

**RESTRICTED USE PESTICIDE**

Due to Toxicity to Fish and Aquatic Organisms

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.



# TOMBSTONE<sup>TM</sup>

INSECTICIDE

## HELIOS<sup>®</sup>

**Emulsifiable Pyrethroid Insecticide**

For control of certain insect pests on field, vegetable, tree and vine crops.

**ACTIVE INGREDIENT:**

**Cyfluthrin**

**Cyano(4-fluoro-3-phenoxyphenyl)methyl-3-(2,2-dichloroethenyl)-2,2-dimethyl-cyclopropanecarboxylate** .....

**25%**

**OTHER INGREDIENTS\*** .....

**75%**

**TOTAL**

**100%**

Contains 2.0 pound Cyfluthrin per gallon.

\*(This product contains aromatic petroleum distillates.)

**KEEP OUT OF REACH OF CHILDREN  
WARNING—AVISO**

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

**FIRST AID**

<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.**

**Note to Physician: ANTIDOTE** – No specific antidote is available. Treat symptomatically. Published data indicate vitamin E acetate can prevent and/or mitigate symptoms of paresthesia caused by synthetic pyrethroids. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

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EPA EST. NO. 34704-MS-002  
NET CONTENTS 1.0 GAL (3.78 L)**

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**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**WARNING.** Causes substantial but temporary eye injury. Do not get in eyes, skin or on clothing. Wear protective eyewear such as goggles, face shield or safety glasses. Harmful if swallowed or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

Do not contaminate feed or food. Keep out of reach of children.

**Personal Protective Equipment (PPE):**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants,
- Chemical-resistant gloves, such as barrier laminate or viton. If you want more options, follow the instructions for category G on an EPA chemical-resistance category selection chart.
- Shoes plus socks
- Protective eyewear
- **Mixers/loaders supporting aerial applications and chemigation applications must wear also** (except when using closed mixing/loading systems): A NIOSH approved particulate respirator, with any N, R, or P filter with NIOSH approval number prefix TC-84A.

Discard clothing and other absorbent materials that have been contaminated with this product. 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.

**Engineering Controls Statements**

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 in the WPS.

**USER SAFETY RECOMMENDATIONS**

User 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 pesticide is extremely toxic to fish and aquatic invertebrates. **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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are foraging treatment area. Additional information may be obtained by consulting your Cooperative Extension Service.

**OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.**

## **BUFFER ZONES**

### **Vegetative Buffer Strip**

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing cyfluthrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers:

*Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp.*

[http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs143\\_023819.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_023819.pdf)

### **Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)**

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### **Buffer Zone for ULV Aerial Application**

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### **Buffer Zone for Non-ULV Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

## **SPRAY DRIFT REQUIREMENTS**

### **Wind Direction and Speed**

Only apply this product if the wind direction favors on-target deposition.

Do not apply when the wind velocity exceeds 15 mph.

### **Temperature Inversion**

Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

### **Droplet Size**

Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

### **Additional Requirements for Ground Applications**

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

### **Additional Requirements for Aerial Applications**

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

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When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

**RUNOFF MANAGEMENT**

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area. Do not apply if soil is saturated with water. Do not apply under conditions that favor drift from runoff. Do not apply in the rain.

**Insect Resistance Statement**

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or State agricultural authorities for details. If resistance to this product develops in your area, this product alone may not continue to provide adequate control of resistant pests. If poor performance cannot be attributed to improper application, extreme weather conditions, etc., a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor/state Extension agent for the best alternative method of control in your area. Consult your state Cooperative Extension Service agent or agricultural advisor for insect resistance management strategies and recommended insect control methods in your area.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

**DIRECTIONS FOR USE**

**Restricted Use Pesticide**

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 exemptions 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 viton,
- Shoes plus socks, and
- Protective eyewear.

**Tombstone™ Helios® may be used for control of a broad spectrum of insect pests by contact action. Because of this contact activity, good spray coverage of the crop is needed for the highest level of control.**

## **APPLICATION RECOMMENDATIONS**

**For all insects, timing of application should be based on careful scouting and local economic thresholds.**

### **Foliar Spray Application**

Foliar applications may be made using properly calibrated ground sprayers, fixed- or rotary-winged aircraft or through properly designed, sprinkler-type, chemigation equipment (See Chemigation Application directions below). Thorough and uniform coverage of plants, with direct contact of the spray mixture to the target pests, is required for satisfactory control.

Avoid application procedures where thorough coverage of plant is not possible. Applications made with less than thorough coverage may result in slower activity and/or less overall control from a single application than an application made with higher gallonages. See general, Spray Drift Reduction Management, section below for application guidelines on minimizing drift from all application methods.

**Ground applications** should be made in a minimum of 10.0 gallons per acre unless specified otherwise in crop-specific recommended application section.

**Aerial applications** should be made in a minimum of 2.0 gallons per acre, unless specified otherwise in crop-specific recommended application section; however 5.0 gallons per acre are recommended. See crop specific gallonage requirements. Aerial applications made to dense canopies may not provide sufficient coverage of lower leaves to provide pest control. Higher labeled rates of Tombstone Helios may be necessary for aerial applications.

**Chemigation applications** (See Chemigation Application directions below) should be made as concentrated as possible. For best results apply at 100% input/travel speed, for center pivots or 0.10 inch (2,716 gallons) up to 0.15 inch (4,073 gallons) of water per acre, for other systems. Higher labeled rates of Tombstone Helios may be necessary for chemigation applications.

### **Chemigation Application**

**Types of Irrigation Systems:** Tombstone Helios may be applied through sprinkler type irrigation systems, only. These types include; center pivot, lateral move, or solid set irrigation systems. Do not apply Tombstone Helios through any other type of irrigation system.

**Injection for Chemigation:** Inject the specified dosage of Tombstone Helios into the irrigation main, water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in main stream flow such that thorough mixing with the irrigation water is ensured.

**Uniform Water Distribution and System Calibration:** The irrigation system must provide uniform distribution of Tombstone Helios treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in or on the crop can result from non-uniform distribution. The system must be calibrated to uniformly distribute the rates specified for chemigation application to specific crops. If you have questions about calibration, contact your Cooperative Extension Service agent, equipment manufacturers, or other experts.

**Chemigation Monitoring:** A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Required Injection and Sprinkler System Safety Devices:** The system must contain a functional check valve, vacuum relief valve, and low pressure drain, appropriately located on the irrigation pipeline to prevent water source contamination from back-flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline

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must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor/engine stops, or in cases where there is no water pump, when water pressure decreases to the point where pesticide distribution is adversely affected. Injection systems must use a metering pump or equivalent, such as a positive displacement injection pump (e.g., diaphragm pump, venturi injection) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**Using Water from Public Water Systems:** Public water system means a system for the provision to the public of piped water for human consumption; if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**Chemical Supply Tank Dilution and Agitation:** For injection of Tombstone Helios use a chemical supply tank for pre-mixing Tombstone Helios with either, water or non-emulsifiable oil before injecting mixture into the irrigation line. Dilution ratio should be at least 4 parts of either water/or non-emulsifiable oil, to 1 part Tombstone Helios. If necessary, constant mechanical or hydraulic agitation should be maintained in the chemical supply tank during the entire period of application. Determine the required amounts of Tombstone Helios and either water or non-emulsifiable oil, to mix in the tank. The amount of Tombstone Helios needed equals the number of fluid ounces of Tombstone Helios to be applied per acre multiplied by the number of acres to be chemigated. The amount of emulsion needed equals the gallons of emulsion delivered per hour by the injection pump, multiplied by the number of hours chemigation will take place. The amount of either water or non-emulsifiable oil needed equals the amount of emulsion needed minus the amount of Tombstone Helios needed.

**Posting Requirements:** Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

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All words shall consist of letters at least 2-1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

**Cleaning the Chemical Injection System:** In order to apply pesticides accurately, the chemical injection system must be kept clean; free from chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

**Flushing the Irrigation System:** At the end of the application period, allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

**Center-Pivot and Automatic-Move Linear Systems:** Inject the specified dosage per acre continuously for one complete revolution (center pivot) or move of the system. The system should be run at maximum speed. It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices be plugged to prevent chemical contamination of these areas. The use of END GUNS is NOT recommended. End guns that provide uneven distribution of treated water can result in crop injury, lack of effectiveness, or illegal pesticide residues in or on the crop.

**Solid Set and Manually Controlled Linear Systems:** Injection should be during the last 30 to 60 minutes of a regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation.

**CROP ROTATION STATEMENT**

Treated areas may be replanted with any crop as soon as practical after last application.

**MAXIMUM USAGE WHEN APPLYING BOTH CYFLUTHRIN AND BETA-CYFLUTHRIN PRODUCTS TO THE SAME CROP WITHIN THE SAME SEASON:**

Do not apply more than the maximum seasonal total for each product when used alone, and do not apply more than the combined maximum seasonal total for both products as outlined in the table below.

Crop	Maximum Seasonal Total for Either Product Used Alone (lbs AI/A)		Maximum Seasonal Total When Applying Both Products to the Same Crop (lbs AI/A)
	beta-cyfluthrin*	cyfluthrin**	beta-cyfluthrin* Plus cyfluthrin**
Alfalfa	0.175	0.35	0.35
Corn (field, pop, seed)	0.088	0.175	0.175
Cotton	0.25	0.5	0.5
Grasses	0.089	0.176	0.176
Peanut	0.066	0.131	0.131
Sorghum	0.066	0.131	0.131
Soybean	0.088	0.175	0.175
Sugarcane	0.132	0.263	0.263
Sunflower	0.066	0.131	0.131
Tobacco	0.0022	0.0044	0.0044
Wheat	0.038	0.076	0.076
Brassica (Cole) Leafy Vegetables, CG 5	0.1	0.2	0.2

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<b>Crop</b>	<b>Maximum Seasonal Total for Either Product Used Alone (lbs AI/A)</b>		<b>Maximum Seasonal Total When Applying Both Products to the Same Crop (lbs AI/A)</b>
	<b>beta-cyfluthrin*</b>	<b>cyfluthrin**</b>	<b>beta-cyfluthrin* Plus cyfluthrin**</b>
Cucurbits, CG 9	0.088	0.175	0.175
Fruiting vegetables, CG 8	0.132	0.263	0.263
Leafy vegetables, CG 4	0.1	0.2	0.2
Dried Shelled Legume Vegetables, CSG 6C	0.05	0.1	0.1
Pea, Southern	0.083	0.165	0.165
Potato, and other tuberous & corm vegetables, CSG 1C	0.132	0.263	0.263
Carrot and Radish	0.11	0.22	0.22
Sweet corn	0.22	0.44	0.44
Citrus, CG 10	0.05	0.1	0.1
Grape	0.1	0.2	0.2
Hops	0.125	0.25	0.25
Pome fruit, CG 11	0.022	0.044	0.044
Stone fruit, CG 12	0.044	0.088	0.088
Tree nut crops, CG 14	0.022	0.044	0.044

\* Products such as BAYTHROID® XL.

\*\*Any cyfluthrin product approved for crop use.

### FIELD CROPS

#### **Recommended Applications – Tombstone Helios**

For all crops, apply specific dosage of Tombstone Helios at early threshold for target pest, as population begins to develop. Degree of control or suppression of additional labeled pests will be determined, in part by the stage of pest development at application and infestation level of those pests.

Application timing should be based on local economic thresholds. Tombstone Helios may be applied before, during, or after planting. Use the higher rates for moderate to heavy insect pressure. Lower rates are generally adequate for low to moderate insect pressure but require careful scouting and may require more frequent application.

Tombstone Helios is an Emulsifiable Concentrate formulation and is active by contact and ingestion. Thorough coverage is necessary for optimum performance.

See application recommendations at the beginning of each section: **FIELD CROPS; VEGETABLE CROPS; TREE and VINE CROPS.**



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**ALFALFA**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Alfalfa looper	0.8 to 1.6	0.013 to 0.025
Army cutworms		
Cutworms		
Green cloverworm		
Meadow spittlebug		
Potato leafhopper		
Alfalfa caterpillar	1.6 to 2.8	0.025 to 0.044
Alfalfa plant bug		
Alfalfa webworm		
Alfalfa weevil		
Armyworm (1st and 2nd instar)		
Aster leafhopper		
Beet armyworm (1st and 2nd instar)		
Corn earworm		
Corn rootworms (adult)		
Cucumber beetle (adult)		
Egyptian alfalfa weevil		
Fall armyworm (1st and 2nd instar)		
Grape colaspis (adult)		
Japanese beetle (adult)		
June beetle (adult)		
Loopers		
Lygus bug		
Mexican bean beetle		
Stink bugs		
Tarnished plant bug		
Threecornered alfalfa hopper		
Velvetbean caterpillar		
Yellowstriped armyworm (1st and 2nd instar)		
Blotch leafminer	2.0 to 2.8	0.031 to 0.044
Grasshoppers		
Western yellowstriped armyworm (1st and 2nd instar)		
<b>Pests Suppressed</b>		
Blue pea aphid	2.8	0.044
Cowpea aphid		
Pea aphid		
Whitefly (adult)		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI) / Pre-Grazing Interval: **7 days.**

Maximum Tombstone Helios allowed per cutting: **5.6 fluid ounces per acre (0.088 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **22.4 fluid ounces per acre (0.35 pounds active ingredient per acre).**

Make applications as necessary but no closer than a 5-day interval.

For applications to mixed-stands of ALFALFA with GRASSES intentionally grown for forage or hay, please see the section of this label entitled: GRASS - Pasture / Rangeland / Grass for Seed / Grass for Hay / Grass in mixed-stands with Alfalfa. Carefully observe the restrictions and use directions associated with both crops. Due to potential injury to bees, do not apply to alfalfa grown for seed.

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**CORN - FOLIAR APPLICATIONS**

**Field Corn, Popcorn, Seed Corn (see Sweet Corn recommendations in Vegetable Crops Section)**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Black cutworm	0.8 to 1.6	0.013 to 0.025
Flea beetles		
Granulate cutworm		
Sand hill cutworm		
Armyworm (1st and 2nd instar)	1.6 to 2.8	0.025 to 0.044
Bean leaf beetle		
Cereal leaf beetle		
Chinch bug		
Click beetle (adult)		
Corn earworm		
Corn rootworms (adult)		
European corn borer*		
Grape colapsis (adult)		
Japanese beetle (adult)		
June beetle (adult)		
Leafhoppers		
Masked chafer (adult)		
Southern armyworm (1st and 2nd instar)		
Southern corn leaf beetle		
Southwestern corn borer*		
Stalk borer		
Stink bugs		
Webworm		
Western bean cutworm		
Yellowstriped armyworm (1st and 2nd instar)		
Grasshoppers	2.1 to 2.8	0.033 to 0.044
Fall armyworm (1st and 2nd instar)	2.8	0.044

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): For grain or fodder **21 days**; Green forage may be fed **0 days** after last application.  
 Maximum Tombstone Helios allowed per 7-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **11.2 fluid ounces per acre (0.175 pounds active ingredient per acre).**

Maximum number of application per season: **4.** *Three* applications may be applied up to early dent stage. One application may be made between early dent and 21 days before harvest.

Minimum ULV application volume (once refined cotton seed/vegetable oil): **1.0 quart per acre – aerial application.**

\*Application must be made prior to the larva boring into the plant.

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**CORN - SOIL APPLICATIONS**  
**Field Corn, Popcorn, Seed Corn**

<b>Pests Controlled</b>	<b>Rate</b> fl oz/1000 row ft	<b>Rate**</b> fl oz/A (based on 30 inch row spacing)
Seedcorn maggot Wireworm	0.12 to 0.16	2.0 to 2.8
<b>Pest Suppressed</b>		
White grub	0.14 to 0.16	2.5 to 2.8

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): For grain or fodder **21 days**; Green forage may be fed **0 days** after last application. Maximum Tombstone Helios allowed at planting: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**.

Maximum Tombstone Helios allowed per crop season: **11.2 fluid ounces per acre (0.175 pounds active ingredient per acre)**.

**APPLICATION INSTRUCTIONS:**

**Carrier:** Tombstone Helios may be applied in water or in liquid pop-up fertilizer at planting. Apply in a **minimum of 2.0 gallons per acre** of total mix volume when applied in water. Good agitation must be maintained at all times during application.

**Instruction for liquid pop-up fertilizer application:** Perform a compatibility test prior to mixing the entire tank to ensure that Tombstone Helios will remain in solution while applying. Take a known amount of the fertilizer to be used as a carrier and place in a glass jar. Add the appropriate amount of Tombstone Helios based on the labeled use rate. Add other components to be tank mixed. Gently agitate the solution. Examine the solution for signs of incompatibility such as flocculation, precipitation, separation, etc. If incompatibility occurs contact your local Loveland Products Inc. representative for additional information.

Fertilizers containing zinc have been shown to be incompatible with Tombstone Helios and should not be mixed with Tombstone Helios.

**Placement:** Apply total mix volume in the open furrow ahead of the closing wheels for optimum coverage.

**\*\*Row width adjustment:** The above rate calculations are based on a standard 30 inch row spacing. For row spacing of less than 30 inches, adjust the rate of Tombstone Helios not to exceed **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**. Diminished control may occur when rates are decreased below the recommended minimum rates per 1000 row feet.

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**COTTON**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cotton leafperforator	0.8 to 1.6	0.013 to 0.025
Cotton leafworm		
Cutworms		
Thrips		
Boll weevil	1.6 to 2.6	0.025 to 0.041
Cabbage looper		
Cotton aphid		
Cotton bollworm*		
Cotton fleahopper		
Cucumber beetle		
European corn borer		
Flea beetles		
Garden webworm		
Lygus bug*		
Pink bollworm		
Saltmarsh caterpillar		
Southern garden leafhopper		
Stink bugs		
Tarnished plant bug*		
Threecornered alfalfa hopper		
Tobacco budworm*		
<b>Ovicidal Control:</b>		
Cotton bollworm and tobacco budworm		
Grasshopper	2.0 to 2.8	0.031 to 0.044
Beet armyworm (1st and 2nd instar)	3.2	0.05
Cotton leafminer		
Fall armyworm (1st and 2nd instar)		
Soybean looper		
Yellowstriped armyworm		
<b>Pest Suppressed</b>		
Whitefly (adult)	3.2	0.05

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day.**

Maximum Tombstone Helios allowed per 3-day interval: **3.2 fluid ounces per acre (0.05 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **32.0 fluid ounces per acre (0.5 pounds active ingredient per acre).**

Minimum ULV application volume (once refined cotton seed/vegetable oil): **1.0 quart per acre – aerial application.**

Do not graze treated fields.

Do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season.

\*See INSECT RESISTANCE statement elsewhere on this label.

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**GRASS**

**Pasture / Rangeland / Grass for Seed / Grass for Hay / Grass in mixed-stands with Alfalfa**

<b>PESTS CONTROLLED</b>	<b>Rate fl oz/A</b>	<b>Rate lb AI/A</b>
Armyworms (1st and 2nd instar)	1.6 to 1.9	0.025 to 0.03
Grass thrips		
Grasshoppers	2.6 to 2.8	0.040 to 0.044

**Notes and Restrictions: Grass for Pasture, Rangeland and Grass for Seed**

Pre-Grazing Interval: **0 day** (minimum time between last application and beginning of foraging or seed harvest).  
 Maximum Tombstone Helios allowed per 5-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**.

Maximum Tombstone Helios allowed per crop season: **11.3 fluid ounces per acre (0.176 pounds active ingredient per acre)**.

**Notes and Restrictions: Grass for Hay**

Pre-Harvest Interval (PHI): **0 day** (minimum time between last application and baling for harvest).

Maximum Tombstone Helios allowed per 5-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**.

Maximum Tombstone Helios allowed per cutting: **11.3 fluid ounces per acre (0.176 pounds active ingredient per acre)**.

**Notes and Restrictions: Grass in mixed-stands with Alfalfa**

See additional PESTS CONTROLLED from ALFALFA section of label.

Pre-Harvest Interval (PHI) / Pre-Grazing Interval: **7 days** (minimum time between last application and beginning of foraging or baling).

Maximum Tombstone Helios allowed per cutting: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**.

Maximum Tombstone Helios allowed per crop season: **11.3 fluid ounces per acre (0.176 pounds active ingredient per acre)**.

**PEANUT**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	1.0 to 1.8	0.016 to 0.028
Green cloverworm		
Potato leafhopper		
Rednecked peanutworm		
Velvetbean caterpillar		
Armyworm (1st and 2nd instar)	1.8 to 2.4	0.028 to 0.038
Bean leaf beetle		
Corn earworm		
Corn rootworms (adult)		
Grape colaspis (adult)		
Grasshoppers		
Japanese beetle (adult)		
June beetle (adult)		
Stink bugs		
Threecornered alfalfa hopper		
Vegetable weevil		
Beet armyworm (1st and 2nd instar)	2.4 to 2.8	0.038 to 0.044
Fall armyworm (1st and 2nd instar)		
Southern armyworm (1st and 2nd instar)		
Whitefringed beetle (adult)		

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**PEANUT CONT'D**

<b>Pests Suppressed</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Soybean looper	2.8	0.044
Thrips		
Whitefly (adult)		

**Notes and Restrictions:** Pre-Harvest Interval (PHI): **14 days (minimum time between final application and threshing for seed).**

Maximum Tombstone Helios allowed per 10 day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **8.4 fluid ounces per acre (0.131 pounds active ingredient per acre)**

Minimum ULV application volume (once refined cotton seed/vegetable oil): **1.0 quart per acre - aerial application.**

**SORGHUM**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	1.0 to 1.3	0.016 to 0.020
Sorghum midge		
Armyworm (1st and 2nd instar)	1.3 to 2.8	0.020 to 0.044
Beet armyworm (1st and 2nd instar)		
Black woollybear		
European corn borer*		
Fall armyworm (1st and 2nd instar)		
False chinch bug		
Flea beetle		
Sorghum headworm (corn earworm)		
Sorghum webworm		
Southern armyworm (1st and 2nd instar)		
Southwestern corn borer*		
Stalk borer*		
Stink bugs		
True armyworm (1st and 2nd instar)		
Webworms		
Yellowstriped armyworm (1st and 2nd instar)		
Chinch bug	2.0 to 2.8	0.038 to 0.044
Grasshoppers		
Sugarcane rootstock weevil		

**Notes and Restrictions:** Pre-Harvest Interval (PHI): **14 days.**

If more than 5.6 fluid ounces per acre is applied, allow at least 14 days between last application and grazing.

Maximum Tombstone Helios allowed per 10-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **8.4 fluid ounces per acre (0.131 pounds active ingredient per acre).**

Minimum ULV application volume (once refined cotton seed/vegetable oil): **1.0 quart per acre – aerial application.**

\*Application must be made prior to the larva boring into the plant.

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**SOYBEAN**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Bean leaf beetle (growth stage VC – V2)	0.8 to 1.6	0.013 to 0.025
Cutworms		
Potato leafhopper		
Thrips		
Green cloverworm		
Armyworm	1.6 to 2.8	0.025 to 0.044
Bean leaf beetle		
Bean leaf webber		
Beet armyworm (1st and 2nd instar)		
Blister beetle		
Cabbage looper		
Click beetle (adult)		
Corn earworm		
Corn rootworms (adult)		
Cucumber beetle		
European corn borer		
Fall armyworm (1st and 2nd instar)		
Grape colaspis (adult)		
Japanese beetle (adult)		
June beetle (adult)		
Lygus bug		
Masked chafer (adult)		
Mexican bean beetle		
Saltmarsh caterpillar		
Silverspotted skipper		
Southern armyworm (1st and 2nd instar)		
Stink bugs		
Tarnished plant bug*		
Threecornered alfalfa hopper		
Tobacco budworm*		
Velvetbean caterpillar		
Webworm		
Woollybear caterpillar		
Yellowstriped armyworm		
Grasshoppers	2.0 to 2.8	0.031 to 0.044
Soybean aphid		
<b>Pests Suppressed</b>		
Lesser cornstalk borer	2.8	0.044
Soybean looper*		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI) or feeding of dry vines: **45 days**. Green forage may be fed **15 days** after last application.

Maximum Tombstone Helios allowed per 7-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **11.2 fluid ounces per acre (0.175 pounds active ingredient per acre)**.

Minimum ULV application volume (once refined cotton seed/vegetable oil): **1.0 quart per acre – aerial application**.

\*See INSECT RESISTANCE statement elsewhere on this label.

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**SUGARCANE**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Sugarcane borer*	2.1	0.033
Rice stalk borer*	2.8	0.044

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **15 days**

Maximum Tombstone Helios allowed per 7-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **16.8 fluid ounces per acre (0.263 pounds active ingredient per acre).**

For ground application, apply in a minimum of 20.0 gallons per acre.

Minimum ULV application volume (once refined cotton seed/vegetable oil): **1.0 quart per acre – aerial application.**

Do not apply if soil is saturated with water.

Do not apply when under conditions that favor runoff.

Do not apply in the rain.

\*Application must be made prior to the larva boring into the plant.

**SUNFLOWER**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.8 to 1.6	0.013 to 0.025
Sunflower beetle		
Sunflower stem weevil (adult)	1.6 to 2.4	0.025 to 0.038
Banded sunflower moth	2.0 to 2.8	0.031 to 0.044
Grasshoppers		
Stink bugs		
Sunflower bud moth		
Sunflower headclipping weevil		
Sunflower midge		
Sunflower moth		
Sunflower seed weevil		
Palestriped flea beetle	2.8	0.044

**Notes and Restrictions:**

Pre-Harvest Interval (PHI) and Pre-grazing or Foraging interval: **30 days.**

Maximum Tombstone Helios allowed per 7-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **8.4 fluid ounces per acre (0.131 pounds active ingredient per acre).**

**DO NOT apply by ULV.**

**TOBACCO**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.28	0.0044

**Notes and Restrictions:**

Apply up to 7 days following transplanting as an individual plant treatment.

Maximum Tombstone Helios allowed per crop season: **0.28 fluid ounces per acre (0.0044 pounds active ingredient per acre).**

Maximum number of applications : **1.**

Minimum application volume (water): **15.0 gallons per acre - ground**



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**WHEAT**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Army cutworm	1.0 to 1.8	0.016 to 0.028
Cereal leaf beetle		
Cutworms		
Armyworm (1st and 2nd instar)	1.8 to 2.4	0.028 to 0.038
Bird cherry-oat aphid*		
English grain aphid*		
Fall armyworm (1st and 2nd instar)		
Flea beetles		
Grasshoppers		
Grass sawfly		
Pale western cutworm		
Russian wheat aphid*		
Southern armyworm (1st and 2nd instar)		
Stink bugs		
Yellowstriped armyworm (1st and 2nd instar)		
Chinch bug	2.4	0.038

**Notes and Restrictions:**

Pre-Grazing or Foraging Interval: **3 days**. Pre-Harvest Interval (PHI): **30 days**.

Maximum Tombstone Helios allowed per 3-day interval: **2.4 fluid ounces per acre (0.038 pounds active ingredient per acre)**.

Maximum Tombstone Helios allowed per crop season: **4.8 fluid ounces per acre (0.076 pounds active ingredient per acre)**.

Minimum ULV application volume (cotton seed/vegetable oil); **1.0 quart per acre - aerial application**.

\*For best control, applications must be made prior to insects damaging the plants. Use the higher rate range and increased water volume for applications occurring after plant damage has taken place or following booting in order to receive better coverage. Once damage occurs or plant growth stage reaches booting, control may be limited to suppression only.

**VEGETABLE CROPS**

**Recommended Applications - Tombstone Helios**

For all crops, apply specific dosage of Tombstone Helios at early threshold for target pest, as population begins to develop. Degree of control or suppression of additional labeled pests will be determined, in part by the stage of pest development at application and infestation level of those pests.

Application timing should be based on local economic thresholds. Tombstone Helios may be applied before, during, or after planting. Use the higher rates for moderate to heavy insect pressure. Lower rates are generally adequate for low to moderate insect pressure but require careful scouting and may require more frequent application.

Tombstone Helios is an Emulsifiable Concentrate formulation and is active by contact and ingestion. Thorough coverage is necessary for optimum performance.

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**BRASSICA (COLE) LEAFY VEGETABLES**

**Includes all members of Crop Group 5: Broccoli, Broccoli raab (rapini)\*\*, Chinese (gai lon) broccoli, Brussels sprouts, Cabbage, Chinese (bok choy) cabbage\*\*, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Cauliflower, Cavalo broccolo, Collards\*\*, Kale\*\*, Kohlrabi, Mizuna\*\*, Mustard greens, Mustard spinach\*\*, Rape greens\*\*, and Turnip greens.**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.8 to 1.6	0.013 to 0.025
Potato leafhopper		
Thrips		
Alfalfa looper	1.6 to 2.4	0.025 to 0.038
Cabbage looper		
Cabbage webworm		
Imported cabbageworm		
Southern cabbageworm		
Armyworm	2.4 to 3.2	0.038 to 0.05
Beet armyworm (1st and 2nd instar)		
Cabbage flea beetle		
Corn earworm		
Diamondback moth (larvae)*		
Fall armyworm (1st and 2nd instar)		
Grasshoppers		
Japanese beetle (adult)		
Lygus bug		
Meadow spittlebug		
Southern armyworm (1st and 2nd instar)		
Stink bugs		
Tarnished plant bug*		
Vegetable weevil (adult)	2.4 to 3.2	0.038 to 0.05
Yellowstriped armyworm		
<b>Pest Suppressed</b>		
Whitefly (adult)	3.2	0.05

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day.**

Maximum Tombstone Helios allowed per 7-day interval: **3.2 fluid ounces per acre (0.05 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **12.8 fluid ounces per acre (0.2 pounds active ingredient per acre).**

For aerial applications, apply in a minimum of 5.0 gallons per acre.

Due to potential injury to bees, do not apply to cole crops grown for seed.

\*See INSECT RESISTANCE statement elsewhere on this label.

\*\* Use not permitted in CA.

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**CUCURBITS (except crops grown for seed)**

**Includes all members of Crop Group 9: Balsam apple, Balsam pear, Bitter melon, Chayote, Chinese cucumber, Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Edible gourd (includes: hyotan, cucuzza, henchmia and Chinese okra), Muskmelon (includes: cantaloupe, true cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon), Pumpkin, Summer squash (includes: crookneck squash, scallop squash, straightneck squash, vegetable marrow, and zucchini), Watermelon, Winter squash (includes: butternut squash, calabaza, hubbard squash, acorn squash and spaghetti squash)**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.8 to 1.6	0.013 to 0.025
Potato leafhopper		
Armyworm (1st and 2nd instar)	1.6 to 2.4	0.025 to 0.038
Cabbage looper		
Corn earworm		
Grasshoppers		
Melonworm		
Pickleworm		
Rindworm		
Stink bugs		
Cucumber beetle	2.4 to 2.8	0.038 to 0.044
Lygus bug		
Stripped cucumber beetle		
Tarnished plant bug*		
Tobacco budworm		
<b>Pest Suppressed</b>		
Whitefly (adult)	2.8	0.044

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day.**

Maximum Tombstone Helios allowed per 7-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **11.2 fluid ounces per acre (0.175 pounds active ingredient per acre)**

\*See INSECT RESISTANCE statement elsewhere in this label.

**FRUITING VEGETABLES**

**Includes all members of Crop Group 8: Eggplant, Groundcherry, Pepino, Pepper (includes: bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, and Tomato**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Celery leaf-tier	1.6 to 2.8	0.025 to 0.044
Colorado potato beetle*		
European corn borer		
Garden webworm		
Potato aphid		
Potato leafhopper		
Stink bugs		
Tomato fruitworm (corn earworm)		
Tomato hornworm		

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**FRUITING VEGETABLES CONT'D**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Beet armyworm (1st and 2nd instar)	2.1 to 2.8	0.033 to 0.044
Cabbage looper		
Southern armyworm (1st and 2nd instar)		
Tarnished plant bug*		
Thrips (except <i>Thrips palmi</i> )		
Tomato pinworm		
Variegated cutworm		
Western yellowstriped armyworm (1st and 2nd instar)		
Flea beetles	2.8	0.044
Garden symphylan**		
<b>Pests Suppressed</b>		
Leafminers	2.8	0.044
Pepper weevil		
Whitefly (adult)		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI) for tomato: **0 days**. PHI for all other fruiting vegetables included in this section: **7 days**.

Maximum Tombstone Helios allowed per 7-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **16.8 fluid ounces per acre (0.263 pounds active ingredient per acre)**

For reduction of damage caused by garden symphylan. Apply specified dosage to the top of the planting beds prior to transplanting. Spray should cover the entire top of the beds. Thoroughly incorporate to a depth of approximately 4 to 6 inches. A maximum of 1 pre-transplant application is allowed per crop season.

\* See INSECT RESISTANCE statement elsewhere on this label.

\*\* Except California

**LEAFY VEGETABLES**

**Includes all members of Crop Group 4: Amaranth (Chinese spinach), Arugula (roquette), Cardoon, Celery, Chinese celery, Celtuce, Chervil, Chrysanthemum (edible-leaved and garland), Corn salad, Cress (garden and upland), Dandelion, Dock (sorrel), Endive (escarole), Florence fennel, Lettuce (head and leaf), New Zealand spinach, Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach, Swiss chard, Vine spinach**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.8 to 1.6	0.013 to 0.025
Potato leafhopper		
Thrips		
Alfalfa looper	1.6 to 2.4	0.025 to 0.038
Cabbage looper		
Green cloverworm		
Imported cabbageworm		
Saltmarsh caterpillar		

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**LEAFY VEGETABLES CONT'D**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Beet armyworm (1st and 2nd instar)	2.4 to 3.2	0.038 to 0.05
Corn earworm		
Diamondback moth (larvae)*		
European corn borer		
Fall armyworm (1st and 2nd instar)		
Flea beetles		
Grasshoppers		
Japanese beetle (adult)		
Leafhoppers		
Lygus bug		
Meadow spittlebug		
Southern armyworm (1st and 2nd instar)		
Stink bugs		
Tarnished plant bug*		
Vegetable weevil (adult)		
Yellowstriped armyworm		

**Pest Suppressed**

Whitefly (adult)	3.2	0.05
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**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day.**

Maximum Tombstone Helios allowed per 7-day interval: **3.2 fluid ounces per acre (0.05 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **12.8 fluid ounces per acre (0.2 pounds active ingredient per acre).**

Minimum application volume (water): **10.0 gallons per acre – ground, 5.0 gallons per acre – aerial application.**

Due to potential injury to bees, do not apply to crops grown for seed.

\*See INSECT RESISTANCE statement elsewhere on this label.

**DRIED SHELLLED LEGUME VEGETABLES** Includes all members of Crop Subgroup 6C: Adzuki bean, Blackeyed pea, Broad bean, Catjang, Chickpea, Cowpea, Crowder pea, Field bean, Field pea, Garbanzo bean, Guar, Kidney bean, Lablab bean, Lentil, Lima bean, Lupin (grain, sweet, white and white sweet), Moth bean, Mung bean, Navy bean, Pigeon pea, Pinto bean, Rice bean, Tepary bean, Urd bean

(Southern pea included in separate section.)

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.8 to 1.6	0.013 to 0.025
Potato leafhopper		
Cowpea curculio*	1.6 to 2.4	0.025 to 0.038
Stink bugs		
Tarnished plant bug*		

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***DRIED SHELLLED LEGUME VEGETABLES CONT'D***

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Bean leaf beetle	2.4 to 3.2	0.038 to 0.05
Bean leaf webber		
Beet armyworm (1st and 2nd instar)		
Blister Beetle		
Cabbage looper		
Corn earworm		
Cucumber beetle		
European corn borer		
Fall armyworm (1st and 2nd instar)		
Grasshoppers		
Green cloverworm		
Japanese beetle (adult)		
Lygus bug		
Mexican bean beetle		
Pea leaf weevil		
Pea weevil		
Saltmarsh caterpillar		
Silverspotted skipper		
Soybean looper*		
Threecornered alfalfa hopper		
Tobacco budworm*		
Velvetbean caterpillar		
Webworm		
Woollybear caterpillar		
Yellowstriped armyworm (1st and 2nd instar)		
<b>Pest Suppressed</b>		
Pea aphid	3.2	0.05

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **7 days** (minimum time between final application and threshing for seed).

Maximum Tombstone Helios allowed per 14-day interval: **3.2 fluid ounces per acre (0.05 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **6.4 fluid ounces per acre (0.1 pounds active ingredient per acre).**

Minimum application volume (water): **10.0 gallons per acre – ground, 5.0 gallons per acre – aerial application.**

For aerial applications, apply in a minimum of 5.0 gallons per acre.

Do not feed treated vines or hay to livestock.

\*See INSECT RESISTANCE statement elsewhere on this label.

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**PEA, SOUTHERN**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.8 to 1.6	0.013 to 0.025
Potato leafhopper		
Beet armyworm (1st and 2nd instar)	1.6 to 2.1	0.025 to 0.033
Fall armyworm (1st and 2nd instar)		
Corn earworm		
Cowpea curculio		
Grasshoppers		
Lygus bug		
Stink bugs		
Southern armyworm (1st and 2nd instar)		
Tarnished plant bug*		
Thrips		
Yellowstriped armyworm (1st and 2nd instar)		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **3 day.**

Maximum Tombstone Helios allowed per 5-day interval: **2.1 fluid ounces per acre (0.033 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **10.5 fluid ounces per acre (0.165 pounds active ingredient per acre).**

Due to potential injury to bees, do not apply to southern peas grown for seed.

Do not feed treated vines or hay to livestock.

Do not apply to cowpea or southern pea varieties grown for livestock feed.

\*See INSECT RESISTANCE statement elsewhere on this label.

**POTATO, SWEET POTATO and other tuberous and corm vegetables:**

**Includes all members of Crop Subgroup 1C: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Edible canna, Cassava (bitter and sweet), Chayote root, Chufa, Dasheen, Ginger, Leren, Potato, Sweet potato, Tanier, True yam, Turmeric, Yam bean**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Cutworms	0.8 to 1.6	0.013 to 0.025
Potato leafhopper		
Cabbage looper	1.6 to 2.8	0.025 to 0.044
Colorado potato beetle*		
European corn borer		
Potato flea beetles		
Potato psyllid		
Potato tuberworm		
Sweet potato weevil (adult)		
Tarnished plant bug*		
<b>Pest Suppressed</b>		
Aphids	2.8	0.044

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day**

If more than 5.6 fluid ounces per acre is applied, allow at least 14 days between last application and grazing.

Maximum Tombstone Helios allowed per 5-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **16.8 fluid ounces per acre (0.263 pounds active ingredient per acre).**

\*See INSECT RESISTANCE statement elsewhere on this label.

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**CARROT and RADISH**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Aster leafhopper	1.6 to 2.8	0.025 to 0.044
Cutworms		
Flea Beetle		
Potato leafhopper		
Carrot weevil	2.8	0.044

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day**.

Maximum Tombstone Helios allowed per 7-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **14.0 fluid ounces per acre (0.22 pounds active ingredient per acre)**

Do not harvest radish tops (leaves) for human consumption.

Due to potential injury to bees, do not apply to any of the crops listed in this section grown for seed.

**SWEET CORN - Foliar Applications**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Black cutworm	0.8 to 1.6	0.013 to 0.025
Flea beetles		
Granulate cutworm		
Sand hill cutworm		
Armyworm (1st and 2nd instar)	1.6 to 2.8	0.025 to 0.044
Bean leaf beetle		
Cereal leaf beetle		
Chinch bug		
Click beetle (adult)		
Corn earworm		
Corn rootworms (adult)		
Corn silk fly		
European corn borer*		
Grape colaspis (adult)		
Japanese beetle (adult)		
June beetle (adult)		
Leafhoppers		
Masked chafer (adult)		
Southern armyworm (1st and 2nd instar)		
Southern corn leaf beetle		
Southwestern corn borer*		
Stalk borer*		
Stink bugs		
Webworm		
Western bean cutworm		
Yellowstriped armyworm (1st and 2nd instar)		
Grasshoppers	2.0 to 2.8	0.031 to 0.044
Fall armyworm (1st and 2nd instar)	2.8	0.044

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day**

Maximum Tombstone Helios allowed per 2-day interval: **2.8 fluid ounces per acre (0.044) pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **28.0 fluid ounces per acre (0.44 pounds active ingredient per acre).**

Minimum ULV application volume (once refined cotton seed/vegetable oil): **1.0 quart per acre – aerial application.**



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\* Application must be made prior to the larva boring into the plant.

**SWEET CORN – Soil Applications\*\***

<b>PESTS CONTROLLED</b>	<b>RATE fl oz/ 1000 row-ft</b>	<b>RATE fl oz/A</b>
Seed corn maggot Wireworm	0.12 to 0.16	2.0 to 2.8
<b>PEST SUPPRESSED</b>		
White grub	0.14 to 0.16	2.5 to 2.8

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day.**

Maximum Tombstone Helios allowed at planting: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre).**

**Application Instructions:** Tombstone Helios may be applied in water or in liquid, pop-up fertilizer at planting. Apply in a minimum of 2.0 gallons per acre of total mix volume when applied in water. Good agitation must be maintained at all times during application.

**Instructions For liquid Pop-Up Fertilizer Application:** Perform a compatibility test prior to mixing the entire tank to ensure that Tombstone Helios will remain in solution while applying. Take a known amount of the fertilizer to be used as a carrier and place in a glass jar. Add the appropriate amount of Tombstone Helios based on the labeled use rate. Add other components to be tank mixed. Gently agitate the solution. Examine the solution for signs of incompatibility such as flocculation, precipitation, separation, etc. If incompatibility occurs, contact your local representative of Loveland Products for additional information. Fertilizers containing zinc have been shown to be incompatible with Tombstone Helios.

**Placement:** Apply total mix volume in the open furrow ahead of the closing wheels for optimum coverage.

\*\*Use not permitted in California.

**TREE and VINE CROPS**

**Recommended Applications – Tombstone Helios**

For all crops, apply specific dosage of Tombstone Helios at early threshold for target pest, as population begins to develop. Degree of control or suppression of additional labeled pests will be determined, in part by the stage of pest development at application and infestation level of those pests.

Application rates within this label are based on full-size mature trees and vines. Application timing should be based on careful scouting and local economic thresholds. Use the higher rates for moderate to heavy insect pressure. Lower rates are generally adequate for smaller trees/vines or low to moderate insect pressure but require careful scouting and may require more frequent application.

Tombstone Helios is an Emulsifiable Concentrate (EC) formulation and is active by contact and ingestion. Thorough coverage of foliage and fruit is necessary for optimum performance.

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**CITRUS (California and Arizona, Only)**

**Includes all members of Crop Group 10:**

**Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sweet and sour), Pummelo, Satsuma mandarin, Tangelo, White sapote, and other cultivars and/or hybrids of these.**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Glassywinged sharpshooter	1.6 to 3.2	0.025 to 0.05
Foliar feeding cutworms	2.4 to 3.2	0.038 to 0.05
Fuller rose beetle (larvae and adults on foliage)		
Grasshoppers		
Root-weevil complex (larvae and adults on foliage)		
Citrus thrips	6.4	0.1
Katydid		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **0 day.**

Maximum Tombstone Helios allowed per 7-day interval: **6.4 fluid ounces per acre (0.1 pounds active ingredient per acre).**

Maximum Tombstone Helios allowed per crop season: **6.4 fluid ounces per acre (0.1 pounds active ingredient per acre).**

Minimum application volume (water): **25.0 gallons per acre – ground, 25.0 gallons per acre – aerial application.**

**GRAPE**

**Includes: Table grape, Raisin, Wine and Muscadine grape**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Glassywinged sharpshooter	1.6 to 3.2	0.025 to 0.05
Grape leaf skeletonizer		
Western grape skeletonizer		
Climbing cutworm	2.4 to 3.2	0.038 to 0.05
Grape berry moth		
Grape bud beetle		
Grape cane gallmaker (adult)		
Grape flea beetle		
Grape leaf folder		
Grape leafhopper		
Grape leafroller		
Grape mealybug (crawlers)		
Omnivorous leafroller		
Orange tortrix		
Thrips		
Variiegated leafhopper		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **3 days.**

Maximum Tombstone Helios allowed per 14-day interval: **3.2 fluid ounces per acre (0.05 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **12.8 fluid ounces per acre (0.2 pounds active ingredient per acre)**

Minimum application volume (water): 50.0 gallons per acre - ground; 25.0 gallons per acre - aerial application.

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**HOP**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Hop aphid	3.2	0.05
Hop flea beetle		
Hop looper		
Hop plant bug		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **7 days**

Maximum Tombstone Helios allowed per 14-day interval: **3.2 fluid ounces per acre (0.05 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **16.0 fluid ounces per acre (0.25 pounds active ingredient per acre)**

Minimum application volume (water): **25.0 gallons per acre - ground; 25.0 gallons per acre - aerial application.**

**POME FRUIT**

**Includes all members of Crop Group 11: Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental pear, Quince**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Green fruitworm	1.4 to 2.0	0.022 to 0.031
Potato leafhopper		
White apple leafhopper		
Codling moth	2.0 to 2.4	0.031 to 0.038
Oriental fruit moth		
Spotted tentiform leafminer		
Stink bugs		
Tarnished plant bug		
Western tentiform leafminer		
Apple leafroller	2.4 to 2.8	0.038 to 0.044
Apple maggot		
Ermine moth		
European apple sawfly		
Lesser appleworm		
Obliquebanded leafroller		
Pandemis leafroller		
Pear sawfly (larvae = pear slug)		
Periodical cicada		
Plum curculio		
Redbanded leafroller		
San Jose scale (crawlers)		
Tufted apple bud moth		
Variiegated leafroller		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **7 days**

Maximum Tombstone Helios allowed per 14-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Minimum application volume (water): **100 gallons per acre - ground application; 25.0 gallons per acre - aerial application.**

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**STONE FRUIT**

**Includes all members of Crop Group 12: Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum (includes chickasaw plum, damson plum, and Japanese plum), Plumcot, Prune (fresh and dried)**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Green fruitworm	1.4 to 2.0	0.022 to 0.031
Lesser peach tree borer		
White apple leafhopper		
Codling moth	2.0 to 2.4	0.031 to 0.038
Lygus bug		
Oriental fruit moth		
Stink bugs		
Tarnished plant bug		
American plum borer	2.4 to 2.8	0.038 to 0.044
Black cherry aphid		
Cherry fruit fly		
Obliquebanded leafroller		
Omnivorous leafroller		
Peach twig borer		
Periodical cicada		
Plum curculio		
Redbanded leafroller		
Western cherry fruit fly		

**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **7 days.**

Maximum Tombstone Helios allowed per 14-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **5.6 fluid ounces per acre (0.088 pounds active ingredient per acre)**

Minimum application volume (water): **50.0 gallons per acre - ground application; 25.0 gallons per acre - aerial application.**

**TREE NUT CROPS**

**Includes all members of Crop Group 14: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)**

<b>Pests Controlled</b>	<b>Rate fl oz/A</b>	<b>Rate lbs AI/A</b>
Potato leafhopper	1.4 to 2.0	0.022 to 0.031
White apple leafhopper		
Ants (on foliage)	2.0 to 2.4	0.031 to 0.038
Codling moth		
Common earwig		
Filbertworm		
Leaffooted bug		
Navel orangeworm		
Pecan nut casebearer		
Pecan weevil		
Stink bugs		
Tarnished plant bug		
Twolined spittlebug		
Hickory shuckworm	2.4 to 2.8	0.038 to 0.044
Obliquebanded leafroller		
Peach twig borer		
Walnut husk fly		

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**Notes and Restrictions:**

Pre-Harvest Interval (PHI): **14 days**

Maximum Tombstone Helios allowed per 14-day interval: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Maximum Tombstone Helios allowed per crop season: **2.8 fluid ounces per acre (0.044 pounds active ingredient per acre)**

Minimum application volume (water): **100 gallons per acre - ground application; 25.0 gallons per acre - aerial application.**

**RATE CONVERSION CHART**

<b>FL OZ/A</b>	<b>LBS AI/A</b>	<b>A/GAL</b>
0.8	0.013	160
1.0	0.016	128
1.2	0.019	107
1.4	0.022	91
1.6	0.025	80
1.8	0.028	71
2.0	0.031	64
2.2	0.034	56
2.4	0.038	53
2.6	0.041	49
2.8	0.044	46
3.0	0.047	43
3.2	0.05	40
6.4	0.1	20

**RATE CONVERSION CHART FOR TREE AND VINE APPLICATIONS**

<b>FL OZ/A</b>	<b>FL OZ/100 GAL OF WATER WHEN USING SPRAY VOLUME OF:</b>						
	<b>25.0 GPA</b>	<b>50.0 GPA</b>	<b>100 GPA</b>	<b>150 GPA</b>	<b>200 GPA</b>	<b>250 GPA</b>	<b>500 GPA</b>
1.4	5.6	2.8	1.4	0.9	0.7	0.56	0.28
1.6	6.4	3.2	1.6	1.1	0.8	0.64	0.32
2.0	8.0	4.0	2.0	1.3	1.0	0.8	0.4
2.4	9.6	4.8	2.4	1.6	1.2	1.0	0.5
2.8	11.2	5.6	2.8	1.9	1.4	1.1	0.6
3.2	12.8	6.4	3.2	2.1	1.6	1.3	0.65
6.4	25.6	12.8	6.4	4.3	3.2	2.6	1.3

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry place and away from open flame and extreme heat. Store in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle open container in a manner as to prevent spillage. If container is leaking, invert container to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

**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 HANDLING:

**Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at [www.acrecycle.org](http://www.acrecycle.org). If not recycled, then 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.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**For packages up to 5 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**For packages greater than 5 gallons or 50 lbs: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

***Storage & Disposal cont'd.:***

**For square bottom caged totes greater than 55 gals.: Triple rinse or pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue drain for 10 seconds after the flow begins to drip. Fill the container about 1/4 full with water, rinsing down all sides inside the container thoroughly. Recirculate water with the pump for 2 minutes. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**For refillable containers:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.**

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

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Helios is a registered trademark and Tombstone is a trademark of Loveland Products, Inc.

SPECIMEN

**FORMULATED FOR**  
**LOVELAND PRODUCTS, INC.**  
**P.O. BOX 1286, GREELEY, COLORADO 80632-1286**