

10163-56

3/11/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Shauna Weaver
Gowan Company
P.O. Box 5569
Yuma, AZ 85366

MAR 11 2014

Subject: Label submission in response to agency initiated action to add pollinator Environmental Hazards text
Gowan Dimethoate E267
EPA Registration No. 10163-56

Dear Ms. Weaver:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit one copy of your final printed labeling before you release the product for shipment. If you have any questions regarding this label, please contact Dr. Jennifer Urbanski at 703-347-0156 or urbanski.jennifer@epa.gov.

Sincerely yours,

A handwritten signature in black ink that reads "Venus Eagle".

Venus Eagle
Product Manager (01)
Insecticide-Rodenticide Branch
Registration Division (7505P)

Enclosure- Stamped Label

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GOWAN DIMETHOATE E267

Active Ingredient:

Dimethoate: O,O-dimethyl S-[(methylcarbamoyl)methyl] phosphorodithioate 31.5%

Other Ingredients 68.5%

TOTAL 100.0%

Contains 2.67 lbs. dimethoate per gallon
Contains 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 ORGANOPHOSPHATE	
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce vomiting unless told to by a 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 eye. • 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 by 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	
This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING-AVISO

May be fatal or harmful if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eyes, on skin, or on clothing.

NET CONTENTS _____ GALLON(S)

EPA Reg. No. 10163-56
EPA Est. No.

ACCEPTED

MAR 11 2014



Produced For:
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for the
pesticide registered under:

EPA Reg. No: 10163-56

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, and viton. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart.

Mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves,
- Protective eyewear: goggles or safety glasses,
- a NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approved number prefix TC-21C or a NIOSH-approved respirator with any R, P, or HE filter, and
- Chemical-resistant apron when mixing, loading, cleaning up spills, or equipment.

See Engineering Controls for additional requirements and exceptions.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

Mixers and loaders supporting aerial application to alfalfa, cotton, soybeans, corn, safflower, sorghum, and wheat must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)]. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to no more than 2 ml per disconnect. In addition, mixer loaders must:

- Wear the personal protective equipment required on this labeling for mixer/loaders, except no respirator is required;
- Wear protective eyewear, if the system operates under pressure; and
- Be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown, chemical-resistant footwear and a respirator of the type specified in the PPE section of this labeling.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(6)]. Pilots need not wear the PPE required in this labeling for applicators, but must wear at least a long-sleeved shirt, long pants, shoes and socks.

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)(4-5)), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife and aquatic invertebrates. This product is highly toxic to bees and other pollinators exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are foraging in the treatment area.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Dimethoate is known to leach through soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several days after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product.

A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted within 48 hours.

A vegetative filter strip constructed and maintained in accordance with the 2000 Natural Resources Conservation Service publication "Conservation Buffers to Reduce Pesticide Losses" (<http://pesticidestewardship.org/drift/Documents/Conservbuffers.pdf>) will significantly reduce the potential for contamination of water from rainfall-runoff.

PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use, pour, spill or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This product is for use in commercial setting only. Use in residential settings is prohibited. 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).

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 worn over long-sleeve shirt and long pants,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant footwear plus socks, and
- Chemical-resistant headgear (if overhead exposure).

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

PHYTOTOXICITY STATEMENT

As is common with most emulsifiable concentrate formulations, adverse effects such as spotting or discoloration of the fruit or foliage can occur. Some conditions known to contribute to phytotoxicity include, but are not limited to: high temperatures, poor spray drying conditions, excessive spray deposit or runoff, certain spray mixtures, stage of crop development or tank mixes with other pesticides.

RESISTANCE MANAGEMENT STATEMENT

Based on historical use patterns in some areas, certain pest species listed on this label may have developed resistance to GOWAN DIMETHOATE E267. Consult your local agriculture advisor, State Cooperative Extension Service or regional Gowan Company representative for recommendations. This product may be applied by ground concentrate or dilute equipment or by air. See DILUTION DIRECTIONS for water rates.

DILUTION DIRECTIONS

The rate required for thorough, uniform coverage varies with plant growth at time of application. The following rates are therefore intended to cover a broad range of conditions.

Dilute Application

Field and Vegetable Crops: Apply specified rate in 20 to 75 gallons of water per acre.

Fruits and Nuts: Apply specified rate in 100 to 800 gallons of water per acre.

For citrus, use up to 2,000 gallons of water per acre.

Concentrate Application

Field and Vegetable Crops: Apply specified rate in not less than 5 gallons of water per acre.

Fruits and Nuts: Apply specified rate in 20 to 100 gallons of water per acre. These applications require special concentrate equipment.

Air Application

Field and Vegetable Crops: Apply specified rate in a minimum of 1 gallon of water per acre.

Fruits and Nuts: Apply specified rate in a minimum of 5 gallons of water per acre.

Do not apply when weather conditions favor drift of spray from areas treated. Repeat applications as necessary unless otherwise specified. Consult your State experiment station or extension service for proper timing of applications.

High Pressure Handwand Equipment

When applications are made by high pressure handwand equipment, the maximum application rate for all crops and use-patterns is 0.0025 pounds active ingredient per gallon.

REQUIREMENTS FOR REDUCING SPRAY DRIFT

Do not apply under circumstances where possible drift to unprotected persons or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use, or consumption can occur.

1. Use the largest droplet size consistent with acceptable efficacy. Formulation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure. For groundboom and aerial applications, use medium or coarser spray nozzles according to ASAE 572 definition for standard nozzles or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles.
2. Make aerial or ground applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is less than or equal to 10 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
3. Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
4. Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.
5. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
6. For groundboom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.
7. 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.
8. For aerial applications, release spray at the lowest height consistent with efficacy and flight safety. If the application includes an aquatic buffer zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.
9. For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of the wingspan or 90% of rotor blade diameter. Use upwind swath displacement.

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PREHARVEST INTERVAL

The required days between the last application and harvest are given in () after each crop name.

FRUIT CROPS			
CROP	PEST	PINTS/ 100 GAL. WATER	COMMENTS
PEARS (28)	Aphids, Leafhoppers, Mites (except rust mites), Pear Psylla	¾ to 1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A) Maximum total rate per year: 1½ pts formulated product (0.5 lb a.i./A). Retreatment interval is 14 days. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.
			<ul style="list-style-type: none"> Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Do not graze livestock in treated orchards.
CHERRIES (Sweet and Tart) (21)	Aphids, Cherry Fruit Flies, Mites	1½ - 4	Maximum single application rate: 4 pts formulated product (1.33 lbs a.i./A). Maximum total rate per year: 4 pts formulated product (1.33 lb a.i./A). The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.
			<ul style="list-style-type: none"> Based on available residue data, use of this product on cherries is restricted to Oregon. Do not apply when trees or substantial numbers of weeds in the treatment area are in bloom. Do not graze livestock in treated orchards.
CITRUS (Grapefruit, Lemons, Oranges and Tangerines) (15)	Aphids	¾ - 1½	Use in dilute ground application as an outside coverage spray.
	Mites (except Rust Mites), Citrus Psyllid	¾ - 1½	Use as a thorough distribution coverage spray.
	Scales (except Black or Snow)	1½ - 2¼	Use as a thorough coverage spray.
	Thrips	¾ - 1½	Use as a mist spray.
	Whiteflies	1½	Use as a thorough distribution coverage spray.
			<ul style="list-style-type: none"> Maximum application rate: 3 pts formulated product (1 lb a.i./A). Maximum total rate per year: 3 pts formulated product (1 lb a.i./A). The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.
NONBEARING CITRUS AND NURSERY STOCK (California and Arizona)	Thrips, Aphids	1½	Use as a foliar spray. Repeat applications as necessary. Soil Drench (trees 1-3 years old) - Use 3 qts. per acre applied in the furrow or basin around the base of the tree. Apply when insect injury to new growth appears. Consult your State Agricultural Experiment Station or State Agricultural Extension Service for proper timing of applications.
			<ul style="list-style-type: none"> Do not apply soil drench to trees which will bear fruit within one year. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Do not use on citrus seedlings. Make no more than 2 applications to mature fruit. Do not graze livestock in treated orchards.

NUT CROPS

CROP	PEST	PINTS/ ACRE	COMMENTS
PECANS (21)	Aphids, Mites, Leafhoppers	1	Maximum single application rate: 1 pt formulated product (0.33 lbs a.i./A). Maximum total rate per year: 1 pt. formulated product (0.33 lb a.i./A). The REI is 48 hours.
			<ul style="list-style-type: none"> Do not graze livestock in treated groves.

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VEGETABLE CROPS

CROP	PEST	PINTS/ACRE	COMMENTS
ASPARAGUS (Except California and Arizona) (180)	Aphids, Asparagus Beetles	1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per season: 3 pts formulated product (1 lb a.i./A). Retreatment interval is 14 days. The REI is 48 hours.
BEANS (Including fresh, snap, lima, and dry beans, but excluding cowpeas) (0)	Aphids, Leafhoppers, Leafminers, Mites, Lygus Bugs	¾ - 1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per season: 3 pts formulated product (1 lb a.i./A). Retreatment interval is 14 days. The REI is 48 hours.
	<ul style="list-style-type: none"> Do not feed treated vines. This pesticide is highly toxic to bees. Do not apply if bees are visiting the areas to be treated when the crop or weeds are in bloom. 		
BROCCOLI, CAULIFLOWER (7)	Aphids	¾ - 1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 4½ pts formulated product (1.5 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours; however, the REI is increased to 72 hours in outdoor areas where the average annual rainfall is less than 25 inches per year.
BRUSSELS SPROUTS (For use in California ONLY) (10)	Aphids	1½	Apply in a minimum of 100 gals. of water by ground equipment only. Apply when insects first appear and repeat as needed. Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 4½ pts formulated product (1.5 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours; however, the REI is increased to 72 hours in outdoor areas where the average annual rainfall is less than 25 inches per year.
	<ul style="list-style-type: none"> Do not feed or graze livestock in treated fields. Do not apply by air. 		
CELERY (For use in Florida ONLY) (7)	Leafminers	1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 4½ pts formulated product (1.5 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours
LEAF LETTUCE, SWISS CHARD, ENDIVE (Escarole) (14)	Aphids, Leafhoppers, Leafminers, Mites	¾	Maximum single application rate: ¾ pts formulated product (0.25 lbs a.i./A). Maximum total rate per year: 2.25 pts formulated product (0.75 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours
KALE (14)	Aphids, Leafhoppers, Leafminers, Mites	¾	Maximum single application rate: ¾ pts formulated product (0.25 lbs a.i./A). Maximum total rate per year: 1½ pts formulated product (0.5 lb a.i./A). Retreatment interval is 15 days. The REI is 48 hours
TURNIP (Green and Roots) (14)	Aphids, Leafhoppers, Leafminers, Mites	¾	Maximum single application rate: ¾ pts formulated product (0.25 lbs a.i./A). Maximum total rate per year: 5.25 pts formulated product (1.75 lb a.i./A). Retreatment interval is 3 days. The REI is 48 hours.
MUSTARD GREENS (14)	Aphids, Leafhoppers, Leafminers, Mites	¾	Maximum single application rate: ¾ pts formulated product (0.25 lbs a.i./A). Maximum total rate per year: 1½ pts formulated product (0.5 lb a.i./A). Retreatment interval is 9 days. The REI is 48 hours
LENTILS (0)	Aphids,	¾	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 3 pts formulated product (1.0 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours
	Lygus bugs	1½	
<ul style="list-style-type: none"> Do not feed or graze hay or treated vines. This pesticide is highly toxic to bees. Do not apply if bees are visiting the areas to be treated when the crop or weeds are in bloom. 			
MELONS (3)	Aphids, Leafhoppers, Leafminers	1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 3 pts formulated product (1.0 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours
PEAS (0)	Aphids	½	Maximum single application rate: ½ pt formulated product (0.16 lbs a.i./A). Maximum total rate per year: ½ pt formulated product (0.16 lb a.i./A). The REI is 48 hours.
	<ul style="list-style-type: none"> Do not feed or graze hay within 21 days after last application when stationary viner is used. Do not feed or graze when a mobile viner is used. This pesticide is highly toxic to bees. Do not apply if bees are visiting the areas to be treated when the crop or weeds are in bloom. Not for use on field peas. 		
PEPPERS (0)	Aphids, Leafminers, Maggots	¾ - 1	Maximum single application rate: 1 pt formulated product (0.33 lbs a.i./A). Maximum total rate per year: 5 pts formulated product (1.65 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours.
POTATOES (0)	Aphids, Leafminers, Leafhoppers	¾ - 1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 3 pts formulated product (1.0 lb a.i./A). Retreatment interval is 7 days.

			The REI is 48 hours
TOMATOES (7)	Aphids, Leafminers, Leafhoppers	¾ - 1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 3 pts formulated product (1 lb a.i./A). Retreatment interval is 6 days. The REI is 48 hours.
WATERMELONS (3)	Aphids, Leafminers, Leafhoppers, Mites	¾ - 1½	Maximum single application rate: 1½ pts formulated product (0.5 lbs a.i./A). Maximum total rate per year: 3 pts formulated product (1.0 lb a.i./A). Retreatment interval is 7 days. The REI is 48 hours

Where cabbage worms and cabbage loopers are a problem, the above rates of GOWAN DIMETHOATE E267 are compatible with endosulfan or malathion. Use in accordance with the manufacturer's directions for control of these insects.

FIELD CROPS

CROP	PEST	PINTS/ACRE	COMMENTS
FIELD CORN & POPCORN (14)	Banks Grass Mites (excluding Trans-Pecos area of Texas), Aphids, Bean Beetle, Corn Rootworm Adult	1 - 1½	Maximum single application rate: 1½ pts formulated product per acre (0.5 lbs a.i./A). Maximum total rate per crop cycle or cutting: 1½ pts formulated product per acre (0.5 lbs a.i./A). The REI is 48 hours.
	<ul style="list-style-type: none"> • PROHIBITION: Workers are prohibited from entering the treated area to perform detasseling tasks for 4 days in nonarid areas and for 15 days in outdoor areas where the average annual rainfall is less than 25 inches per year. • Do not feed or graze within 14 days of last application • Do not apply to corn during pollen-shed period. 		
COTTON (For use in Arizona and California ONLY) (14)	Lygus Bugs, Fleahoppers, Black Fleahoppers	¾ - 1½	Repeat applications should not be made at intervals closer than 14 days. Make only 2 applications per year at higher rate - 1.5 pts per acre (0.5 lbs a.i./acre/application). The REI is 48 hours.
<ul style="list-style-type: none"> • Do not feed treated forage or graze livestock on treated fields. 			
COTTON (Except Arizona and California) (14 when water is used for dilution; 40 when once refined vegetable oil is used for dilution)	Aphids, Mites, Thrips, Fleahoppers	1/3 - 2/3	Maximum single application rate: 1½ pts per acre (0.5 lbs a.i./A). Maximum total rate per year: 3 pts per acre (1 lb a.i./A). Retreatment interval is 14 days. REI is 48 hours.
	Plant Bugs	2/3	For Water Dilution: Repeat applications should not be made at intervals closer than 14 days. For Once Refined Vegetable Oil Dilution: Repeat applications should not be made at intervals closer than 40 days. Make only one application per year at higher rate. Apply at least 1 qt. of finished spray per acre.
<ul style="list-style-type: none"> • Do not feed treated forage or graze livestock on treated fields. 			
SAFFLOWER (For use in Arizona and California ONLY) (14)	Aphids, Leafhoppers, Lygus Bugs, Thrips	1½	Maximum single application rate: 1½ pts per acre (0.5 lbs a.i./A). Maximum total rate per crop cycle or cutting: 1½ pts per acre (0.5 lbs a.i./A).
<ul style="list-style-type: none"> • Do not feed treated forage or graze livestock in treated fields. • Do not make more than 2 applications per year. • The REI is 48 hours. 			
SORGHUM (Milo) (28)	Aphids	1/3 - 1½	Maximum single application rate: 1½ pts per acre (0.5 lbs a.i./A).
	Banks Grass Mite (excluding Trans-Pecos area of Texas), Spider Mites, Grasshoppers	1½	Maximum total rate per year: 3 pts per acre (1 lb a.i./A). Reapplication interval is 7 days. REI is 48 hours.
	Sorghum Midge	1/3 - 2/3	
	<ul style="list-style-type: none"> • Do not make more than 3 applications per year. • Do not feed or graze within 28 days of last application. • Do not apply after heading. 		
SOYBEANS (21)	Mexican Bean Beetle, Spider Mites, Bean Leaf Beetle, Leafhoppers, Three Cornered Alfalfa Hopper, Grasshoppers	1½	Maximum single application rate: 1½ pts per acre (0.5 lbs a.i./A). Maximum total rate per year: 3 pts per acre (1 lb a.i./A). Reapplication interval is 7 days. REI is 48 hours.
<ul style="list-style-type: none"> • Do not feed or graze within 5 days of last application. 			
WHEAT (60)	Aphids	¾ to 1	Maximum single application rate: 1 pt per acre (0.33 lbs a.i./A).
	Brown Wheat Mite	1/3 - 2/3	Maximum total rate per crop cycle or cutting: 1 pt per acre (0.33 lbs a.i./A)
	Grasshoppers	1	
<ul style="list-style-type: none"> • Do not apply within 14 days of grazing immature plant. • Do not apply more than twice per year. • The REI is 48 hours. 			

SEED CROPS

Do not use on seed onions, seed carrots, or seed bermuda grass.

CROP	PEST	PINTS/ACRE	COMMENTS
ALFALFA (Grown for Seed or Hay) (10)	Aphids, Leafhoppers, Lygus Bugs, Grasshoppers, Reduction of Alfalfa Weevil Larvae	¾ - 1½	Maximum single application rate: 1½ pts per acre (0.5 lbs a.i./A). Maximum total rate per crop cycle or cutting: 1 ½ pts per acre (0.5 lbs a.i./A). REI is 48 hours.
	<ul style="list-style-type: none"> Do not feed or graze livestock on treated crop, hay threshings or stubble within 10 days of application. This pesticide is highly toxic to bees. Do not apply if bees are visiting the areas to be treated when the crop or weeds are in bloom. 		
GRASS (Grown for Seed) (For use in Idaho, Oregon, and Washington ONLY) (14)	Aphids, Plant bugs, Thrips, Winter Grain Mites	¾ - 1½	Apply in a minimum of 2 gallons of water per acre. Maximum single application rate: 1½ pts formulated product per acre (0.5 lbs a.i./A). Maximum total rate per year: 3 pts formulated product per acre (1.0 lbs a.i./A).
	<ul style="list-style-type: none"> The REI is 48 hours. Do not graze or use seed screenings for livestock feed or food purposes. 		

OTHER USES

CROP	PEST	RATE/ACRE	COMMENTS
HYBRID POPLARS (Cottonwoods), OTHER TREES GROWN FOR PULP) (For use in Washington, Oregon, and Idaho ONLY)	Leaf Beetle	1 1/3 - 6 pts.	Maximum application rate: 6 pts per acre (2 lbs a.i./A) Maximum total rate per year: 18 pts per acre (6 lbs a.i./A). Apply in 10 gals. of water per acre by aerial or dripline application. The REI is 14 days; however, the REI is increased to 24 days in outdoor areas where the average annual rainfall is less than 25 inches per year. Refer to section entitled DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH USES) section for additional application instructions.

SHADE AND ORNAMENTAL TREES

Before treating a large number of ornamental plants with GOWAN DIMETHOATE E267 alone or as a tank mixture with any other material, make a test application on a few plants and observe for 7 - 10 days prior to treating large areas to reduce the possibility of plant injury.

Do not use on ornamental plants growing in greenhouses, Christmas tree and conifer plantations, landscapes, interiorscapes and residential, public, recreational, commercial, industrial and institutional establishments.

Maximum application rate: 48 ozs formulated product (1.0 lbs a.i./A). Maximum total rate per year: 144 oz formulated product (3.0 lbs a.i./A).

Retreatment interval is 14 days. When applications are made by high pressure handwand equipment, the maximum application rate for all crops and use-patterns is 0.0025 lbs a.i./gallon. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average rainfall is less than 25 inches per year.

CROP	PEST	OZS./6 GALS. WATER	COMMENTS
ARBORVITAE	Aphids, Bagworms, Mites	3	Use as a foliar spray.
BIRCH	Aphids, Leafminers	¾	Use as a foliar spray. For leafminers, apply when leaves are expanded (about mid-May) and repeat in early July.
BOXWOOD	Leafminers, Mealy Bugs, Mites	1½	Use as a foliar spray. For leafminers, apply in spring when leafminer flies first appear or in early summer to control larvae in infested leaves.
CEDAR	Mites	3	Use as a foliar spray.
FICUS NITIDA (Outdoor)	Thrips	1½	Use as a foliar spray.
	<ul style="list-style-type: none"> Do not use on potted plants. 		
HEMLOCK	Mites, Scales	1½	Use as a foliar spray.
JUNIPER	Aphids, Bagworms, Midges, Mites	3	Use as a foliar spray.
OAK	Golden Oak Scale	3	Use as a foliar spray.
PINE	Aphids, Bagworms, European Pine Shoot Moth, Nantucket Pine Tip Moth, Zimmerman Pine Moth	3	Use as a foliar spray.
	Fletcher Scale, Mealy Bugs, Mites	3	Use as a foliar spray.

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ORNAMENTAL PLANTS

Before treating a large number of ornamental plants with GOWAN DIMETHOATE E267 alone or as a tank mixture with any other material, make a test application on a few plants and observe for 7 - 10 days prior to treating large areas to reduce the possibility of plant injury. Do not use on ornamental plants growing in greenhouses, Christmas tree and conifer plantations, landscapes, interiorscapes and residential, public, recreational, commercial, industrial and institutional establishments.

Maximum application rate: 12 ozs formulated product (0.25 lbs a.i./A). Maximum total rate per year: 12 oz formulated product (0.25 lbs a.i./A). The REI is 48 hours.

CROP	PEST	OZS./ 6 GALS. WATER	COMMENTS
AZALEAS (Outdoor)	Lace Bugs, Leafminers, Mites, Tea Scale, Whiteflies	1½	Use as a foliar spray.
CAMELLIA	Aphids, Camellia Scale, Tea Scale, Mites	1½	Use as a foliar spray. Apply 2 sprays, 6 weeks apart the first year followed by annual applications soon after first growth begins in the spring. Soil Drench: Apply as a soil drench around the base of plants in early spring at the rate of 2 ozs. per gallon of water per plant up to 6 ft. tall. Increase the rate proportionately for larger plants.
CARNATIONS	Aphids, Thrips, Mites	1½	Use as a foliar spray. Soil Drench: Apply as a soil drench at the rate of 4 ozs. per 500 sq. ft. of bed or bench (10 qts. per acre) in sufficient water for even distribution. Water in thoroughly after application.
CYPERUS	Bactra Moth Larvae	1½	Use as a drenching spray.
DAY LILIES	Aphids, Thrips	3	Use as a foliar spray.
IRIS	Aphids, Iris Borer, Thrips	3	Use as a foliar spray. For borer control, spray when new leaves are 5 - 6 inches tall.
POINSETTIAS (Outdoor)	Mites, Whiteflies, Mealy Bugs, Aphids	1½	Use as a foliar spray.
HOLLY, English and American (not Buford variety)	Leafminers, Mites, Soft Scale	1½	Use as a foliar spray. For leafminers, apply in spring when leafminer flies first appear or in early summer for control of larvae in the infested leaves.
ROSE (outdoor)	Aphids, Leafhoppers, Mites, Thrips	1½	Use as a foliar spray. For commercial fields: Use 1 pt. per acre in 5 - 10 gals. water by air or 1 pt. per acre in 100 gals. water by ground application.

**APPLICATION THROUGH IRRIGATION SYSTEMS
CHEMIGATION**

Apply this product only through sprinkler, including center pivot, lateral move, end tow side (wheel) roll, traveler, big gun, solid set, or hand move, flood (basin) furrow, border, or drip trickle irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

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.

Mix in clean supply tank the recommended amount of this product for acreage to be covered, and needed quantity of water.

This product should not be tank-mixed with other pesticides, surfactants or fertilizers unless prior use has shown the combination noninjurious under your conditions of use. Follow precautionary statements and directions for all tank-mix products.

On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem and stage of crop growth. Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury or illegal pesticide residues.

Meter this product into the irrigation water uniformly during the period of operation. Do not overlap application. Follow recommended label rates, application timing, and other directions and precautions for crop being treated. Continuous mild agitation of pesticide mixture may be needed to assure a uniform application, particularly if the supply tank requires a number of hours to empty.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water systems 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, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a 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 the 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 pump.

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 automatically or manually shutdown.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPRINKLER CHEMIGATION (FOLIAR SPRAY USES)

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 backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain 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 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. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor 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.

FLOOD (BASIN) FURROW AND BORDER CHEMIGATION (SOIL DRENCH USES)

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a. 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 backflow.
- b. The pesticide injection pipeline must contain a functional automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- c. The pesticide injection pipeline 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 automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. 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.

DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH USES)

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 backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pipe and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is 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. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor 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.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place. Do not use, pour, spill or store near heat or open flame.

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 or refill this container. Triple rinse (or equivalent) promptly after emptying. 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 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State or local authorities, by burning. If burned, stay out of smoke.

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.



