or diesel oil. Protect from water.

Before and after use, flush tanks, pumps, lines, hoses and entire spray systems with diesel fuel, kerosene or #2 fuel oil until clean. Water, scale, rust and other residues must be removed from pumps, mixing and spray systems before use.

## COMPATIBILITY

"SEVIN 4-OIL®" BRAND 41 CARBARYL INSECTICIDE IS NOT COMPATIBLE WITH AND SHOULD NOT BE CONTAMINATED WITH WATER, ALCOHOL OR AROMATIC SOLVENTS. 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.

#### 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 SEVIN 4-OIL® brand 41 Carbaryl Insecticide. Rotary atomizing and hollow cone nozzles can be used if the SEVIN 4-OIL® brand 41 tarbaryl Insecticide is diluted at the ratio of 5 volumes of SEVIN 4-OIL® brand 41 Carbaryl Insecticide with 3 volumes of fuel oil, kerosene or diesel oil.

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 rates on mature plants, advanced instars and adults. Thereugh and uniform spray coverage is essential for effective control. Follow directions for most effective use. DOSAGES LISTED REFER TO VOLUME OF "SEVIN 4-OIL®" BRAND 41 CARBARYL INSECTICIDE PER ACRE.

SEVIN 4-0il® brand 41 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 4-0il® brand 41 Carbaryl Insecticide. If local experience indicates inadequate control, use an alternative pesticide.



## PASTURE, RANGELAND AND WASTELAND INSECT CONTROL

For grasshoppers: Apply 15 to 60 ounces of SEVIN 4-OIL® brand 41 Carbaryl Insect:cide per acre in a total spray volume of at least 20 fluid ounces per acre. Lower rate is suggested for nymphs, low to moderate populations, or applications to small plants or sparse vegetation. Use higher rate for adult grasshoppers high populations or applications to dense vegetation.

For range caterpillar: Apply 20 to 40 ounces of this product per acre. Use the lower rate when larvae are in early instars and the higher rate for later instars.

For black grass bugs: Apply 20 to 40 ounces of this product per acre. Lower rate is suggested for immature bugs in sparse vegetation. Use higher rate for mature bugs or when vegetation is thick.

For Japanese beetle: Apply 40 ounces of this product per acre when adult beetles are present.

## WHEAT INSECT CONTROL

For grass toppers: Apply 20 to 60 ounces of this product per acre. Do not make more than 2 applications after grain heads emerge from boot. Do not apply within 21 days of harvest of grain. No time limitation on green wheat used as pasture or forage.

## ALFALFA AND CLOVERS INSECT CONTROL

For grasshoppers: Apply 20 to 60 ounces 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.



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## STORAGE AND DISPOSAL

#### STORAGE

Store Unused SEVIN 4-OIL® brand 41 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. Open dumping is prohibited. 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 by rinsing with kerosene or #2 fuel oil. Rinses may be drained into a mixing or spray tank. Bulk tanks should be washed with a detergent and hot water.

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

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.



UNION CARBIDE AGRICULTURAL PRODUCTS COMPANY, INC.
T. W. ALEXANDER DRIVE

P.O. BOX 12014
RESEARCH TRIANGLE PARK, NC 27709

## PRODUCT BULLETIN

SEVINO brand 4-011 41 carbary1 insecticide. EPA Reg. No. 264-337 Revised Directions for Use on Forage Crops: Alfalfa, Pastures, Rangelands, Wastelands/Rights-of-Way/Hedgerows/Ditchbanks/Roadsides

## **DIRECTIONS FOR USE**

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

CAREFULLY CALIBRATE ALL APPLICATION EQUIPMENT.

## ALFALFA INSECT CONTROL

For grasshoppers: Apply 20 to 60 ounces of SEVIN 4 OIL 41 insecticide 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.

Apply only once per cutting.

Do not apply within 7 days of harvest.

## PASTURE INSECT CONTROL

For grasshoppers, range caterpillar, black grass bug: Apply 10 to 60 ounces of this product per acre. Use the lower rate for nymphs or immature insects on small plants or sparse vegetation. Apply the higher rate for adults or when vegetation is thick.

Apply a maximum of 2 applications/year. Allow at least 14 days between applications. Do not allow foraging or cut for hay within 14 days of last application by ground. Aerially treated pastures may be grazed or cut for hay on day of treatment.

Carefully mark swaths to avoid over-application.

## RANGELAND INSECT CONTROL (FOR AERIAL APPLICATION ONLY)

For black grass bug, grasshoppers, mormon cricket, range caterpillar: Apply 20 to 30 ounces of this product per acre. Use the lower rate for nymphs of immature insects on small plants or sparse vegetation. Apply the higher fate for adults or when vegetation is thick.

Apply a maximum of 2 applications per year. Allow at least 14 days between harvest.

Carefully mark swaths to avoid over-application.

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## DIRECTIONS FOR USE (con't)

## WASTELAND, RIGHTS-OF-WAY, HEDGEROWS, DITCHBANKS, ROADSIDES INSECT CONTROL

For grasshoppers, range caterpillar, mormon cricket, black grass bug: Apply 20 to 40 ounces of this product per acre. Use the lower rate for nymphs or immature insects on small plants or sparse vegetation. Apply the higher rate for adults or when vegetation is thick.

Apply a maximum of 2 applications/year. Allow at least 14 days between applications. Do not allow foraging or cut for hay within 14 days of last application by ground. Aerially treated areas may be grazed or cut for hay on day of treatment.

Carefully mark swaths to avoid over-application.

IMPORTANT: Before using SEVIN brand 4 OIL 41 Carbaryl Insecticide, read and carefully observe the Precautionary Statements and all other information appearing on the product label. This bulletin contains revised directions for use of this product which may not appear on the package label. Follow directions carefully.

OBSERVE ALL DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE FEDERAL LABEL FOR SEVIN BRAND 4 OIL 41 CARBARYL INSECTICIDE

August 1986