66222 - 247

82014

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION



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

April 8, 2014

Laura Phelps Makhteshim Agan of North America, Inc. 3120 Highwoods Blvd# 100 Raleigh, NC 27604

Subject:

Amendment: Add Strawberries Use SkyRaider EPA Reg. No. 66222-247 Your Submission Dated January 10, 2014

Dear Ms. Phelps:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable. A stamped copy of the label is enclosed for your records.

If you have any questions regarding this action, please contact BeWanda Alexander at <u>Alexander.bewanda@epa.gov</u> or (703) 305-7460.

Sincerely, anda Ulufander Sor

Richard Gebken Product Manager Team 10 Insecticide Branch Registration Division (7505P)

Enclosure

RESTRICTED USE PESTICIDE

TOXIC 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.

SKYRAIDER

ACTIVE INGREDIENT:

% BY WT.

04/8/2014

Under the Federal Insecticide, Fungicide

and Rodenticide Act as amended, for the

66222-247

pesticide registered under

EPA Reg. No.

EPA Est. No.

Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,	
3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropanecarboxylate*	21.65%
Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	10.80%
OTHER INGREDIENTS:	<u>67.55%</u>
TOTAL:	100.00%
*CIS isomers 97% minimum, trans isomers 3% maximum.	

This product contains 2 lb. active Bifenthrin and 1 lb. active Imidacloprid per gallon.

KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

This label must be in the possession of the user at the time of application. Si usted no entiende la etiqueta, busque a alguien para que se a explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See other panels for additional precautionary information.

Manufactured for: Makhteshim Agan of North America, Inc. 3120 Highwoods Blvd., Suite 100 Raleigh, NC 27604

How can we help? 1-866-406-MANA (6262).

EPA Reg. No. 66222-247

NET CONTENTS:

	FIRST AID
IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquids to the person. Do not give anything by mouth to an unconscious person.
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Have the 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: This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING. May be fatal if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thorough with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instruction for Category E on the EPA Chemical resistance category section chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Protective eyewear,
- Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton, and
- Shoes plus socks.

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

USER SAFETY RECOMMENDATIONS

Users 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.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water.

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 make applications 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/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds while bees are foraging in or adjacent to the treatment area.

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county, contact the local extension service for procedures and precautions to use to protect endangered species.

The chemical imidacloprid demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

PROTECTION OF POLLINATORS

APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- o Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx. Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: besticide.nego

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near oxidizing agents.

DIRECTIONS FOR USE

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

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed crops and commercially grown ornamentals that are attractive to pollinators:



1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met:

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



2. FOR FOOD/FEED CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

•The application is made to the target site after sunset

•The application is made to the target site when temperatures are below 55°F

•The application is made in accordance with a government-initiated public health response

•The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying

•The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

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Do not apply this product in a way that it will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. **Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 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 over long-sleeved shirt and long pants;
- · Chemical-resistant gloves such as Barrier Laminate or Neoprene Rubber or Viton;
- · Shoes plus socks; and
- Protective eyewear.

RESISTANCE MANAGEMENT

Some insects are known to develop resistance to products with the same chemical class used repeatedly for control. SKYRAIDER contains Group 3 and Group 4A insecticides. Although pest resistance cannot be predicted, a general rule to reduce the onset of resistance in pest species to SKYRAIDER is not to consecutively and repeatedly apply Group 3 and/or Group 4A insecticides during a growing season for control of a particular pest target. Consult your local or state agricultural authorities or your Makhteshim Agan of North America (MANA) representative for more specific details on insect resistance management strategies.

The Group 4A active ingredient in SKYRAIDER is a member of the neonicotinoid chemical group. Avoid using a block of more than three consecutive applications of SKYRAIDER and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, MANA strongly encourages the rotation to a block of applications with effective products of different mode

before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with IPM practices, is considered an effective use strategy for preventing or delaying an insect's ability to develop resistance to this class of chemistry.

Foliar applications of SKYRAIDER or other Group 4A products from the neonicotinoid chemical class must not be used on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme

weather conditions, a resistant strain of insect(s) may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your

local MANA company representative or agricultural advisor for the best alternative method of control for your area.

Application Instructions:

Rate of application is variable according to pest pressure, timing of sprays, and field scouting. Use lower listed rates under light to moderate infestations; higher listed rates under heavy insect pressures. Arid climates generally require higher listed rates.

Use adequate spray volumes, properly calibrated application equipment and spray adjuvant if necessary to obtain thorough coverage. Adjuvants may help optimize deposition, penetration, and translocation, use 0.25% v/v of VADER. Other adjuvants must be used at 0.25 to 0.50% v/v.

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip. In New York State, this product may not be applied within 100 feet (using ground equipment) or 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

ROTATIONAL CROPS

Plant back restrictions are determined by the crop. Crops that have tolerances for both bifenthrin and imidacloprid may be rotated at any time. Crops with tolerances for bifenthrin and not imidacloprid can be rotated 12 months following the final application of SKYRAIDER. Crops that have tolerances for imidacloprid and not bifenthrin may be rotated 30 days following the final application of SKYRAIDER. **Plant back restrictions:**

CROP	TIME TO PLANT BACK
Artichoke	0 days
Caneberries	0 days
Cereals	30 days
Cilantro/Coriander	0 days
Citrus	0 days
Corn (all)	0 days
Cucurbits	30 days
Eggplant	0 days
Grapes	0 days
Hops	0 days
Legumes (edible podded)	0 days
Lettuce (head & leaf)	0 days
Okra	0 days
Onion & bulb vegetables	10 months
Pears	0 days
Peppers (bell & non-bell)	0 days
Safflower	30 days
Soybeans	0 days
Spinach	0 days
Strawberries	0 days
Tobacco	0 days
Tomatoes	0 days
Tuberous root & corm vegetables	0 days
All other crops	12 months

MAXIMUM ALLOWABLE USE PER SEASON

Refer to the individual crop sections for maximum allowable SKYRAIDER usage per acre per season. The maximum allowable use must include all registered use patterns including at-plant, soil applied and/or foliar applications for the 12 month period. The 12-month period is to begin upon the initial application to the acreage.

Tank Mixture

SKYRAIDER may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing.

BUFFER ZONES

Vegetative Buffer Zones

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 product containing bifenthrin 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. 2I pp. http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.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, natural 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, natural 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, natural 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. 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.

CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

For LEPA irrigation, a minimum of 0.75 inch of water per acre is recommended. Where non-emulsified oils are used as the diluent,1 to 2 pints per acre is recommended.

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water. Contact your State Agricultural Extension Service specialists, equipment manufacturers or other experts for consultation on the suitability of the equipment set up to obtain effective control of the target insect pests.

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. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas. 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 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. 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.

Do not apply when wind speed favors drift beyond the area intended for treatment. SKYRAIDER should be applied continuously for the duration of the water application. SKYRAIDER should be diluted in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation generally is not required when a suitable dilutent is used. A diluent test should be conducted to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

CROP USE INSTRUCTIONS AGRICULTURAL USES

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CROP	TARGET PESTS.	RATE	
		fl oz/A	
ARTICHOKE (GLOBE)	Aphid spp. Artichoke plume moth	6.4	Make applications when pests appear.
	Cribrate weevil Leafhopper spp.		Apply in sufficient volume to ensure sufficient coverage of foliage.
	•		Ground application: Apply in a minimum of 75 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.
			Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.
			Use higher listed rates for increased residual control.
	 Do not apply more that Do not apply more that Pre-Harvest Interval (F 	n 0.5 lb Al⁄A of I n 0.5 lb Al/A of I PHI): 7 day	Bifenthrin per year.
		ile less than 15 r	tavs
CROP	Do not apply at interva TARGET PESTS		days. REMARKS
CROP	TARGET PESTS	RATE fl oz/A	
BRASSICA	TARGET PESTS Aphid spp.	RATE	
BRASSICA (Head and Stem)	TARGET PESTS Aphid spp. Armyworm spp.* Budworm	RATE fl oz/A	REMARKS Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of
BRASSICA (Head and Stem) Broccoli, Broccoli	TARGET PESTS Aphid spp. Armyworm spp.*	RATE fl oz/A	REMARKS Make applications when pests appear.
BRASSICA (Head and Stem) Broccoli, Broccoli (Cavalo), Broccoli (Chinese), Brussels sprouts,	TARGET PESTSAphid spp.Armyworm spp.*BudwormCorn earwormCricketsCucumber beetleCutworm spp.Diamondback moth**	RATE fl oz/A	REMARKS Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of
BRASSICA (Head and Stem) Broccoli, Broccoli (Cavalo), Broccoli (Chinese), Brussels sprouts, Cabbage, Cabbage, (Chinese Mustard), Cabbage (Chinese napa),	TARGET PESTSAphid spp.Armyworm spp.*BudwormCorn earwormCricketsCucumber beetleCutworm spp.Diamondback moth**Ground beetlesGrasshoppersImported cabbagewormLeafhopper spp.LoopersSaltmarsh caterpillar	RATE fl oz/A	REMARKS Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the
BRASSICA (Head and Stem) Broccoli, Broccoli (Cavalo), Broccoli (Chinese), Brussels sprouts, Cabbage, Cabbage (Chinese Mustard), Cabbage	TARGET PESTSAphid spp.Armyworm spp.*BudwormCorn earwormCricketsCucumber beetleCutworm spp.Diamondback moth**Ground beetlesGrasshoppersImported cabbagewormLeafhopper spp.Loopers	RATE fl oz/A	REMARKS Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished
BRASSICA (Head and Stem) Broccoli, Broccoli (Cavalo), Broccoli (Chinese), Brussels sprouts, Cabbage, Cabbage (Chinese Mustard), Cabbage (Chinese napa), Cauliflower, Cavalo Broccolo,	TARGET PESTSAphid spp.Armyworm spp.*BudwormCorn earwormCricketsCucumber beetleCutworm spp.Diamondback moth**Ground beetlesGrasshoppersImported cabbagewormLeafhopper spp.LoopersSaltmarsh caterpillarStink bug spp.ThripsTobacco budworm	RATE fl oz/A	REMARKSMake applications when pests appear.Apply in sufficient volume to ensure sufficient coverage of foliage.Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray.When foliage is dense and/or pest populations are high, use 5- 10 gallons/A by air or 20 gallons/A by ground and higher use

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Banks Grass Mite	5.12 - 6.0	
Beet armyworm		
Carmine Mite		A.
Lygus spp.		
Pacific spider Mite		
Two Spotted Spider		
Mite		
Whitefly		• · · · · ·
		•
		•
 * Including all army 	worm pests except	Beet Armyworm.
 ** Pyrethroid resist 	ance is common for int pest populations	this pest. Consult your local or state agricultural authority to are in your area. If so refer to the Resistance Management
 Do not apply more 	than 0.24 lb AI/A of	Imidacloprid per crop season.
 Do not apply more 	than 0.5 lb AI/A of E	Bifenthrin per crop season.
 Pre-harvest Interva 	l (PHI): 7 days Do r	ot apply at intervals less than 7 days.
Do not apply more		
		raider per crop season.
1	-	less allowed by state-specific 24(c) labeling

CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/A	
BRASSICA (Leafy Greens) Broccoli Raab, Cabbage (Chinese bok choy), Collards, Kale, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens Turnip tops (greens)***	Aphid spp. Armyworm spp.* Budworm Corn earworm Crickets Cucumber beetle Cutworm spp. Diamondback moth** Ground beetles Grasshoppers Imported cabbageworm Leafhopper spp. Loopers Saltmarsh caterpillar Stink bug spp. Thrips Tobacco budworm	2.1 - 6.0	 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and biober use rates.
	to determine if resistant Management statement • *** This use not permitte	is common for t pest populatior of this label. ed in California	higher use rates. Use higher listed rates for increased residual control. Beet Armyworm. this pest. Consult your local or state agricultural authority as are in your area. If so refer to the Resistance
	 Do not apply more than Pre-harvest Interval (PH Do not apply more than Do not apply more than 	0.5 lb Al/A of B II): 7 days Do n 5 applications a 32 fl oz of Skyr	ifenthrin per crop season. ot apply at intervals less than 7 days. after bloom.

CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fi oz/A	
CILANTRO and CORIANDER	Aphid spp. Cabbage looper Cutworm spp. Flea beetle Grasshopper Leafhopper spp. Leafminer Saltmarsh caterpillar Spotted cucumber beetle Thrips	2.1 - 5.6	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full
	Beet armyworm Twospotted spider mite Whitefly	5.12 – 5.6	when foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates.Use higher listed rates for increased residual control.
	 application. Do not apply more than Pre-harvest Interval (PI- Do not apply at intervals Do not apply more than 	0.5 lb Al/A o l): 3 days. less than 7 16.5 fl. oz. (0	

CROP	TARGET PESTS	RATE fl oz/A	INSTRUCTIONS
	A . I		Apply by ground equipment to have goil hereadth situatees. Do not
CITRUS	Asian cockroach	16 – 32	Apply by ground equipment to bare soil beneath citrus trees - Do not allow any application of the product to contact fruit or foliage.
Except	Diaprepes root		anow any application of the product to contact rult of lonage.
Florida)*:	weevil	}	Must be uniformly applied from the trunk to the drip line of tree. Apply in
Calamondin,	(Diaprepes		Must be uniformly applied from the trunk to the drip line of tree. Apply in
Citron citron,	abbreviatus)		a minimum of 40 gallons of dilute spray per acre or sufficient spray
Citrus hybrids	Fire ants		volume to obtain full coverage of target area. Higher spray volume
(includes			should insure greater uniformity of coverage.
chironja, tangelo			A pro- and most explication inication may aid in the uniformity of
			A pre- and post-application irrigation may aid in the uniformity of coverage as well.
and tangor),			Coverage as well.
Grapefruit,			The use of this product protects citrus tree roots from <i>Diaprepes</i> and
Kumquat,			other citrus root weevil feeding by forming a barrier. As newly hatched
_emon, Lime,		1	Citrus weevil larvae (neonates) fall to the soil surface beneath the tree
Mandarin			and come in contact with this product as they attempt to burrow into the
(tangerine),			root zone. Disturbance of the soil beneath trees should be minimized.
Pummelo,			
Orange (sweet			Timing of applications is critical and current information suggests that
and sour),			peak emergence of adult Diaprepes Weevil varies by citrus growing
Satsuma			region and these emergence peaks can be dramatically affected by
mandarinand			environmental factors, such as soil moisture. Usually, two peaks are
other cultivars			observed for Diaprepes, first in spring then late summer or early fall.
and/or hybrids of			Southern Blue-Green and Blue-Green Citrus Weevils and Fuller Rose
-			Beetle typically exhibit a single emergence peak in the spring. Brown
these	<i>x</i>		and Little Leaf Notchers typically exhibit three emergence peaks, spring,
	к.		summer and fail. Since emergence varies seasonally and by location,
			timing of this product application can be accurately forecast by observing
			adults. Adults are most active early morning and late afternoon;
,			numbers can be estimated by trapping throughout spring
			and summer (emergence periods). Egg laying will occur for 8 to 10
			weeks following adult emergence from the soil; larval invasion of the soil
			will begin 2-3 weeks following adult emergence. This product must be
			applied prior to drop of the neonates. Insecticides are one of several
			effective tools in an integrated pest management program for Citrus
			Root Weevils. Application of this product should be used in conjunction
			with good cultural practices, biological control of larvae and foliar control
			of adults. Consult local university extension personnel for current
			information to protect citrus trees from Citrus Root Weevils and other
			pests.
			Apply to individual citrus reacts, when not in colid planted rows, using
			Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer.
			Peak emergence of Diaprepes root weevil generally occurs in the spring.
			Depending on weather conditions, a minor emergence of Diaprepes root weevil may also occur in the fall.
	•	1	If the citrus grove to be treated is in an area where weather conditions
			are conducive to primary emergence occurring in the spring, 32 fl ozs
		1	formulated product should be used to obtain the longest residual
			management of Diaprepes root weevil. If the citrus grove to be treated
			is in an area where weather conditions will promote more than one peak
			of pest emergence, 16 fl ozs formulated product can be applied early
			season and 16 fl ozs formulated product can be applied later in the
		1	season. If emergence extends beyond the residual protection of this
			product, grower is advised to use additional management strategies (i.e.
		ł	foliar adult control or soil larvae control such as nematodes). Contact
			your state agricultural Extension Specialist as to the recommendation
		1	suited for local conditions.

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*Use in California not permitted
 Do not apply by air or through irrigation systems
 Do not apply starting 10 days prior to bloom through bloom or when bees are foraging.
 Do not apply more than 0.25 lb Al/A of Imidacloprid per year.
Do not apply more than 0.5 lb AI/A of Bifenthrin per year.
Pre-harvest Interval (PHI): 1 dayDo not apply at intervals less than 10 days.
• Do not apply more than 32 fl oz (0.75 lb. Al/A) of Skyraider per year.

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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/A	· · · · · · · · · · · · · · · · · · ·
CITRUS(Florida only): Calamondin, Citron citron, Citrus hybrids (includes chironja, tangelo and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, (Casimiroa spp.), and other cultivars and/or hybrids of these	Asian citrus psyllid Blue green citrus root weevil (Pachnaeus opalus) Brown leaf notcher (Epicacrus mexicanus) Diaprepes root weevil (Diaprepes abbreviatus) Leafhoppers/Sharpshooters Leafminers Little leaf notcher (Artipus floridanus) Mealy bugs Scales Southern blue green citrus root weevil (Pachnaeus litus) Whiteflies	16 – 32	 Apply by ground equipment to bare soil beneath citrus trees - Do not allow any application of the product to contact fruit or foliage. Must be uniformly applied from the trunk to the drip line of tree. Apply in a minimum of 40 gallons of dilute spray per acre or sufficient spray volume to obtain full coverage of target area. Higher spray volume should insure greater uniformity of coverage. A pre- and post-application irrigation may aid in the uniformity of coverage as well. The use of this product protects citrus tree roots from <i>Diaprepes</i> and other citrus root weevil feeding by forming a barrier. As newly hatched Citrus weevil larvae (neonates) fall to the soil surface beneath the tree and come in contact with this product as they attempt to burrow into the root zone. Disturbance of the soil beneath trees should be minimized. Timing of applications is critical and current information suggests that peak emergence of adult Diaprepes Weevil varies by citrus growing region and

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Asian cockroaches, Fire ants	6.4 - 16	these emergence peaks can be dramatically affected by environmental factors, such as soil moisture. Usually, two peaks are observed for <i>Diaprepes</i> , first in spring then late summer or early fall. Southern Blue- Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
	6.4 - 16	Usually, two peaks are observed for <i>Diaprepes</i> , first in spring then late summer or early fall. Southern Blue- Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
ants		spring then late summer or early fall. Southern Blue- Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
4 4 9 9 9 9 9 9 9 9 9 9 9 9		Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
4 • • • •		in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
• • • • •		in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
9 • • •		fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
•		location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
•		accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
•		most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
0		numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
• .		spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
• .		and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence
		occur for 8 to 10 weeks following adult emergence
		occur for 8 to 10 weeks following adult emergence
		from the soil; larval invasion of the soil will begin 2-3
	1	weeks following adult emergence. This product must
		be applied prior to drop of the neonates. Insecticides
		are one of several effective tools in an integrated pest
		management program for Citrus Root Weevils.
		Application of this product should be used in
		conjunction with good cultural practices, biological
		control of larvae and foliar control of adults. Consult
		local university extension personnel for current
		information to protect citrus trees from Citrus Root
		Weevils and other pests.
		Apply to individual citrus resets, when not in solid
		planted rows, using hand-gun or shielded sprayer.
		Peak emergence of Diaprepes root weevil generally
		occurs in the spring. Depending on weather
		conditions, a minor emergence of Diaprepes root
		weevil may also occur in the fall.
		weevir may also occur in the fail.
		If the citrus grove to be treated is in an area where
		weather conditions are conducive to primary
		emergence occurring in the spring, 32 fl ozs
		formulated product should be used to obtain the
		longest residual management of Diaprepes root
		weevil. If the citrus grove to be treated is in an area
		where weather conditions will promote more than one
		peak of pest emergence, 16 fl ozs formulated product
		can be applied early season and 16 fl ozs formulated
		product can be applied later in the season. If
	1	emergence extends beyond the residual protection of
		this product, grower is advised to use additional
		management strategies (i.e. foliar adult control or soil
		larvae control such as nematodes). Contact your state
		agricultural Extension Specialist as to the
		recommendation suited for local conditions.

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 Do not apply by air or through irrigation systems Do not apply starting 10 days prior to bloom through bloom or when bees are foraging. Do not apply more than 0.5 lb Al/A of Imidacloprid per year. Do not apply more than 0.5 lb Al/A of Bifenthrin per year. Pre-harvest Interval (PHI):1 day Do not apply at intervals less than 10 days. 	
 Do not apply at intervals less than 10 days. Do not apply more than 32 fl oz. (0.75 lb. Al/A) of Skyraider per year. 	·
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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl. oz./1000RF	•
CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (AT	Corn rootworm larvae Northern Southern Western	0.30	Apply in a minimum of 3 gallons per acres as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe, in front of the press wheel centered over the row. Use the table below to determine this product's needs/A.
PLANT USE)	Army cutworm Cutworm spp. Grubs Seed corn beetle Seed corn maggot True armyworm or Armyworm spp. Wireworm	0.15 – 0.30	Mix this product with water or fertilizer in the following manner: Fill the spray tank approximately one-half full with water or liquid fertilizer, add the proper amount of this product, then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Applications of this product alone or in recommended tank mixtures, in conjunction with in-furrow pop-up fertilizers may be used. A jar compatibility test should be performed with appropriate ratio of this product and fertilizer to ensure mixture will stay in solution. Constant agitation should be maintained.
	 Do not apply more than Do not apply more than plus foliar applications. Pre-harvest Interval (PF Do not apply to soil whe Do not graze livestock in 	0.3 lb Al/A of 0.3 lb Al/A of II): 30 days re there is gre n treated area	5 lb AI/A) Skyraider per year as an at plant application. Imidacloprid per year. Bifenthrin per year including PRE and PPI, at-planting, ater than 30% cover of crop residue remaining. or cut treated crops for feed within 30 days of treatment. 45 lb AI/A) of Skyraider per year.

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Row Spacing (inches)	40	38	36	30
SKYRAIDER (IbAI/A)	0.09	0.096	01035	0.12
SKYRAIDER (Product – fl oz/A)	3.9	4.1	4.4	5.12

CROP	TARGET PESTS	RATE	INSTRUCTIONS
CILOF	TARGETTEOTO	fl.	
• • •	6	oz./1000RF	······································
FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (PRE & PPI)	Armyworm spp. Black cutworm Seedcorn maggot Stalkborer White grub Wireworm	3 - 4	Pre-Plant Incorporated (PPI) The 3 to 4 ozs/A rate must be applied as PPI and can be tankmixed and applied with PPI herbicides. Incorporation of this product should not be any deeper than the intended planting depth and no deeper than 3 inches. Incorporation depth should be close to the intended seed planting depth. Pre-Emergence (PRE)
	Black cutworm Stalkborer	2.00	The 2.56 ozs/A rate may be applied PRE and can be tankmixed and applied with PRE herbicides.
	 plus foliar applications. Pre-harvest Interval (PH Do not apply to soil whe Do not graze livestock ir 	0.3 lb Al/A of I II): 30 days. Ire there is greated area	midacloprid per year. Bifenthrin per year including PRE and PPI, at-planting, ater than 30% cover of crop residue remaining. or cut treated crops for feed within 30 days of treatment. 45 lb AI/A) of Skyraider per year.
CROP	TARGET PESTS	RATE	INSTRUCTIONS
	-	fl oz/A	
FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (FOLIAR USE)	Aphids Army cutworm Beet armyworm Cereal leaf beetle Chinch bug Common stalk borer Corn earworm Corn rootworm adults Cucumber beetle adult Cutworm spp. Southwestern corn borer European corn borer Fall armyworm Flea beetle Grasshoppers Greenbug Japanese beetle adult Sap beetle Southern armyworm Southern corn leaf beetle Stink bug spp Tarnished plant bug True armyworm or Armyworm spp. Webworms Western bean cutworm Yellowstriped armyworm	2.1 – 6.4	 General: Apply in a minimum of 2 to 5 gallons of finished spray/A by air or in a minimum of 10 gallons/A with ground equipment. To improve control by air, use 5 gallons of finished spray/A particularly when initial populations are heavier than normal. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray. Thorough coverage is essential to achieve control. To control ear-attacking pests: Apply this product just before silking and repeat as necessary to maintain control, but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section. Southwestern corn borer, European corn borer: Make application for corn borer control with initial application at or shortly before egg hatch. For control of other insect pests: Apply when pests first appear and repeat as necessary but do not exceed maximum application intervals listed elsewhere in this section.

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	Banks grass mite	5.12 - 6.4	For control of mites:
	Carmine mite Twospotted spider mite		Banks Grass Mite - Apply for control when colonies first form prior to leaf damage or discoloration and
-			beford
			dispersal above the bottom third of the plant.
			Twospotted Spider Mite and Carmine Mite - Apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy.
			Higher listed rates will be necessary for heavier initial populations and corn under heat or drought stress. Field experience with dimethoate at 0.5 lb Al/A in tank mixture has demonstrated good control under these conditions.
			For mite control in Texas, New Mexico, Oklahoma, Arizona: Apply in a minimum of 5 gallons of finished spray/A by aircraft or in a minimum of 10 gallons/A with ground equipment.
	 Do not apply more that 	1 0.3 lb Al/A of	Imidacloprid per year.
			Bifenthrin per year including PRE and PPI, at-planting,
	•		
	Do not apply at interval		· ·
	 Do not apply more that Pre-harvest Interval (Planta) 		s alter bloom.
			or cut treated crops for feed within 30 days of treatment.
	Do not use on corn in a		
	 Do not make applicatio 		
	 Do not apply using Ultr 		•
			0.45 lb Al/A) of Skyraider per year.

CROP	TARGE	TPESTS	RAT	E			INSTRUCTIONS
		•	fl. oz./100	0RF			
SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (AT PLANT USE)	Corn rootwo Northern Southern Western Mexican	orm larvae	0.3		inch T Positi front c the ta Mix th mann with w this po Provic applic Applic tank n fertiliz A jar c appro mixtur Const	-band to on the s f the pr ole belo is produ er: Fill th ater or oduct, t e suffic ations of ations of nixtures ers may ompatil priate ra e will st	nimum of 3 gallons per acres as a 5 to 7 reatment over an open seed furrow. pray nozzle behind the planter shoe, in ess wheel centered over the row. Use w to determine this product's needs/A. uct with water or fertilizer in the following he spray tank approximately one-half full liquid fertilizer, add the proper amount of hen add the rest of the water or fertilizer ient agitation during mixing and maintain a uniform spray mixture. of this product alone or in recommended , in conjunction with in-furrow pop-up y be used. bility test should be performed with atio of this product and fertilizer to ensure ay in solution. ation should be maintained during mixing on.
	applicatio Do not ap Do not ap Pre-harve Do not ap Do not ap	pp. peetle naggot form or spp. oply more that oply more that oply more that oply more that oply to soil w aze livestoc	an 0.2 lb Al/ an 0.2 lb Al/ PHI): 30 day /here there i k in treated	. (0.15 /A of In /A of B ys. is grea area o	midack Bifenth ater tha or cut t	oprid pe in per y n 30% eated c	
Row Spacing (inc	ches)	40	38	36		30]
				0.400			1

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Row Spacing (inches)	40	38	36	30
SKYRAIDER (IbAI/A)	0.09	0.096	0.103	0.12
SKYRAIDER (Product – fl oz/A)	3.9	4.1	4.4	5.12

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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/A	
SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (FOLIAR USE)	AphidsArmy cutwormAster leafhopperBeet armywormCereal leaf beetleChinch bugCommon stalk borerCorn earwormCorn rootworm adultsCorn rootworm adultsCorn silk flyCucumber beetle adultCutworm spp.European corn borerFall armywormFlea beetleGrasshoppersGreenbugJapanese beetle adultLeafhoppersSap beetleSouthern armywormSouthern corn leafbeetleSouthwestern cornborerStink bug sppTarnished plant bugThripsTrue armyworm orArmyworm spp.WebwormsWestern bean cutworm	2.1 - 6.4	 General: Apply in a minimum of 2 gallons of finished spray/A by air or in a minimum of 10 gallons/A with ground equipment. To improve control by air, use 5 gallons of finished spray/A particularly when initial populations are heavier than normal. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray. Thorough coverage is essential to achieve control. To control ear-attacking pests: Apply this product just before silking and repeat as necessary to maintain control, but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section. For control of other insect pests: Apply when pests first appear and repeat as necessary but do not exceed maximum application intervals listed elsewhere in this section.
	Yellowstriped armyworm Banks grass mite Carmine mite Twospotted spider mite	5.12 - 6.4	For control of mites: Banks Grass Mite - Apply for control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant. Twospotted Spider Mite and Carmine Mite - Apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy. Higher listed rates will be necessary for heavier initial populations and corn under heat or drought stress.

	 Do not use on corn in a Do not make applicatio Do not apply using Ultr 	n 0.2 Jb Al/A c ay of harvest Is less than 7 in treated are all coastal cou Ins to corn if h a Low Volum	of Bifenthrin per year. days. a or cut treated crops for feed within 1 day of treatment. inties. neavy rainfall is imminent.
CROP	TARGET PESTS	RATE fl oz/A	INSTRUCTIONS
COTTON	Bandedwinged whitefly Boll weevil Cotton aphid Cotton fleahopper Lygus spp. Plant bugs (excludes Lygus hesperus) Southern garden leafhopper Stink bug spp. Armyworm spp. Armyworm spp. Bollworm Cabbage looper Cotton leaf perforator Cutworm spp. European corn borer Pink bollworm Saltmarsh caterpillar Tobacco budworm Thrips spp. Beet armyworm Whitefly	2.6 - 6.4 3.8 - 6.4 6.4	 Application in Water: Apply in a minimum of 5 gallons/A with ground equipment or 1 gallon/A by air. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray. ULV Application: Apply the listed rate of this product in refined vegetable oil in a minimum of 1 qt of finished spray/A with aircraft calibrated to give adequate coverage. To Control Boll Weevil: Apply this product at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels. To Control Aphids: Apply when pest first appears. Repeat as necessary to maintain control. Higher listed rates will be required once a damaging threshold is established.
· · ·	of formulation or metho including seed treatme Do not apply more than Do not apply at interval Pre-harvest Interval (PI Do not graze livestock Do not make more than combination of pyrethro	n 0.31 lb Al/A od of application nt, soil and fo n 0.5 lb Al/A of ls less than 7 HI): 14 days in treated are n 10 synthetic bid containing	of Imidacloprid by foliar application per crop; regardless on, apply no more than 0.5 lb AI/A per acre per year, liar uses. of Bifenthrin per year.

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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/A	
FRUITING VEGETABLES: Crops of Crop Group 8 including EGGPLANT, PEPPERS (BELL & NON-BELL), GROUNDCHERRY, PEPINO	Armyworm spp.* Cabbage looper Colorado potato beetle Corn earworm Cucumber beetle Cutworms European corn borer Flea beetle Leafminer Loopers Stink bug spp. Thrips Tomato hornworm Tomato pinworm Aphid spp. Artichoke plume moth Banks grass mite Carmine mite Leafhopper spp. Pacific spider mite Pepper weevil Twospotted spider mite Beet armyworm Lygus spp. Whitefly	2.1 - 6.4 5.12 - 6.4 6.4	 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates. Use higher listed rates for increased residual control.
	foliar application Do not apply more than Do not apply at interval Pre-harvest Interval (PI Do not apply more than 	n 0.24 lb Al/A n 0.2 lb Al/A (s less than 7 HI): 7 days. n 12.8 fl oz (0	of Imidacloprid per crop season,when used as a of Bifenthrin per crop season.

CROP	TARGET PESTS	RATE	INSTRUCTIONS
	· · · · · · · · · · · · · · · · · · ·	fl oz/A	
GRAPES	Cutworm spp. Eastern grape leafhopper Fleabeetle spp. Grape berry moth Grape bud beetle Grape leafroller Grapeleaf skeletonizer Japanese beetles (adult) Mealybug Omnivorous leafroller Orange tortrix Sharpshooter spp. Thrips (adults) Variegated leafhopper Western grape leafhopper	3.2 - 6.4	 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 25 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray. When foliage is dense and/or pest populations are high, use higher spray volumes and higher use rates. Use higher listed rates for increased residual control.
	 Do not apply more tha of application. Do not apply more tha Do not apply at interval Pre-harvest Interval (F 	n 0.5 lb Al/A n 0.1lb Al/A d als less than ? ?HI): 30 days	14 days.

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CROP	TARGET PESTS	RATE	INSTRUCTIONS
	· · · · · · · · · · · · · · · · · · ·	fl oz/A	
PEANUT*	Corn earworm Cutworm spp. Fall armyworm Grasshoppers Green cloverworm Leafhoppers Lesser cornstalk borer Loopers Rednecked peanut worm Southern armyworm Southern armyworm Southern corn rootworm Stink bugs spp. Threecornered alfalfa hopper Thrips Velvetbean caterpillar Yellowstriped armyworm Aphids Beet armyworm Spider mites Whiteflies	5.6	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When foliage is dense and/or pest populations are high, use 20 gallons/A by ground and higher listed use rates. Use higher listed rates for increased residual control.
	 Do not apply more that or method of applicatio Do not apply more that Pre-harvest Interval (P Do not apply at interval 	n 0.5 lb Al/A c n. n 0.5 lb Al/A o Hl): 14 days. Is less than 14	

Do not apply more than 16.5 fl oz (0.39 lb Al/A) of Skyraider per year.

CROP	TARGET PESTS	RATE fl oz/A	INSTRUCTIONS
HEAD LETTUCE	Aphid spp	2.1 - 6.0	Make applications when pests appear.
	Leafhopper spp.		
	Stink bug spp.		Apply in sufficient volume to ensure sufficient coverage
	Thrips		of foliage.
•	Thips		or tollage.
•			Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.
•			Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray.
	2		When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher listed use rates.
			Use higher listed rates for increased residual control.
	Armyworm spp.* Cabbageworm Corn earworm	2.56 - 6.0	
	Crickets		
	Cucumber beetle		
	Cutworm spp.		
	Diamondback moth	,	
	European corn borer		· · ·
	Flea beetle		
	Grasshoppers		
	Ground beetles		
	Leafminer .		
	Loopers		
	Pepper weevil		
	Tomato hornworm		
	Tomato pinworm		
	Tobacco budworm	,	
	Saltmarsh caterpillar		
	Beet armyworm	6.0	
	Carmine mite		
	Lygus spp.		
	L I WO-Spotted Spider		
	Two-spotted spider		

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 * Including all armyworm pests except beet armyworm.]
• Do not apply more than 0.24 lb AI/A of Imidacloprid per crop season as a foliar application.	
• Do not apply more than 0.5 lb AI/A of Imidacloprid per crop season, regardless of formulation	
or method of application.	
 Do not apply more than 0.5 lb AI/A of Bifenthrin per crop season. 	
 Do not apply at intervals less than 7 days. 	
Pre-harvest Interval (PHI): 7 days.	
Do not apply more than 32 fl oz'of Skyraider per year.	
 Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling 	
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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/ A	
HOPS	Root weevil Aphid spp. Armyworm spp.* Cutworm spp. Leafrollers Looper spp. Two spotted spider mite Beet armyworm	3.2 - 6.4 3.8 - 6.4 6.4	 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 100 - 150 gallons per acre in early season; 200 – 250 gallons per acre late season. Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area For Root weevil control: Make a direct spray to the base of the plant. Spray up to 3 ft on the vine and 1.5 to 2 ft on sides of the plant. Thorough coverage is essential to achieve control. Use higher listed rates for increased residual control.
	 *All armyworm except Do not apply more that Do not apply more that Do not apply at intervation Pre-harvest Interval (for the pre-that apply more that 	an 0.3 lb Al/A an 0.3 lb Al/A als less than 2 PHI): 28 days.	of Imidacloprid per year. of Bifenthrin per year. 21 days.

CROP	TARGET PESTS	RATE fl oz/A	REMARKS
PINACH	fl oz/AArmyworm spp.*CabbagewormColorado potato beetleCorn earwormCucumber beetleCutworm spp.Diamondback mothEuropean corn borerFlea beetleLeafhopper spp.LeafminerLoopersPepper weevilStink bugs spp.ThripsTomato hornwormTobacco budwormSaltmarsh caterpillar		 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain fu coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates.
	Banks grass mite Broad mite Carmine mite Fire ants Lygus spp. Pacific spider mite Twospotted spider mites	5.12 - 6.0	Use higher listed rates for increased residual control.
	Aphids Beet armyworm Whiteflies	6.0	
·	 Do not apply more that or method of application Do not apply more that Do not apply at intervation Pre-harvest Interval (For the pre-that apply more that 	n 0.24 lb Al/A n 0.5 lb Al/A on. n 0.43 lb Al// als less than 7 PHI): 40 days. n 27.5 fl oz ol	A of Imidacloprid per year as a foliar application. of Imidacloprid per crop season, regardless of formulation A of Bifenthrin per year. 7 days.

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CROP	TARGET PESTS	RATE	INSTRUCTIONS		
		fl oz/A],,,,,,,,		
STRAWBERRY	Aphid spp. Armyworm [§] spp.*	2.56 - 6.0	Make applications when pests appear.		
	Corn earworm Flea beetle spp. Leafhopper spp.		Apply in sufficient volume to ensure sufficient coverage of foliage.		
	Lygus spp.' Spittlebug • Strawberry•clipper		Ground application : apply in a minimum of 50 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.		
	Strawberry sap beetle Whitefly		Aerial application*: apply in a minimum of 5 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.		
			When foliage is dense and/or pest populations are high, use 20 gallons/a by ground and higher use rates.		
			Use higher rates for increased residual control.		
			*aerial applications are prohibited in Florida.		
	Strawberry root weevil Black vine weevil	3.2 – 6.0			
	Spider mites	6.0			
	*All armyworm except		rm		
	or method of application	0.5 lb Al/A of on.	Imidacloprid per crop season, regardless of formulation		
	 Do not apply more than 0.14 lb AI/A of Imidacloprid per crop season, when applied as a foliar application 				
	 Do not apply more than 0.14 lb AI/A of Bifenthrin per season. Do not apply within 7 days of harvest. 				
	 Do not apply at intervals less than 5 days. 				
	 Do not apply during or within 10 days after bloom or when bees are foraging. 				
	Not for use on crops g	rown for seed	unless allowed by state-specific 24(c) labeling.		
CROP	TARGET PESTS	RATE	INSTRUCTIONS		
		fl oz/A			

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2.1 - 6.0OKRA Aphid spp. Make applications when pests appear. Armyworm Corn earworm Apply in sufficient volume to ensure sufficient coverage Cucumber beetle of foliage. Cutworms European corn borer Ground application: Apply in a minimum of 10 Flea beetles gallons per acre or sufficient spray volume to obtain full Leafminer coverage of the foliage or target area. Loopers Japanese beetle Aerial application: Apply in a minimum of 2 gallons (adult) per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Stink bug spp. Thrips Whitefly When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher listed use rates. Use higher listed rates for increased residual control. Broad Mite 6.0 **Carmine Mite** Lygus spp. Two Spotted Spider Mite • Do not apply more than 0.24 lb Al/A of Imidacloprid per crop season as a foliar application. Do not apply more than 0.5 AI/A of Imidacloprid per year, regardless of formulation or method of application. • Do not apply more than 0.20 Ib AI/A of Bifenthrin per season. • Do not apply at intervals less than 7 days. • Pre-harvest Interval (PHI): 7 days. • Do not apply more than 12.8 fl oz (0.3 lb AI/A) of Skyraider per year. • Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

CROP	TARGET PESTS	RATE fl oz/A	INSTRUCTIONS
PEARS	Aphid spp. Codling moth Cutworm spp. Green fruitworm Leafhopper spp. Leafminer Leafroller Lygus spp. Plum curculio Stink bug spp. Twospotted Spider Mite Yellow Mite	2.6 - 12.8	 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply as a dilute spray in a minimum of 200 gallons per acre (Dilute) and 50 gallons per acre (concentrate) or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When foliage is dense and/or pest populations are

	European Red Mite	5.12– 12.8	high, use 5-10 gallons/A by air 20 gallons/A by ground and higher listed use rates.
e •	х		Use higher listed rates for increased residual control.
•	Apple maggot	12.8	
•			
•	fall).Do not apply more theDo not apply at interv	an 0.5 lb Al/A o als less than 3	of Imidacloprid per crop season (0.45 lb AI/A after petal of Bifenthrin per crop season (0.45 lb AI/A after petal fall). 0 days.
	 Do not apply more that 	k in treated orc an 32 fl oz (0.7	hards or cut treated cover crops for feed. 5 lb Al/A) of Skyraider per year. 5 om or when bees are forahing.

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TARGET PESTS RATE INSTRUCTIONS CROP fl oz/A 2.1 - 6.0Make applications when pests appear. **POTATO** (Foliar Banded cucumber uses) beetle Black flea beetle Apply in sufficient volume to ensure sufficient Cucumber beetle coverage of foliage. European corn borer Ground application: Apply in a minimum of 5 Grasshopper spp. Looper spp. gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Flea beetle spp. June beetle Aerial application: Apply in a minimum of 1-Sugarcane beetle gallon per acre or sufficient spray volume to obtain Sweetpotato flea beetle Sweetpotato weevil full coverage of the foliage or target area. When Tuberworm applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. Whitefringed beetle When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher listed use rates. Use higher listed rates for increased residual control. Aphid 6.0 Colorado Potato beetle Leafhopper Potato psyllid Whitefly • Do not apply more than 0.2 lb AI/A of Imidacloprid per year as a foliar application. • Do not apply more than 0.5lb AI/A of Bifenthrin per year. • Do not apply more than 0.5 lb AI/A of Imidacloprid per year, regardless of formulation or method of application. • Two applications are permitted per year. It is permitted to make one at-plant application followed by a foliar application later in the same growing year. • Do not apply at intervals less than 7 days. • Pre-harvest Interval (PHI): 21 days. TARGET PESTS RATE INSTRUCTIONS CROP fl óz/A

POTATO (At-	Aphid spp.	12.8	At-plant Application/In-furrow applications:	
plant)	Colorado potato beetle		Apply as an in-furrow spray onto the seed pieces or	
	Flea beetle spp. (adult,		seed potatoes.	
	larvae)			
	Japanese beetle (larvae)			
	Leafhopper spp.			
	Potato psyllid			
	Rootworm spp.			
	White grub			
	Wireworm			
	 Pre-harvest Interval (PH) 	I): 21 days.		
	• Do not apply more than (Imidacloprid per year.	
	• Do not apply more than (
			5 Ib AI/A) of Skyraider per year for all application	
·	methods.			
		192 fl oz (0	45 lb AI/A) of Skyraider as an at-plant application. A	
	maximum of one at-plant			
	 Do not apply more than 0.5 lb AI/A of Imidacloprid per year, regardless of formulation or method of application. 			
	 Do not apply at intervals less than 7 days. 			
	• Do not apply at intervals	less man / u	ays	
CROP	TARGET PESTS	RATE	INSTRUCTIONS	
		fl oz/A		
TUBEROUS AND		2.1-6.0	Make applications when pests appear.	
CORM	Banded cucumber			
VEGETABLES:	beetle	1	Apply in sufficient volume to ensure sufficient	
Arracacha;	Black flea beetle		coverage of foliage.	
arrowroot;	Cucumber beetle			
			Ground application: Apply in a minimum of 10	
arrowroot; artichoke, Chinese; artichoke,			Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain	
artichoke, Chinese;	European corn borer Grasshopper spp. Looper spp.			
artichoke, Chinese; artichoke,	European corn borer Grasshopper spp.		gallons per acre or sufficient spray volume to obtain	
artichoke, Chinese; artichoke, Jerusalem; canna,	European corn borer Grasshopper spp. Looper spp.		gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and	European corn borer Grasshopper spp. Looper spp. Flea beetle spp.		gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle		gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa;	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle		gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro);	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle		gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren;	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tuberworm		gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren; Tanier; Turmeric;	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil		gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray.	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren; Tanier; Turmeric; Bean, Yam, True	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tuberworm Whitefringed beetle	6.0	 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. When foliage is dense and/or pest populations are 	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren; Tanier; Turmeric;	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tuberworm Whitefringed beetle Aphid	6.0	 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by 	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren; Tanier; Turmeric; Bean, Yam, True	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tuberworm Whitefringed beetle Aphid Colorado potato beetle	6.0	 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. When foliage is dense and/or pest populations are 	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren; Tanier; Turmeric; Bean, Yam, True	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tuberworm Whitefringed beetle Aphid Colorado potato beetle Leafhopper	6.0	 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher listed use rates. 	
artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren; Tanier; Turmeric; Bean, Yam, True	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tuberworm Whitefringed beetle Aphid Colorado potato beetle	6.0	 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by 	

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 Do not apply more than 0.13 lb Al/A of Imidacloprid per crop season (0.45 lb Al/A after petal fall).
Do not apply more than 0.5 lb AI/A of Bifenthrin per crop season (0.45 lb AI/A after petal fall).
 Do not apply more than 2 applications per season.
 Do not apply at intervals less than 7 days.
 Do not apply within 21 days of harvest.
 Do not make more than 10 synthetic pyrethroid applications (of a single product or a combination of pyrethroid containing products) to a potato crop in one growing season. Do not apply more than 16 fl oz of Skyraider per year.

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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/A	
except Almonds pecan a Codling Filbert w Hickory Leaffoot Navel or Oblique Leafhop Peach tw Pecan le Pecan n Phylloxe (leaf infe Plantbug Spittlebu	Aphids (except black pecan aphid) Codling moth Filbert worm Hickory shuckworm Leaffooted bug Navel orangeworm Oblique banded leafroller Leafhoppers/Sharpshooters Peach twig borer Pecan leaf casebearer Pecan nut casebearer Phylloxera spp. (leaf infestations) Plantbug spp. Spittlebugs	fl oz/A 3.2 – 11.2	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply by ground as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (50 gallons of finished spray per acre) spray in sufficient water to provide through coverage. Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Use higher listed rates for increased residual partrel
X	Stink bug spp. Black pecan aphid European mite Mealybugs San Jose scale Spider mite Fire ants Walnut husk fly	5.1 – 11.2 3.2 -11.2	control. Applications for control of San Jose scale should be timed according to crawler stage, treating each successive generation.
	 Do not apply more than 0.5 Do not apply at intervals le Do not apply within 7 days 	5 lb AI/A of Bif ss than 15 day of harvest. (P or within 10 d	ys. ecan PHI – 21 days) ays prior to bloom or when bees are foraging.

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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/A	
LEGUME VEGETABLES DRIED BEANS AND PEAS except Soybeans Including: Dried cultivars of bean (Lupinus spp.) (Phaseolus spp.); and any one (includes grAl/An lupin, sweet lupin, dried cultivar of pea (Pisum white lupin,	Alfalfa caterpillar Aphid spp. Armyworm spp.* Bean leaf beetle Cloverworm Corn earworm Corn rootworm (adult) Cucumber beetle Cutworm spp. European corn borer Flee beetle spp. Grasshopper Japanese beetle (adult) June beetle (adult)		INSTRUCTIONS Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray.
and white sweet lupin); (Phaseolus spp.) (includes field bean, kidney bean, lima bean(dry), navy bean, pinto bean, tepary bean; bean (Vigna spp.) (includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean,	Leafhopper spp. Looper spp. Mexican bean beetle Pea leaf weevil Pea weevil Sap beetle (adult) Saltmarsh caterpillar Silverspotted skipper Threecornered alfalfa hopper Thrips (adult) (foliage feeding) Webworm		Use higher listed rates for increased residual control.
pea, morn bean, mung bean, rice bean, southern pea, urd bean); broad bean (dry); chickpea; guar; lablab bean; lentil; pea (Pisum spp.) (includes field pea); pigeon pea.		n 0.13 lb Àl/A n 0.2 lb Al/A fo ls less than 7 days of harve	of Imidacloprid per crop season. or peas and 0.3 lb AI/A for beans of Bifenthrin per crop days. st.

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CROP	TARGET PESTS	RATE	INSTRUCTIONS
		fl oz/A	
SUCCULENT BEANS AND PEAS except soybeans: Crops in the Succulent Pea and Bean group, Pea (Pisum spp.): Dwarf pea, Edible-pod pea, English pea, Garden pea, Green pea, Snow pea, Sugar snap pea, Pigeon pea; Bean (Phaseolus spp.): Broadbean (succulent), Lima bean (green), Runner bean, Snap bean, Wax bean; Bean (Vigna spp.): Asparagus bean, Blackeyed pea, Chinese longbean, Cowpea, Moth bean, Southern pea, Yardlong bean., Jackbean, Soybean (immature seed), Sword bean	Alfalfa caterpillar Bean leaf beetle Cloverworm Corn earworm Corn rootworm (adult) Cucumber beetle Cutworm spp. European corn borer Fall armyworm Flea beetle Japanese beetle (adult) Looper spp. Pea leaf weevil Pea weevil Sap beetle (adult) Southern armyworm Vebworm Yellowstriped armyworm Banks grass mite Beet armyworm Carmine Mite Lygus spp. Twospotted spider mite Whitefly	2.1 - 5.6	 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 5 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 1 gallon per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air; 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. Use higher listed rates for increased residual control.
		n 0.2 lb Al/A of	

CROP	TARGET PESTS	RATE	INSTRUCTIONS
·	A 16 - 16	fl oz/A	
SOYBEANS	Alfalfa caterpillar	<u>2.1 – 6.0</u>	Make applications when pests appear.
	Aphids		
	Aster leafhopper		Apply in sufficient volume to ensule sufficient
	Bean leaf beetle		coverage of foliage.
	Beet armyworm*		
	Cloverworm		Ground application: Apply in a minimum of 10
	Corn earworm		gallons per acre or sufficient spray volume to obtain
	Corn rootworm adult		full coverage of the foliage or target area.
	Cucumber beetles		
	Cutworms		Aerial application: Apply in a minimum of 2 gallons
	European corn borer		per acre or sufficient spray volume to obtain full
	Fall armyworm		coverage of the foliage or target area.
	Flea beetle		
	Grasshoppers		Use higher listed rates for increased residual control.
	Imported cabbageworm	l	
	Japanese beetle adult		
	Kudzu bug		
	Leafhoppers		·
	Leafminer		
	Loopers		· ·
	Mexican bean beetle	•	
	(adult)		
	Pea leaf weevil		
	Pea weevil		
	Plant bug		
	Saltmarsh caterpillar		
	Sap beetle		
	Southern armyworm		
	Stink bugs		
	Tarnished plant bug		
	Thrips		
	Tobacco budworm*		
	Twospotted spider mite		
	Webworms	,	
	Western bean cutworm		
	Yellowstriped		
	armyworm	5 10 0 0	
	Lygus spp.	5.12 – 6.0	· · · · ·
	Twospotted spider mite		
	Whitefly		
•			· ·

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 Do not apply more than 0.14 lb Al/A of Imidacloprid per year.
 Do not apply more than 0.3 lb AI/A of Bifenthrin per year.
Do not apply at intervals less than 30 days.
Do not apply within 21 days of harvest.
 Do not apply more than 18 fl oz (0.42 lb Al/A) of Skyraider per year.
• *Pyrethroid resistance is common for beet armyworm and tobacco budworm. Consult your local extension specialist, certified crop advisor, and/or manufacturer for insecticide resistance management and/or IPM guidance for the specific site and resistant pest problems.

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CROP	JARGET PESTS	RATE	INSTRUCTIONS	
CRUP	JARGEI PESIS	fl oz/A		
TOBACCO	Aphid Armyworm spp. Chinch bugs Cutworm spp. Flea beetle (Adults) Grasshoppers Japanese beetles Stalkborers Stink bug spp. Thrips Beet armyworm Lygus spp. Spider mites Whitefly	2.56 - 6.4	 Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 5 gallon per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. Use higher listed rates for increased residual control. 	
	 Do not apply more that Do not apply more that formulation or method Do not apply more that Do not apply at intervat Pre-harvest Interval (F Do not apply more that 	ore than 0.3 lb AI/A of Bifenthrin per year. intervals less than 7 days.		

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A B C C C C C C C C C C C C C C C C C C	Aphid app. Armyworm spp. Bean leaf beetle Cabbageworm Cloverworm Corn earworm Corn rootworm Cucumber beetle Cutworms Diamondback moth European corn borer	fl oz/A 2.1- 5.2	Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallon per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be
A B C C C C C C C C C C C C C C C C C C	Armyworm spp. Bean leaf beetle Cabbageworm Cloverworm Corn earworm Corn rootworm Cucumber beetle Cutworms Diamondback moth	2.1-5.2	gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallon per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When
Ji Lu Ly M P P R S S S S S T T C	Tea beetle Tea hopper Grasshopper Japanese beetle (adult) Leaf hopper Loopers Lygus spp. Melonworm Pea leaf weevil Pea weevil Pickleworm Caltmarsh caterpillar Sap beetle Seedpod weevil Squash bug Stink bug spp. Thips Twospotted spider mite Colorado potato beetle Pepper weevil	5.12 - 6.4	 applying by an, 1 qt of emulsmed on may be substituted for 1 qt of water in the finished spray. Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Use higher rates for increased residual control
•	Do not apply more than formulation or method o Do not apply more than Do not apply at intervals Pre-harvest Interval (PH	0.5 lb Al/A of l of application. 0.4 lb Al/A of l s less than 10 of II): 1 day.	

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STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:

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DO NOT ALLOW PRODUCT TO FREEZE. Do not store below 40° F. If crystals are observed, warm material to above 60° F by placing container in warm location. Shake or roll container periodically to redissolve solids. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

PESTICIDE DISPOSAL:

Pesticide wastes are toxic. 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 of the nearest EPA Regional Office for guidance. Open dumping is prohibited.

CONTAINER HANDLING:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY.**

CONDITIONS:

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

DISCLAIMER OF WARRANTIES:

To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent

with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY:

To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Agan of North America, Inc.'s election, the replacement of product.

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