

RESTRICTED USE PESTICIDE
 DUE TO TOXICITY TO FISH AND AQUATIC ORGANISMS
 FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS, OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

SAMURAI II C.S.

GROUP	3	INSECTICIDE
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Distributors should sell in original packages only.

Active Ingredient:	By Wt.
Lambda-cyhalothrin: [1a(S*),3a(Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate.	23.6%
Inert Ingredients:	<u>76.4%</u>
Total	100.0%

Contains 2.16 pounds active ingredient per gallon.
 Contains petroleum distillate.

EPA Reg. No. 83222-23

EPA Est. No. 53883-TX-002

Manufactured By:
 J. Oliver Products, Inc.
 3187 Robertson Gin Road
 Hernando, MS 38632

Net Contents ___1 gallon_____

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

FIRST AID	
If swallowed	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call the Poison Control Center 800-222-1222.</p>	

Note to Physician - Contains petroleum distillate – vomiting may cause aspiration pneumonia. This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine 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 / Aviso

May be fatal if swallowed. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hrs. after exposure and may last 2 – 30 hrs., without injury. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

All pesticide handlers (mixers, loaders, and applicators) must wear long-sleeved shirt and long pants, socks, shoes, protective eyewear, and chemical-resistant gloves Category G such as barrier laminate or viton \geq 14 mils.

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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This pesticide is extremely toxic to fish and aquatic invertebrates and toxic to wildlife. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops if bees are visiting the treatment area.

DIRECTIONS FOR USE

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

SHAKE WELL BEFORE USING

Do not apply this product in a way that will contact workers or other persons, either directly or through

drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. This labeling must be in the possession of the user at the time of application.

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 24 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, wear:

- Coveralls
- Chemical-resistant gloves Category G, such as barrier laminate, or viton 14 mils.
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

APPLICATION INSTRUCTIONS

Thorough crop coverage is necessary for good control of insects. Apply by ground or aerial equipment in enough water (minimum 2 gal / acre by air, or 10 gal / acre by ground unless directed otherwise by this label) to completely cover foliage. In dense foliage or high pest pressure, the higher use rates on this label, and / or increased water volume may provide better control. For soil-incorporated application, the higher rates indicated on this label will provide improved control. For cutworm control, this product may be applied before, during, or after planting. In addition, the following may be used as diluents:

- Crop Oil Concentrate
- Methylated Sunflower Oils
- Urea-Ammonium Nitrate

Do not use non-emulsifiable oils, diesel fuel, or straight mineral oil as diluents.

RESISTANCE MANAGEMENT

Lambda cyhalothrin is a Group 3 (synthetic pyrethroid) insecticide. Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, 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 may be present. If you experience difficulty with control and resistance may be the cause, immediately consult your local agricultural advisor for the best alternative method of control for your area.

SPRAY DRIFT PRECAUTIONS

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

- Do not apply by ground within 25 ft., or by air within 150 ft. of lakes; reservoirs; rivers; permanent

streams, marshes, pot holes, or natural ponds; estuaries and commercial fish farm ponds. Increase the buffer zone to 450 ft. when ultra-low volume (ULV) application is made.

- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.
- Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 ft. above the crop canopy should be avoided.
- Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 - 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.
- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Do not cultivate within 10 ft. of the aquatic area so as to allow growth of a vegetative filter strip.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.
- Do not make aerial or ground applications during 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.

In the State of New York, a 25 ft. vegetated, non-cropped buffer strip untraversed by drainage tiles must be maintained between a treated field and a coastal salt marsh or stream that drains into a coastal salt marsh, for both aerial or ground application. For aerial applications, the 25 ft. vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 ft. buffer strip (or 450 ft. buffer strip for ULV application) required for spray drift.

TANK MIXTURES

When tank mixing with any other agricultural products, ALWAYS ADD SAMURAI II C.S. LAST. Fill the tank with ½ - 2/3 volume of water. Start agitation and then add tank mix partner products as directed on their labels. AFTER the tank mix partners are fully dispersed, continue agitation and add SAMURAI II C.S., then finish filling with water to the required volume.

Always follow the precautions and limitations of the most restricted product in the tank mixture.

A jar test for physical compatibility is recommended for untried mixtures, using proper ratios and mixing sequences of all ingredients to be included in the mixture. If necessary, a compatibility agent such as may assist in mixing.

Compatibility Test:

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities.

If pesticides do not ball-up or form flakes, sludge, gel, oily films or layers, or other precipitates, then the tested mixture is compatible. Usually incompatibility in any of the above-described forms will be seen within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Re-run the above compatibility test with a suitable compatibility agent (e.g. COMPLETE COMPATIBILITY®. (One quarter teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer.)

Tested material not used in the actual application must be disposed of in accordance with the Storage and Disposal instructions on this label.

No type of non-emulsifiable oils should be used in combination with SAMURAI II C.S..

If adjuvants are used, use only:

- Nonionic Surfactant (NIS) containing at least 75% surface agent, or
- Nonphytotoxic Crop Oil Concentrate (COC), such as once-refined Vegetable Oil Concentrate (VOC), or,
- Methylated Sunflower Oils (MSO) containing a minimum of 17% emulsifier.

Adjuvants other than NIS or COC may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)

CHEMIGATION

Sprinkler Irrigation Application

Apply SAMURAI II C.S. at the same rates and timing as described in this label for other application methods.

As local recommendations differ, consult your local State Extension Service or other local experts for recommendations on adjuvant or diluent types.

Check the irrigation system to insure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Maintain thorough agitation in the pesticide supply tank when mixing / loading, and during the entire application period.

Apply by injecting the recommended rate of SAMURAI II C.S. into the irrigation system using a metering device that will evenly distribute the product to the target area in 0.1-0.2 acre-inch of water. Use the smallest amount of water required for even and complete coverage. In order to improve mixing of the insecticide in the irrigation water, the injection point should be shortly before a right-angle turn in the irrigation line. Following application, flush the entire irrigation and injection system with clean water before shutting down the system.

If application is being made during a normal irrigation set of a stationary sprinkler, SAMURAI II C.S. should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

Use Precautions - Sprinkler Irrigation Applications

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

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

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

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

E. 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.

F. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back-flow.

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

H. 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.

I. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

J. The irrigation line or water pump must include a functional pressure switch to stop the water pump

motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
 K. 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 are capable of being fitted with a system interlock.

L. Any alternatives to the above required safety devices must conform to the list of EPA - approved alternative devices.

M. **Do not** apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.

N. Do not apply through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

CROPS AND RATES Agricultural Crops

Alfalfa (including alfalfa grown for seed)

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
meadow spittlebug Mexican bean beetle pea aphid pea weevil (adult) plant bug species including lygus species ³ spotted alfalfa aphid stink bug species sweet clover weevil (adult) thrips species (not including western flower thrips) western yellowstriped armyworm whitefringed beetle species (adult) yellowstriped armyworm	1.28 to 1.92
beet armyworm ^{1,3} spider mites ² blotch leafminer ³	1.92
<p>NOTES: Apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gals. per acre by air or 10 gals. per acre by ground. When foliage is dense and/or pest populations are high 5–10 gals. per acre by air or 20 gals. per acre by ground and higher use rates are recommended. Use higher rates for increased residual control. Avoid application when bees are actively foraging by applying during the early morning or during the evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. It may be advisable to remove bee shelters during and for 2–3 days following application. Avoid direct application to bee shelters. Do not apply more than 0.03 lb. a.i. (1.92 fl. oz. or 0.12 pts. of product) per acre per cutting. Do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per season. Do not apply within 1 day of harvest for forage or within 7 days of harvest for hay.</p>	
<p>1 For large larvae, use the higher rate 2 Provides suppression only</p>	

3 Avoid resistance by following directions under “Resistance Management”

Canola

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
armyworm species cabbage seedpod weevil cutworm species diamondback moth flea beetle grasshoppers looper species lygus bug	0.96 to 1.92
cabbage aphid	1.92
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. Do not apply within 7 days of harvest. Do not apply more than 5.76 fl. oz. or 0.36 pts. of this product (or equivalent to 0.09 lb ai if using other lambda cyhalothrin products) per acre per year.</p>	

Corn (at planting) including field, popcorn, seed, and sweet

TARGET PEST	RATE
corn rootworm larvae: Mexican, Northern, Southern, Western cutworm species lesser cornstalk borer red imported fire ant (suppression only) seedcorn beetle seedcorn maggot white grub species wireworm species	0.33 fl. oz per 1000 ft of row
<p>NOTES: Banded Applications – Apply at planting as a 5 to7 inch T–band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel. In–Furrow Applications – Apply into the seed furrow through spray nozzles or microtubes, behind the planter furrow openers and in front of the press wheel. Apply a minimum of 3 gals. finished spray per acre. Do not harvest or graze livestock or cut treated crops for feed within 21 days of at plant application. Do not apply more than 5.76 fl. oz. or 0.36 pts. of this product (or equivalent to 0.09 lb ai if using other lambda cyhalothrin products) per acre per year. For field corn, popcorn, and seed corn do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per crop from at plant and foliar applications. For sweet corn do not apply more than 0.48 lb. a.i. (30.72 fl. oz. or 1.92 pts. of product) per acre per crop from at plant and foliar applications.</p>	

Corn (foliar) including field, popcorn, and seed corn

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
corn earworm (before larva bores into stalk or ear) cutworm species green cloverworm meadow spittlebug western bean cutworm (before larva bores into stalk or ear)	0.96 to 1.6
armyworm (use higher rate for large larvae) bean leaf beetle bird cherry-oat aphid (suppression only) cereal leaf beetle corn leaf aphid (suppression only) corn rootworm beetle (adult): Mexican, Northern, Southern, Western English grain aphid (suppression only) European corn borer (before larva bores into stalk or ear) fall armyworm (use higher rate for large larvae) flea beetle species grasshopper species hop vine borer (before larva bores into stalk or ear) Japanese beetle (adult) lesser cornstalk borer sap beetle (adult) seedcorn beetle Southwestern corn borer (before larva bores into stalk or ear) stalk borer (before larva bores into stalk or ear) stink bug species tobacco budworm (before larva bores into stalk or ear) (observe instructions for limiting development of resistance) webworm species yellowstriped armyworm (use higher rate for large larvae)	1.28 to 1.92
beet armyworm (observe instructions for limiting development of resistance) chinch bug greenbug (suppression only) (observe instructions for limiting development of resistance) Mexican rice borer (before larva bores into stalk or ear) rice stalk borer (before larva bores into stalk or ear) southern corn leaf beetle (suppression only) sugarcane borer ¹	1.92
<p>NOTES: Inspect crop by scouting, or by local corn growth stages, usually at intervals of 7 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water of thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. For chinch bug control, begin applications when bugs migrate from small grains or grass</p>	

weeds to small corn. Direct spray to the base of corn plants. Repeat applications at 3-5-day intervals if needed. In heavy infestations, applications may provide only suppression of infestation or subsequent migration.

For control of adult corn rootworm beetles (*Diabrotica* species) as part of an aerial applied corn rootworm control program use a minimum of 0.03 lb. a.i. (1.92 fl. oz. of product) per acre.

Do not apply within 21 days of harvest.

Do not allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment.

Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.

Do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per crop from at plant and foliar applications. **Do not** apply more than 0.06 lb. a.i. (3.84 fl. oz. or 0.24 pts. of product) per acre after silk initiation. **Do not** apply more than 0.03 lb. a.i. (1.92 fl. oz. or 0.12 pts. of product) per acre after corn has reached the milk stage (yellow kernels with milky fluid).

Sweet Corn (foliar)

TARGET PEST	RATE
corn rootworm larvae: Mexican, Northern, Southern, Western cutworm species lesser cornstalk borer red imported fire ant (suppression only) seedcorn beetle seedcorn maggot white grub species wireworm species	0.33 fl. oz per 1000 ft of row
<p>NOTES:</p> <p>Banded Applications – Apply at planting as a 5 to 7 inch T–band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel.</p> <p>In–Furrow Applications – Apply into the seed furrow through spray nozzles or microtubes, behind the planter furrow openers and in front of the press wheel. Apply a minimum of 3 gals. finished spray per acre.</p> <p>Do not harvest or graze livestock or cut treated crops for feed within 21 days of at plant application.</p> <p>Do not apply more than 5.76 fl. oz. or 0.36 pts. of this product (or equivalent to 0.09 lb ai if using other lambda cyhalothrin products) per acre per year. For field corn, popcorn, and seed corn do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per crop from at plant and foliar applications. For sweet corn do not apply more than 0.48 lb. a.i. (30.72 fl. oz. or 1.92 pts. of product) per acre per crop from at plant and foliar applications.</p>	

Rice, Wild Rice

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
bird cherry-oat aphid chinch bug fall armyworm grasshopper species greenbug leafhopper species rice stink bug rice water weevil (adult) riceworm sharpshooter species true armyworm yellow sugarcane aphid yellowstriped armyworm	1.6. to 2.56
European corn borer Mexican rice borer rice seed midge rice stalk borer sugarcane borer	1.92 to 2.56 NOTE: Application must be made before larvae bore into the stalks.

NOTES:

Inspect crop by scouting. Apply when insect populations reach locally-determined population that may lead to yield loss. Repeat applications may be made at 5 to 7 day intervals, if indicated by scouting.

SAMURAI II C.S. may be applied to crops also treated with propanil as a herbicide.

Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. Use of an emulsified crop oil may improve performance.

For control of rice water weevil in dry-seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or feeding scars, usually at flood establishment or within 5 days. **Do not** exceed 10 days from starting permanent flood until insecticide application unless weevils have not been previously present in that area. Adults may also be treated at later stages of rice development to reduce overwintering populations.

To control rice water weevil in water-seeded rice, apply after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars, usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment and, if needed, apply a second application within 7-10 days of the first application. Adults may also be treated at later stages of rice development to reduce overwintering populations.

In water-seeded rice in California, SAMURAI II C.S. may also be applied at the 1-3 leaf growth stage, with the majority at the 2 leaf growth stage. Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Scout for adults, based upon history of infestation in that field. Monitor field edges and levee areas for adults. If adults are found, spray the inside perimeter of the field, or if necessary, spray the entire field.

SAMURAI II C.S. may only provide suppression of certain biotypes of greenbug. If satisfactory control is not achieved with the first application of SAMURAI II C.S., a resistant biotype may be

present. In this case, an alternate (non-pyrethroid) insecticide registered for this use should be used.

For control of stem borers, scout fields when rice growth is near panicle differentiation for early symptoms such as discoloration (orange–tan) around the junction of the leaf sheath and leaf blade, which is caused by feeding of young larvae within the sheath.

Apply before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading stage for maximum control. All rice varieties are susceptible to stem borer damage, but Cocodrie and Priscilla are particularly susceptible.

Mixers / loaders supporting aerial applications to wild rice at a rate of 0.04 lb. ai. per acre, and treating 1200 acres (or more) per day must wear dust-mist respirator.

Do not release floodwater within 7 days after an application.

Do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pt. of product) per acre per season.

Do not apply more than 0.04 lb. a.i. (2.56 fl. oz. or 0.16 pt. of product) per acre within 21 to 27 days of harvest.

Do not apply within 21 days of harvest.

Do not use treated rice fields for the aquaculture of edible fish and aquatic crustaceans.

Do not apply as an ultra-low volume (ULV) spray.

Grain Sorghum (Milo)

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species sorghum midge	0.96 to 1.28
armyworm beet armyworm (avoid resistance by following directions under “resistance management”) corn earworm European corn borer (before larvae bore into stalk) fall armyworm (use higher rate for large larvae) flea beetle species grasshopper species lesser cornstalk borer (before larvae bore into stalk) Southwestern corn borer (before larvae bore into stalk) stink bug species webworm species yellowstriped armyworm (use higher rate for large larvae)	1.28 to 1.92
chinch bug Mexican rice borer (before larvae bore into stalk) rice stalk borer (before larvae bore into stalk) sugarcane borer (before larvae bore into stalk)	1.92

NOTES:

Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss.

Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre.

For sorghum midge control, make the first application when 25% of the sorghum heads have emerged and are in tip bloom. Repeat applications at 5-day intervals if needed.

For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small sorghum. Direct spray to the base of sorghum plants. Repeat applications at

3 to 5-day intervals if needed. In heavy infestations, applications may provide only suppression of infestation or subsequent migration
Do not apply more than 0.08 lb. a.i. (5.12 fl. oz. or 0.32 pt. of product) per acre per season.
Do not apply more than 0.06 lb. a.i. (3.84 fl. oz. or 0.24 pt. of product) per acre per season after crop emergence.
Do not apply more than 0.02 lb. a.i. (1.28 fl. oz. or 0.08 pt. of product) per acre per season once crop is in soft-dough stage.
Do not apply within 30 days of harvest.

Small Grains (Barley, Buckwheat, Oats, Rye, Triticale, Wheat and Wheat Hay)

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species (including army cutworm)	0.96 to 1.6
armyworm bird cherry-oat aphid (apply before insects begin to roll leaves. after beginning of boot stage, higher rates may be needed) cereal leaf beetle English grain aphid (apply before insects begin to roll leaves. after beginning of boot stage, higher rates may be needed) fall armyworm flea beetle species grasshopper species Hessian fly when adults emerge) orange blossom wheat midge Russian wheat aphid (apply before insects begin to roll leaves. after beginning of boot stage, higher rates may be needed) stink bug species yellowstriped armyworm	1.28 to 1.92
grass sawfly	1.6 to 1.92
chinch bug corn leaf aphid (suppression only) greenbug (apply before insects begin to roll leaves. after beginning of boot stage, higher rates may be needed), (avoid resistance by following directions under "resistance management") mite species (suppression only)	1.92
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. For chinch bug control, repeat applications at 3-5-day intervals if needed. In heavy infestations, applications may provide only suppression of infestation or subsequent migration SAMURAI II C.S. may only provide suppression of certain biotypes of greenbug. If satisfactory control is not achieved with the first application of SAMURAI II C.S., a resistant biotype may be present. In this case, an alternate (non-pyrethroid) insecticide registered for this use should be used. Do not apply within 30 days of harvest.</p>	

Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. **Do not** feed treated straw to meat or dairy animals within 30 days after the last treatment.
Do not apply more than 0.06 lb. a.i. (3.84 fl. oz. or 0.24 pts. of product) per acre per season.

Cole Crops (Broccoli, Brussels Sprouts, Cabbage, Cavalo broccolo, Cauliflower, Gai Lon (Chinese Broccoli), Napa (Chinese Cabbage), Gai Choy (Chinese Mustard Cabbage), Kohlrabi

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
alfalfa looper cabbage looper cabbage webworm cutworm species imported cabbageworm Southern cabbageworm	0.96 to 1.6
aphid species, suppression only (avoid resistance by following directions under "resistance management") armyworm beet armyworm first and second instar only (avoid resistance by following directions under "resistance management") corn earworm diamondback moth (avoid resistance by following directions under "resistance management") fall armyworm, suppression only flea beetle species grasshopper species Japanese beetle (adult) leafhopper species meadow spittlebug plant bug species including lygus species (avoid resistance by following directions under "resistance management") spider mite specie, suppression only stink bug species thrips species, suppression only vegetable weevil (adult) whitefly species, suppression only (avoid resistance by following directions under "resistance management") yellowstriped armyworm	1.28 to 1.92
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. Do not apply within 1 day of harvest. Do not apply more than 0.24 lb. a.i. (15.36 fl. oz. or 0.96 pts. of product) per acre per season.</p>	

COTTON

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species soybean thrips tobacco thrips	0.96 to 1.6
cabbage looper cotton fleahopper cotton leaf perforator cotton leafworm lygus bug species, suppression only pink bollworm saltmarsh caterpillar	1.28 to 1.92
bandedwing whitefly beet armyworm, first and second instar only (avoid resistance by following directions under "resistance management") boll weevil brown stink bug cotton aphid, suppression only (avoid resistance by following directions under "resistance management") cotton bollworm European corn borer fall armyworm green stink bug southern green stink bug sweet potato whitefly, suppression only (avoid resistance by following directions under "resistance management") tobacco budworm (avoid resistance by following directions under "resistance management") twospotted spider mite, suppression only	1.6 to 2.56
<p>NOTES: Inspect crop by scouting at intervals of 5 to 7 days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. Applications may also be made with equipment adapted and calibrated for ULV sprays. Mix with once-refined vegetable oil and apply in a minimum of at least one quart of this mixture per acre. When bollworm or budworm pressure is low, the rate may be reduced to 0.02 lb. a.i. (1.28 fl. oz. of product) so long as there is intense monitoring of insect population in the treated field. To maintain adequate boll weevil control, repeat applications every 3 to 5 days. SAMURAI II C.S. also provides ovicidal activity against cotton bollworm and tobacco budworm when applied according to label directions. Do not apply within 21 days of harvest. Do not graze livestock in treated areas.</p>	

Do not apply more than 0.2 lb. a.i. (12.8 fl. oz. or 0.8 pt. of product) per acre per season.
Do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season.

CUCURBIT VEGETABLES: Chayote (fruit), Chinese Waxgourd, (Chinese preserving melon), Citron Melon, Cucumber, Gherkin, Gourd (edible), *Lagenaria* species (includes: hyotan, cucuzza), *Luffa acutangula*, *L. cylindrical* (includes: hechima, Chinese okra), *Momordica* species (includes: balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo*, including true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon), Pumpkin, summer squashes (*Cucurbita pepo* var *melopepo* – includes: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Winter squashes (*Cucurbita maxima*; *C. moschata* –includes butternut squash, calabaza, hubbard squash), (*C. mixta*; *C. pepo* - includes: acorn squash, spaghetti squash), Watermelon (includes: hybrids and/or varieties of *Citrullus lanatus*)

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
armyworm species (avoid resistance by following directions under “resistance management”) blister beetle species cabbage looper corn earworm cricket species cucumber beetle species (adults) cutworm species flea beetle species grasshopper species June beetle species leaffooted bug leafhopper species lygus bug species (avoid resistance by following directions under “resistance management”) melonworm pickleworm plant bug species rindworm species complex saltmarsh caterpillar squash beetle squash bug species squash vine borer species stink bug species thrips species, except western flower thrips (avoid resistance by following directions under “resistance management”) tobacco budworm (avoid resistance by following directions under “resistance management”) webworm species	1.28 to 1.92

aphid species (avoid resistance by following directions under "resistance management") leafminer species, suppression only (avoid resistance by following directions under "resistance management") whitefly species, suppression only (avoid resistance by following directions under "resistance management") spider mite species, suppression only	1.92
<p>NOTES:</p> Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. Use the higher application volumes and / or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual. Insects that bore or tunnel into leaves, vines, stems or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of SAMURAI II C.S.. Do not apply more than 0.18 lb. a.i. (11.5 fl. oz. or 0.72 pts. of product) per acre per season. Do not apply within 1 day of harvest.	

FRUITING VEGETABLES: Eggplant, Ground cherry, Pepino, Peppers (bell and non-bell), Tomatillo, Tomato

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cabbage looper cutworm species hornworm species	0.96 – 1.60
aphid species, suppression only (avoid resistance by following directions under “resistance management”) tomatillo beet armyworm, first and second instar only (avoid resistance by following directions under “resistance management”) tomato blister beetle species Colorado potato beetle (avoid resistance by following directions under “resistance management”) cucumber beetle species (adult) European corn borer before larvae bore into stalk or fruit fall armyworm, first and second instar only flea beetle species grasshopper species Japanese beetle (adult) leafhopper species leafminer species, suppression only meadow spittlebug pepper weevil (adult), suppression only plant bug species southern armyworm, first and second instar only spider mite species, suppression only stalk borer, before larvae bore into stalk or fruit stink bug species thrips, except western flower thrips tobacco budworm (avoid resistance by following directions under “resistance management”) tomato fruitworm tomato pinworm tomato psyllid, suppression only (avoid resistance by following directions under “resistance management”) vegetable weevil (adult) whitefly species suppression only (avoid resistance by following directions under “resistance management”) yellowstriped armyworm1	1.28 to 1.92

NOTES:

Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss.

Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre.

Do not apply within 5 days of harvest.

Do not apply more than 0.36 lb. a.i. (23.04 fl. oz. or 1.44 pts. of product) per acre per season.

GRASS FORAGE, FODDER, and HAY: Pasture and Rangeland Grass, Grass Grown for Hay or Silage, and Grass Grown for Seed

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
army cutworm cutworm species grass Essex skipper range caterpillar striped grass looper	0.96 – 1.6

beet armyworm billbug species suppression only bird cherry-oat aphid before insects start to toll leaves black grass bug black turfgrass beetle (adult) blue stem midge cereal leaf beetle chinch bug crane fly species cricket species English grain aphid before insects start to roll leaves fall armyworm flea beetle species grass mealybug grass sawfly (adult) grasshopper species green June beetle (adult) greenbug before insects start to roll leaves (avoid resistance by following directions under “resistance management”) Japanese beetle (adult) katydid species leafhopper species grass, grass grown for mite species, suppression only hay or silage and grass Russian wheat aphid before insects start to roll leaves grown for seed southern armyworm spittlebug species stink bug species sugarcane aphid thrips species tick species true armyworm webworm species yellowstriped armyworm	1.28 to 1.92
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NOTES:
Inspect crop by scouting at intervals of 5 days or less. Apply when insect populations reach locally-determined population that may lead to yield loss.
Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre.
Use higher application volumes and rates when foliage is dense, pest populations are high, larvae are large and/or weather conditions are adverse. Use higher rates for longer residual.
SAMURAI II C.S. may only achieve suppression in case of heavy infestations and/or migrations of chinch bugs. If this is the case, apply a second application using a non-pyrethroid insecticide.
SAMURAI II C.S. may only provide suppression of certain biotypes of greenbug. If satisfactory control is not achieved with the first application of SAMURAI II C.S., a resistant biotype may be present. In this case, an alternate (non-pyrethroid) insecticide registered for this use should be used.
Pasture and rangeland grass may be used for grazing or cut for forage 0 days after application. **Do not** cut grass to be dried and harvested for hay until 7 days after the last application.
In grass grown for seed, straw, hay and mature seed (seed screenings) may be used as feed 7 days after the last application. After regrowth, grass grown for seed may be grazed, or cut for forage or to be harvested and dried for hay.
Do not apply more than 0.03 lb. a.i. (1.92 fl. oz. or 0.12 pts. of product) per acre per cutting for

pastures, rangeland and grasses grown for seed. In pastures and rangeland receiving 0.03 lb. ai. per acre which have not been cut between applications, do not re-treat for at least of 30 days.

Do not apply more than 0.09 lb. a.i. (5.76 fl. oz. or 0.36 pts. of product) per acre per season.

LEGUME VEGETABLES: Peas and Beans, including **Edible Podded** (Jackbean *Canavalia ensiformis*, Sword bean *Canavalia gladiata*, immature soybean *glycine max*) **Edible Podded, Succulent Shelled, or Dry Shelled** (Pigeon peas *Cajanus cajun*; *Phaseolus spp.* including field, kidney, Lima, navy, pinto, runner, snap, tepary, and wax beans; *Pisum spp.* including dwarf, edible-pod, English, field, garden, snow, and sugar snap peas; *Vigna spp.* including adzuki, asparagus, moth, mung, rice, urd, and yardlong, beans, black-eyed peas, catjang, Chinese longbeans, cowpeas, Crowder peas, Southern peas), **Succulent Shelled or dried shelled** - fava bean (broadbean) *Vicia fava*: **Dried Shelled** - chickpea (garbanzo bean) *Cicer arietinum*; guar bean *Cyamopsis tetragonoloba*; Lablab bean *Lablab purpureus*; *Lupinus spp.* including, grain, sweet, white, and sweet white lupines; and Lentils *Lens esculata*.

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species green cloverworm Mexican bean beetle saltmarsh caterpillar velvetleaf caterpillar	0.96 – 1.6

<p>alfalfa caterpillar aphid species (avoid resistance by following directions under "resistance management") armyworm - use higher rate for large larvae. bean leaf beetle bean leaf skeletonizer blister beetle species corn earworm corn rootworm beetle species (adult) cucumber beetle species (adult) curculio and weevil species (foliage and pod feeding adults and larvae before larvae bore into stalks or pods) European corn borer fall armyworm - use higher rate for large larvae flea beetle species (adult) flea hopper species grasshopper species Japanese beetle (adult) Chinese leafhopper species leaf-tier species looper species meadow spittlebug painted lady butterfly (larva) plant bug species including lygus species (avoid resistance by following directions under "resistance management") stalk borer before larvae bore into stalks or pods stink bug species threecornered alfalfa hopper thrips species excluding western flower thrips (avoid resistance by following directions under "resistance management") tobacco budworm (avoid resistance by following directions under "resistance management") webworm species western bean cutworm western yellowstriped armyworm - use higher rate for large larvae yellowstriped armyworm - use higher rate for large larvae</p>	<p>1.28 to 1.92</p>
<p>beet armyworm, suppression only (avoid resistance by following directions under "resistance management") leafminer species, suppression only (avoid resistance by following directions under "resistance management") lesser cornstalk borer, suppression only soybean looper, suppression only (avoid resistance by following directions under "resistance management") spider mite species, suppression only whitefly species, suppression only (avoid resistance by following directions under "resistance management")</p>	<p>1.92</p>
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. For edible podded and succulent shelled legume vegetables, do not apply within 7 days of harvest.</p>	

For dried shelled legume vegetables, **do not** apply within 21 days of harvest.
Do not apply more than 0.12 lb .a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per season.
For succulent and dried shelled peas and beans, **do not** graze livestock in treated areas or harvest vines for forage or hay.

SOYBEANS

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
bean leaf beetle cabbage looper corn earworm corn rootworm beetle (adult): Mexican, Northern, Southern, Western cutworm species green cloverworm Mexican bean beetle painted lady (thistle) caterpillar potato leafhopper saltmarsh caterpillar soybean aphids - use the lower rate for early season application or light insect pressure threecornered alfalfa hopper thrips species, excluding western flower thrips velvetbean caterpillar woollybear caterpillar	0.96 – 1.6
blister beetle species European corn borer fall armyworm - use the higher rate for large larvae. grasshopper species Japanese beetle (adult) plant bug species silverspotted skipper stink bug species tobacco budworm (avoid resistance by following directions under "resistance management") webworm species yellowstriped armyworm - use the higher rate for large larvae.	1.60 to 1.92
beet armyworm, suppression only (avoid resistance by following directions under "resistance management") lesser cornstalk borer soybean looper, suppression only (avoid resistance by following directions under "resistance management") spider mite species, suppression only	1.92
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. For edible podded and succulent shelled legume vegetables, do not apply within 7 days of harvest. Do not graze or harvest treated soybean forage, straw, or hay for livestock feed.</p>	

For control of adult corn rootworm beetles (*Diabrotica* species) as part of an aerial-applied corn rootworm control program, use a minimum of 0.02 lb. a.i. (1.28 fl. oz. of product) per acre.
Do not apply within 30 days of harvest.
Do not apply more than 0.06 lb. a.i. (3.84 fl. oz. or 0.24 pt. of product) per acre per season.

LETTUCE (Leaf and Head)

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
alfalfa looper cabbage looper cutworm species green cloverworm imported cabbageworm saltmarsh caterpillar	0.96 – 1.6
aphid species, suppression only (avoid resistance by following directions under “resistance management”) armyworm beet armyworm, first and second instar only (avoid resistance by following directions under “resistance management”) corn earworm diamondback moth (avoid resistance by following directions under “resistance management”) European corn borer fall armyworm, first and second instar only flea beetle species grasshopper species Japanese beetle (adult) leafhopper species meadow spittlebug plant bug species including lygus species (avoid resistance by following directions under “resistance management”) southern armyworm spider mite species, suppression only stink bug species tobacco budworm (avoid resistance by following directions under “resistance management”) vegetable weevil (adult) whitefly species, suppression only (avoid resistance by following directions under “resistance management”)	1.28 to 1.92
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. For edible podded and succulent shelled legume vegetables, do not apply within 7 days of harvest. Do not apply within 1 day of harvest. Do not apply more than 0.3 lb. a.i. (19.2 fl. oz. or 1.2 pts. of product) per acre per season.</p>	

ONION (Bulb) and GARLIC

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species leafminer species (adult) onion maggot (adult) seedcorn maggot (adult)	0.96 – 1.6
aphid species, suppression only armyworm species, first and second instar only flower thrips, suppression only (avoid resistance by following directions under “resistance management”) onion thrips (avoid resistance by following directions under “resistance management”) plant bug species stink bug species tobacco thrips (avoid resistance by following directions under “resistance management”) western flower thrips, suppression only (avoid resistance by following directions under “resistance management”)	1.28 to 1.92 (Use the higher label rates as thrips population increases and avoid rescue situations.)
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. For thrips control by aerial application, the addition of 1% COC v/v, 1/4% NIS v/v or a silicone adjuvant may enhance the deposition of the spray and increase coverage. Always follow use directions on the adjuvant label. Do not apply within 14 days of harvest. Do not apply more than 0.24 lb. a.i. (15.36 fl. oz. or 0.96 pts. of product) per acre per season.</p>	

PEANUTS

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species green cloverworm potato leafhopper rednecked peanut worm threecornered alfalfa hopper velvetbean caterpillar	0.96 – 1.6
bean leaf beetle corn earworm fall armyworm - use the higher rate for large larvae. grasshopper species southern corn rootworm (adult) stink bug species tobacco thrips vegetable weevil whitefringed beetle (adult)	1.28 to 1.92

aphid species, suppression only beet armyworm, suppression only (avoid resistance by following directions under "resistance management") lesser cornstalk borer, suppression only soybean looper, suppression only (avoid resistance by following directions under "resistance management") spider mite species, suppression only	1.92
NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. For thrips control by aerial application, the addition of 1% COC v/v, 1/4% NIS v/v or a silicone adjuvant may enhance the deposition of the spray and increase coverage. Always follow use directions on the adjuvant label. Do not apply within 14 days of harvest. Do not apply more than 0.24 lb. a.i. (15.36 fl. oz. or 0.96 pts. of product) per acre per season.	

POME FRUITS(Apples, crabapples, Loquat, Mayhaw, Oriental Pears, Pears, Quince

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
apple aphid apple maggot (adult) cherry fruit fly species (adult) codling moth green fruitworm Japanese beetle leafhopper species leafroller species lesser appleworm omnivorous leafroller orange tortrix oriental fruit moth pear psylla, suppression only pear sawfly periodical cicada plant bug species plum curculio rosy apple aphid San José scale (fruit infestations only) spirea aphid, suppression only stink bug species tent caterpillar species tentiform leaf miner species tree borer species tufted apple budworm webworm species	1.28 to 2.56

NOTES:

Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss.

Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 5 gals. of water per acre, or more if required to obtain complete coverage.

Do not apply within 21 days of harvest.

Do not apply more than 0.2 lb. a.i. (12.8 fl. oz. or 0.80 pts. of product) per acre per year.

Do not apply more than 0.16 lb. a.i. (10.24 fl. oz. or 0.64 pts. of product) per acre per year post bloom.

STONE FRUITS (Apricots, Chickasaw Plums, Damson Plums, Japanese Plums, Nectarines, Peaches, Plums, Plumcots, Prunes, Sweet and Sour (Tart) Cherries)

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
American plum borer apple maggot (adult) black cherry aphid cherry fruit fly species (adult) codling moth green fruitworm Japanese beetle June beetle leafhopper species leafroller species oriental fruit moth peach twig borer peachtree borer species pear sawfly periodical cicada plant bug species plum curculio rose chafer bug species tent caterpillar species thrips species	1.28 to 2.56

NOTES:

Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss.

Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 5 gals. of water per acre, or more if required to obtain complete coverage.

Do not apply within 14 days of harvest.

Do not apply more than 0.2 lb. a.i. (12.8 fl. oz. or 0.80 pts. of product) per acre per year. **Do not**

apply more than 0.16 lb. a.i. (10.24 fl. oz. or 0.64 pts. of product) per acre per year post bloom.

SUGARCANE

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
Mexican rice borer, before the larvae bore into the stalk pygmy mole cricket rice stalk borer, before the larvae bore into the stalk sugarcane aphid (avoid resistance by following directions under "resistance management") sugarcane beetle (adult), suppression only of above- ground, active beetles sugarcane borer, before larvae bore into the stalk West Indian crane fly yellow sugarcane aphid (avoid resistance by following directions under "resistance management")	1.6 to 2.56
<p>NOTES: Inspect crop by scouting at intervals of 7 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. Do not apply within 21 days of harvest. Do not apply more than 0.16 lb. a.i. (10.24 fl. oz. or 0.64 pt. of product) per acre per season.</p>	

SUNFLOWER

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species sunflower beetle	0.96 to 1.6
banded sunflower moth fall armyworm - use the high rate for large larvae grasshopper species head-clipper weevil (adult) Japanese beetle (adult) leafhopper species meadow spittlebug painted lady (thistle) caterpillar seed weevil (adult) spotted cabbage looper stem weevil (adult) stink bug species sunflower maggot (adult) sunflower moth woollybear caterpillar	1.28 to 1.92
beet armyworm, suppression only (avoid resistance by following directions under "resistance management") spider mite species, suppression only	1.92

NOTES:

Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss.

Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre.

Do not apply within 45 days of harvest.

Do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per season.

Do not apply more than 0.09 lb. a.i. (5.76 fl. oz. or 0.36 pts. of product) per acre per season after bloom initiation.

Do not apply as an ultra-low volume (ULV) spray.

TOBACCO

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
armyworm species, first and second instar only blister beetle species cabbage looper corn earworm cucumber beetle species (adult) cutworm species grasshopper species Japanese beetle (adult) katydid species plant bug species (avoid resistance by following directions under "resistance management") potato tuberworm salt marsh caterpillar stinkbug species tobacco aphid species, suppression only (avoid resistance by following directions under "resistance management") tobacco budworm (avoid resistance by following directions under "resistance management") tobacco flea beetle (adult) tobacco hornworm tobacco thrips species, suppression only tomato hornworm tree cricket species vegetable weevil (adult) webworm species	0.96 – 1.92

NOTES:

Inspect crop by scouting at intervals of 7 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss.

Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre.

Do not apply within 40 days of harvest.

Do not apply more than 0.09 lb. a.i. (5.76 fl. oz. or 0.36 pts. of product) per acre per year.

TREE NUTS (Almonds, Beech Nuts, Brazil Nuts, Butternuts, Cashews, Chestnuts, Chinquapins, Filberts (Hazelnuts), Hickory Nuts, Macadamia Nuts, Pistachios, Black Walnuts, English (Persian) Walnuts, Pecans

TARGET PEST (not including pecans)	RATE (FL. OZ. SAMURAI II C.S. per acre)
ants beech nut chinch bug Brazil nut codling moth butternut filbertworm cashew leaffooted bug chestnut leafroller species chinquapin navel orangeworm filbert (hazelnut) peach twig borer hickory nut plant bug species macadamia nut stink bug species (bush nut) walnut aphid pistachio walnut husk fly species walnut, black (adult)	1.28 – 2.56
TARGET PESTS ON PECANS	1.28 – 2.56
hickory shuckworm pecan aphid species pecan casebearer species pecan phylloxera species pecan spittlebug pecan weevil stink bug species	
<p>NOTES: Inspect crop by scouting at intervals of 5 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 5 gals. of water per acre, or more if required to obtain complete coverage. Do not apply more than 0.16 lb. a.i. (10.24 fl. oz. or 0.64 pts. of product) per acre per year. Do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per year post bloom.</p>	

TUBEROUS AND CORM VEGETABLES (Potato, Sweet Potato, Yams and Related)

(including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem only), Canna (edible), Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen, Ginger, Leren, Potato, Sweet Potato, Tanier, Turmeric, Yam (bean and true)

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
cutworm species leafhopper species saltmarsh caterpillar sweet potato hornworm woolybear caterpillar species	0.96 to 1.6

<p>aphid species (avoid resistance by following directions under "resistance management") armyworm species (avoid resistance by following directions under "resistance management") blister beetle species Colorado potato beetle¹ corn earworm cricket species cucumber beetle species (adults) European corn borer flea beetle species (adults) grasshopper species looper species (avoid resistance by following directions under "resistance management") lygus bug species (avoid resistance by following directions under "resistance management") plant bug species potato psyllid potato tuberworm stink bug species sweet potato leaf beetle (adults) sweet potato vine borer thrips species excluding western flower thrips (avoid resistance by following directions under "resistance management") tortoise beetle species webworm species weevil species (adults)</p>	<p>1.28 to 1.92</p>
<p>leafminer species, suppression only (avoid resistance by following directions under "resistance management") spider mite species, suppression only whitefly species suppression only (avoid resistance by following directions under "resistance management")</p>	<p>1.92</p>
<p>NOTES: Inspect crop by scouting at intervals of 7 or more days. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. When applying by ground, use a minimum of 10 gallons of dilution per acre. Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual. Insects that bore or tunnel into leaves, vines, stems, tubers or corms must be controlled before penetration. Do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pts. of product) per acre per season. Do not apply within 7 days of harvest.</p>	

NON-AGRICULTURAL USES

Tree Nurseries: Deciduous and Conifer

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
bagworm balsam twig aphid balsam wooly aphid birch leafminer black pine weevil elm leaf beetle European elm bark beetle gypsy moth Japanese beetle June beetle species leaf beetle species leafroller species May beetle species mealybug species, suppression only pales weevil pine chafer pine colaspis beetle pine conelet bug pine leaf chermid pine needle scale pine sawfly species pine tip moth species pine tortoise scale pine weevil species poplar aphid species sawfly species spittlebug species spruce budworm tent caterpillar species tussock moth species webworm species	1.28 to 2.56
<p>NOTES: Inspect crop by scouting at intervals based on local conditions and history. Apply when insect populations reach locally-determined population that may lead to yield loss. Apply with ground or air equipment using sufficient water for thorough coverage of foliage. When applying by air, apply a minimum of 2 gals. of water per acre. When applying by ground, use a minimum of 10 gallons of dilution per acre. Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual. Insects that bore or tunnel into leaves, vines, stems, tubers or corms must be controlled before penetration. Do not apply more than 0.5 lb. a.i. (32 fl. oz. or 2 pints of product) per acre per season.</p>	

Conifer and Deciduous Seed Orchards

TARGET PEST	RATE (FL. OZ. SAMURAI II C.S. per acre)
coneworm species seed bug species thrips species	For high volume sprayers, dilute 2.56 fl. oz. per 100 gals. of water and apply 5-10 gals. of finished spray per tree. For low volume sprayers, dilute 10 fl. oz. per 100 gals. of water and apply 100 gals. of finished spray per acre. For aerial applications, apply 7.5 fl. oz./A in a minimum of 10 gals. finish spray per acre.
NOTES: Do not apply more than 0.5 lb. a.i. (32 fl. oz. or 2 pts. of product) per acre per year.	

NON CROP AREAS (not including public lands)

In non-crop areas adjacent to treated crops, spray according to the use directions indicated for the crop to control insects which may migrate into crops from the non-cropped area. Use the highest rate for dense foliage, high insect pressure, or late growth stages of larvae. Repeat as necessary, but do not exceed maximum rates if spray will also be applied to the crop, and **do not** apply more than 12.8 fl. oz (0.8 pint) of SAMURAI II C.S. per year.

Do not graze livestock in treated non-crop areas.

STORAGE AND DISPOSAL

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

Storage and Spill Procedures: Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spillage or leakages, soak up with an absorbent material such as sand, sawdust, earth, Fuller's earth, etc. Dispose of with chemical waste.

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Disposal: Nonrefillable Container. Do not reuse or refill container. Triple Rinse (or equivalent) after emptying container. Offer for recycling if available, or puncture and dispose of in a sanitary land fill or by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke. *For Containers equal to or less than 5 Gallons* : Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. *For Containers greater than 5 Gallons:* 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.

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

WARRANTY STATEMENT

J. Oliver Products, Inc. warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with 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 J. Oliver Products, Inc. To the extent consistent with applicable law, J. Oliver Products, Inc. shall in no event be liable for consequential, special, or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. In addition to the foregoing, no purchaser of this product (other than an end user) shall be entitled to any reimbursement for any loss suffered as a result of any suspension or cancellation of the registration for this product by the U.S. Environmental Protection Agency. Except, as expressly provided herein, J. Oliver Products, Inc. makes no warranties, guarantees, or representations of any kind, either expressed or implied, or by usage of trade, statutory or otherwise, with regard to the product sold, including, but not limited to merchantability, fitness for a particular purpose, use or eligibility of the product for any particular trade usage. To the extent consistent with applicable law, the exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damage resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall be damages not exceeding the purchase price paid for this product or, at J. Oliver Products, Inc. election, the replacement of this product.