#### 264-635

05/31/2000

# Carzol' SP MITICIDE/INSECTICIDE

## **IN WATER SOLUBLE PACKAGING**

## For Agricultural Use Only

ACTIVE INGREDIENT: Formetanate hydrochloride\*.....

\*N, N-dimethyl-N'[3-[[(methylamino) carbonyl]oxy]phenyl]methanimidamide monohydrochloride

EPA Reg. No. 264-635

EPA Est. No. 67345-AZ-01



## KEEP OUT OF REACH OF CHILDREN DANGER - POISON PELIGRO - VENENO



Percent by Weight

TOTAL: 100%

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

For <u>MEDICAL</u> And <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT USE</u> Information Call 1-888-AVENTIS (1-888-283-6847)

## **FIRST AID**

This product is an N-methyl carbamate.

IF SWALLOWED: Drink 1 or 2 glasses or water and induce vorniting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

IF ON SKIN: Wash immediately with soap and water.

IF IN EYES: Flush with water for at least 15 minutes and get medical attention.

[F INHALED: Remove victim to fresh area. If not breathing, give artificial respiration. Administer oxygen if necessary. Get medical attention.

OTICE TO PHYSICIAN: CARZOL® SP is a carbamate which acts as a cholinesterase inhibitor. Specific antidote — Atropine. Do not use 2-PAM.

### PRECAUTIONARY STATEMENTS

#### DANGER

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Fatal if swallowed. Do not breathe spray mist. Can cause irreversible eye damage. May cause skin sensitization. Do not get in eyes, on skin or on clothing.

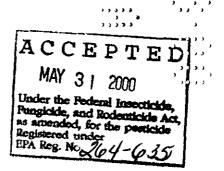
#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, Loaders, Flaggers, Applicators (other than airblast applicators) and Other Handlers Must Wear:

- Long-sleeved shirt & long pants
- Shoes plus socks
- Protective eyewear
- Waterproof gloves
- Chemical-resistant apron when mixing, loading, or cleaning of equipment

#### Applicators Involved In Airblast Applications Must Wear:

- Coveralls worn over long-sleeved shirt and long pants
- Waterproof gloves
- Protective eyewear



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- Chemical-resistant footwear plus socks
- Chemical-resistant headgear
- Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### ENGINEERING CONTROLS STATEMENT

Aerial applicators must be in an enclosed cockpit.

When handlers use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240 (d)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When water-soluble packaging is being handled, handlers must be provided all PPE specified above for applicators using airblast equipment and have such PPE immediately available for use in an emergency, such as a broken package.

#### USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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**

his pesticide is toxic to wildlife. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area. Do not allow animals to graze in orchard areas treated with CARZOL SP.

#### STORAGE AND DISPOSAL

PESTICIDE DISPOSAL:

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. 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:

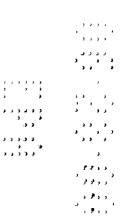
Open outer pouch and place soluble bag into application equipment. Then dispose of empty outer pouch in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

DO NOT REUSE THIS CONTAINER

#### **DIRECTIONS FOR USE**

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

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.



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#### AGRICULTURAL USE REQUIREMENTS

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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:

- 16 days for hand labor activities (harvesting, thinning, topping, pruning, except weeding and propping) in citrus, pome and stone fruit trees
- 10 days for hand labor activities (weeding and propping) in citrus, pome, and stone fruit trees
- 10 days for non-hand labor activities (irrigation and crop advisor activities)
- 4 days when treating stone and pome fruit trees that are bare of foliage
- 48 hours for alfalfa (grown for seed)

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 over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- / Chemical resistant headgear for overhead exposures

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

CARZOL SP is completely soluble in water. Preparation of a premix of slurry before adding to the spray tank is not necessary. Fill the spray tank with one-half of the total amount of water to be used. After opening each container to be used, open its foil liner. Immediately dump the soluble bag(s) into the mix tank. Fill the tank with the additional quantity of water required and then start the agitator. Refer to the chart below to determine the proper dosage of CARZOL SP.

#### DOSAGE CHART FOR CARZOL SP

Desired Rate of CARZOL SP per acre (pounds)	Desired Rate of CARZOL SP per acre (ounces)	One 2.5 lb package of CARZOL SP will treat this many acres at the desired rate
0.5	8	5
0.625	10	4
1.0	16	2.5
1.25	20	2

NOTE: CARZOL SP is not stable in alkaline water. Do not prepare the spray mixture until just before application. Do not prepare more spray mixture than will be used within 4 hours.

#### **USE PRECAUTIONS**

To avoid excessive residues, observe the following limitations:

- Do not use CARZOL SP in the state of Florida.
- Do not make more than one (1) application of CARZOL SP per season, except as noted below.
- Do not apply this product through any type of irrigation system

#### **CITRUS:**

- Do not apply more than 1.25 lbs. CARZOL SP per acre in one crop season.
- Do not apply after fruit reach a diameter of one inch.
- If unharvested grapefruit and Valencia oranges are present from the previous crop, an application may be made to the new crop. However, a
  preharvest interval of 30 days must be observed for the unharvested crop.

NOTE: If brown soft scale is present in the grove, a suitable scallicide should be applied after the CARZOL SP application, ( ) ;

#### **APPLES, PEARS:**

- Do not apply more than 1.25 lbs. CARZOL SP per acre in one crop season.
- Do not apply this product after petal fall.
- A second, later season, application may be made to control stink bugs, lygus bugs, and pear rust mites in CA, OR, WA and ID, only after written approval by the State agency responsible for enforcement of FIFRA or authorized by that State agency.

#### PEACHES AND NECTARINES:

- Do not apply more than 1.25 lbs. CARZOL SP per acre in one crop season.
- Do not apply this product after petal fall.

#### ALFALFA (Seed Crop Only):

- Use this product only on pure stands of alfalfa to be harvested for seed.
- Do not allow spray to drift onto adjacent crops.
- Do not spray while bees are visiting the treatment area.
- Do not allow livestock to graze treated fields. Do not use treated crops for livestock feed. Crop residues are not to be fed to livestock or baled for such use. Fields treated with CARZOL SP must be cleared after harvest by burning or by disking into the soil.

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- CARZOL SP does not control aphids. If aphids appear, add an aphicide to the spray.
- Do not apply more than 1 lb. CARZOL SP per acre in one crop season.
- Allow 21 days before harvest.
- Observe the following plant back intervals after harvest of treated alfalfa:
  - 1. 30 days for leafy vegetables
  - 2. 120 days for root crops
  - 3. 12 months for small grains and all other crops (except leafy vegetables and root crops)

#### For other use limitations see side panel under Use Precautions.

PEST	APPLICATION	
THRIPS	Apply 0.5 to 1.25 lbs. of CARZOL SP per acre as outside coverage spray when thrips appear. For aerial applications, use a minimum of 10 gallons of water per acre.	
THRIPS	Apply 0.5 to 1.25 lbs. of CARZOL SP per acre as outside coverage spray when thrips appear. For aerial application, use a minimum of 10 gallons of water per acre.	
RUST MITE	Use 2 to 4 oz. CARZOL SP per 100 gallons of water when mites appear. For full cover dilute spray, apply 500 gallons of water per acre.	
TENTIFORM LEAF MINER	Use 4 to 5 oz. CARZOL SP per 100 gallons of water at pink or petal fall. For full cover dilute spray, apply 400 gallons of water per acre depending on the size of the trees. For concentrate spray, apply 1 to 1.25 lbs. CARZOL SP per acre in at least 50 gallons of water.	
WHITE APPLE LEAFHOPPER	Use 2 to 4 oz. CARZOL SP per 100 gailons when leafhoppers appear. For full cover dilute spray, apply 400 gallons of water per acre. For concentrate spray, apply ½ to 1 lb. CARZOL SP per acre in at least 50 gallons of water.	
CAMPYLOMMA	Use 4 oz. CARZOL SP per 100 gallons of water at pre-bloom/bloom. For full cover dilute spray, apply 400 gallons of water per acre. For concentrate spray or dilute application of less than 400 gallons, apply 1 lb. CARZOL SP per acre in a minimum of 50 gallons of water per acre. For aerial applications, use a minimum of 10 gallons of water per acre. Apply at night or while bees are not working in blooms.	
EUROPEAN RED MITE TWO SPOTTED MITE	Use 4 to 5 oz. CARZOL SP per 100 gallons of water when mites appear. For full cover dilute spray, apply 400 gallons of water per acre depending on the size of the trees and severity of the mite infestation. For concentrate spray, apply 1 to 1,25 lbs. CARZOL SP per acre in at least 50 gallons of water.	
THRIPS	Use 4 to 5 oz. CARZOL SP per 100 gallons of water at bloom. For full cover dilute spray apply 400 gallons of water per acre. For concentrate spray or dilute application of less than 400 gallons, apply 1 to 1.25 lbs. CARZOL SP per accelerate minimum of 50 gallons of water per acre. Apply at night or while bees are not working in blooms.	
	THRIPS THRIPS THRIPS RUST MITE TENTIFORM LEAF MINER WHITE APPLE LEAFHOPPER CAMPYLOMMA EUROPEAN RED MITE TWO SPOTTED MITE	

CROP	PEST	APPLICATION
PEARS	PEAR RUST MITE	Use 4 oz. CARZOL SP per 100 gallons of water. For full cover dilute spray, apply 400 gallons of water per acre depending on the size of the trees. For concentrate spray, apply 1 to 1.25 lbs. CARZOL SP per acre in at least 50 gallons of water.
PEACHES AND NECTARINES	EUROPEAN RED MITE McDANIEL MITE TWO-SPOTTED MITE	Use 4 oz. CARZOL SP per 100 gallons of water when mites appear. For full cover dilute spray, apply 400 to 500 gallons of water per acre depending on the size of the trees. For concentrate spray, apply 1 to 1.25 lbs. CARZOL SP per acre in at least 50 gallons of water.
PEACHES	LYGUS BUGS STINK BUGS	Use 4 oz. CARZOL SP per 100 gallons of water at first sign of infestation. For full cover dilute spray, apply 400 to 500 gallons of water per acre. For concentrate spray, apply 1 to 1.25 lbs. CARZOL SP per acre in at least 50 gallons of water.
PEACHES (Except California)	PLUM CURCULIO	Apply 1 lb. CARZOL SP as a concentrate spray of 100 gallons per acre, or less.
NECTARINES	THRIPS	Use 4 to 5 oz. CARZOL SP per 100 gallons of water when thrips infest blossoms through petal fall. For full cover dilute spray, apply 400 gallons of water per acre depending on the size of the trees. For concentrate or aerial spray, apply 1 to 1.25 lbs. CARZOL SP per acre in at least 50 gallons of water. Apply at night or while bees are not working in blooms.
ALFALFA (seed crop only in California, Oregon,	LYGUS BUGS	Use ½ to 1 lb. CARZOL SP per acre. Apply when lygus bugs reach damaging numbers.
) ashington, Idaho and Nevada. Use pre-bloom only on alfalfa in all areas except California)	CONSPERSE STINK BUGS (California Only)	Use 1 lb. CARZOL SP per acre for knockdown of a heavy nymphal population. A lygus control program will control stink bugs. When applied by air use a minimum of 5 gallons per acre. When applied by ground use a minimum of 20 gallons per acre.
	TWO-SPOTTED MITE	Use ½ to 1 lb. CARZOL SP per acre. Apply when mites appear. When applied by air use a minimum of 10 gallons of spray per acre. When applied by ground use a minimum of 20 gallons per acre.

#### **AERIAL SPRAY DRIFT MANAGEMENT**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed 75% the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- 3. Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- 4. Do not apply when gusts or sustained winds exceed 15 mph.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

#### AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and does not supersede the mandatory label requirements.

#### INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

#### CONTROLLING DROPLET SIZE

Volume—Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets,

Pressure—Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larges alroptets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

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Number of Nozzles-Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation—Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type—Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 75% of the wingspan or rotor length may further reduce drift without reducing swath width.

#### SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

#### WIND

Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. "moke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and apidly dissipates indicates good vertical air mixing.

#### SENSITIVE AREAS

The pesticide should only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops).

#### **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Aventis CropScience. All such risks shall be assumed by the user or buyer.

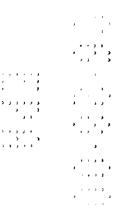
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NET CONTENTS:

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CARZOL® SP MITICIDE/INSECTICIDE (PENDING) Submitted 6/27/00.



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