

10163-265

8-8-2001

1/5

Carzol SP

INSECTICIDE

IN WATER SOLUBLE PACKAGING
For Agricultural Use Only

ACTIVE INGREDIENT:

Formetanate hydrochloride*

% BY WT.

92.0%

OTHER INGREDIENTS

8.0%

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

TOTAL 100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER – POISON
PELIGRO - VENENO



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

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Call poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Carzol SP is a carbamate, which acts as a cholinesterase inhibitor. Specific antidote – Atropine. Do not use 2-PAM.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER

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)

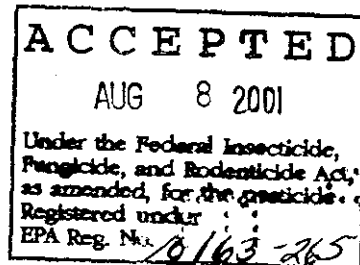
Mixers, Loaders, Flaggers, Applicators (other than airblast applicators) and Other Handlers Must Wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical resistant 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
- Chemical resistant gloves
- Protective eyewear
- 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, use detergent and hot water. Keep and wash PPE separately from other laundry.



NET CONTENTS ___ POUNDS

EPA Reg. No. 10163-265
EPA Est. No. 67545-AZ-1



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Yuma, AZ 85366-5569

ENGINEERING CONTROLS STATEMENTS

Aerial applicators must be in an enclosed cockpit.

When handlers use closed systems or 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 RECOMMENDATION

- 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

This product is toxic to wildlife. For terrestrial uses, do not apply directly to water, 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.

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.

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:

- 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
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

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 or 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.

DOSEAGE CHART FOR CARZOL SP

Desired Rate of CARZOL SP per acre (lbs.)	Desired Rate of CARZOL SP per acre (ozs.)	One 2.5 lb. package of CARZOL SP will treat this many acres at the desired rate
0.5	8	5.0
0.625	10	4.0
1.0	16	2.5
1.25	20	2.0

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

CROP	PEST	APPLICATION
ORANGES, LEMONS, TANGERINES, TANGELOS and GRAPEFRUIT (Arizona Only)	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.
	<ul style="list-style-type: none"> 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 soft brown scale is present in the grove, a suitable scallicide should be applied after the CARZOL SP application. 	
ORANGES, LEMONS, TANGERINES AND GRAPEFRUIT (Texas)	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.
	<ul style="list-style-type: none"> 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 soft brown scale is present in the grove, a suitable scallicide should be applied after the CARZOL SP application. 	
ORANGES, LEMONS, LIMES, TANGERINES, TANGELOS and GRAPEFRUIT (California Only)	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.
	<ul style="list-style-type: none"> 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 soft brown scale is present in the grove, a suitable scallicide should be applied after the CARZOL SP application. 	
APPLES	Tentiform Leafminer	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 gallons of water when leafhoppers appear. For full cover dilute spray, apply 400 gallons of water per acre. For concentrate spray, apply 1/2 to 1 lb. 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 acre in a minimum of 50 gallons of water per acre. Apply at night or while bees are not working in blooms.
	European Red Mite, Twospotted 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.
	<ul style="list-style-type: none"> 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, tygus 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. 	
APPLES (except California)	Campyloomma	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 application, use a minimum of 10 gallons of water per acre. Apply at night or while bees are not working in blooms.
	<ul style="list-style-type: none"> 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, tygus 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. 	
PEARS	European Red Mite, Twospotted 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.
	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.
	<ul style="list-style-type: none"> 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, tygus 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. 	

CROP	PEST	APPLICATION
PEACHES	European Red Mite, McDaniel Mite, Twospotted 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.
	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.
	<ul style="list-style-type: none"> Do not apply more than 1.25 lbs. CARZOL SP per acre in one crop season. Do not apply this product after petal fall. 	
PEACHES (except California)	Plum Curculio	Apply 1 lb. CARZOL SP as a concentrate spray of 100 gallons per acre, or less.
	<ul style="list-style-type: none"> Do not apply more than 1.25 lbs. CARZOL SP per acre in one crop season. Do not apply this product after petal fall. 	
NECTARINES	Thrips	Use 4 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.
	European Red Mite, McDaniel Mite, Twospotted 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.
	<ul style="list-style-type: none"> 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 in California, Oregon, Washington, Idaho and Nevada. Use pre-bloom only on alfalfa in all areas except California)	Lygus Bugs	Use ½ to 1 lb. CARZOL SP per acre. Apply when lygus bugs reach damaging numbers.
	Conspense Stink Bugs	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.
	Twospotted 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.
	<ul style="list-style-type: none"> 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. 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 on treated alfalfa. <ol style="list-style-type: none"> 30 days for leafy vegetables 120 days for root crops 12 months for small grains and all other crops (except leafy vegetables and root crops) 	

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 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.

- The distance of the outer-most nozzles on the boom must not exceed 75% the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- 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.
- 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 larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

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 downward. 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. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops).

STORAGE AND DISPOSAL

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

PESTICIDE DISPOSAL: 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 EMPTY CONTAINERS.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.

For other product information, contact GOWAN COMPANY or see Material Safety Data Sheet.

NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

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