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.

QUALI-PRO®

STATE OF HAWAII
Department of Agriculture
ACCEPTED
LICENSE NO. 8275.43

Bifenthrin Golf & Nursery 7.9F

Insecticide

For Commercial Non-Food Use on Indoor and Outdoor Ornamentals, Greenhouses, Nurseries, and Turf on Golf Courses and Sod Farms.

ACTIVE INGREDIENT:	**% BY WT.**
Bifenthrin*	7.9%
OTHER INGREDIENTS:	92.1%
TOTAL	100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum. Quali-Pro Bifenthrin Golf & Nursery 7.9F contains 2/3 pound active ingredient per gallon.

Contains bifenthrin, the active ingredient used in Talstar S Select Insecticide. Bifenthrin Golf and Nursery 7.9F is not manufactured or distributed by FMC Corp.

EPA Reg. No. 66222-192

KEEP OUT OF REACH OF CHILDREN

CAUTION

For additional precautionary, handling, and use statements, see inside of this booklet.

NOTE:

- **USERS OF THIS PRODUCT IN CALIFORNIA MUST BE IN POSSESSION OF STATE-SPECIFIC SUPPLEMENTAL LABELING.**
- **DO NOT USE THIS PRODUCT ON GOLF COURSES AND SOD FARMS IN NASSAU COUNTY OR SUFFOLK COUNTY, NEW YORK.**

Manufactured for: **Makhteshim Agan of North America, Inc.**
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609

Label #13791

EPA 091609/Rev B

FIRST AID	
IF SWALLOWED:	• 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 INHALED:	• 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.
IF ON SKIN OR CLOTHING:	• 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 IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies involving this product, call Prosar at 1-877-250-9291.	
Note to Physician: 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

CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Applicators and other handlers (other than mixers and loaders) must wear:

• Long-sleeved shirt and long pants

- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton
- Shoes plus socks

Mixers and Loaders must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton
- Shoes plus socks
- Protective eyewear

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.
- Remove PPE immediately after handling this product. Wash 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. 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 runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow 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. 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.

Do not apply this product through any kind of irrigation system.

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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or Viton
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.

Do not allow people or pets on treated surfaces until the spray has dried.

GENERAL APPLICATION INSTRUCTIONS

NOTE: USERS OF THIS PRODUCT IN CALIFORNIA MUST BE IN POSSESSION OF STATE-SPECIFIC SUPPLEMENTAL LABELING.

Quali-Pro Bifenthrin Golf & Nursery 7.9F controls listed insects and mites on trees, shrubs, foliage plants, nonbearing fruit and nut trees, and flowers in greenhouses. Nonbearing crops are perennial crops that will not produce a harvestable raw agricultural commodity during the season of application.

Spreader stickers are not necessary with Quali-Pro Bifenthrin Golf & Nursery 7.9F.

Quali-Pro Bifenthrin Golf & Nursery 7.9F can be tank mixed with insect growth regulators, other pesticides, and other aqueous carriers. Observe all precautions and directions for use for each product. Physical compatibility may vary with different combinations of products, so prepare a small-scale (pint or quart jar) test sample for any combination not tested previously. Use proper proportions in the small-scale test to achieve the correct result.

Unless otherwise noted in the label instructions, use the procedure below for preparation of a new tank mix:
1. Add wettable powders to tank water.
2. Mix well.
3. Add liquids and flowables.
4. Mix well.
5. Add emulsifiable concentrates.
6. Mix well.

Try reversing the order of addition or increasing the amount of water if the combination is not compatible using the above order. NOTE: After increasing the amount of water, if the mixture is found to be compatible, it is necessary to recalibrate the sprayer for a higher volume application. Do not allow mixture to stand overnight.

Maximum rates: Do not apply more than 0.2 lb. ai/acre (40 fl. oz. of Quali-Pro Bifenthrin Golf & Nursery 7.9F) in a single application or per year for outdoor applications.

Resistance:
When products are used repeatedly for control, some insects are known to build up resistance, but this cannot be predicted. This product should conform to resistance management strategies established for the use area. Check with your local or state pest management authorities for more information.

This product, or other products with comparable modes of action, may not provide sufficient control if resistance should develop in your area. A resistant species may be present if poor efficacy cannot be linked to extreme weather conditions or improper treatment. Consult pest management advisors for the other methods of control for your area if you believe resistance is a factor.

Quali-Pro Bifenthrin Golf & Nursery 7.9F Dilution Chart

Appl Volume	Appl Rate	Fluid Ounces* of Quali-Pro Bifenthrin Golf & Nursery 7.9F Diluted to these Volumes of Finished Spray			
Gallons per Acre	Lb. a.i. per Acre	1 Gallon	25 Gallons	50 Gallons	100 Gallons
50	0.025	0.1	2.5	5.0	10.0
50	0.05	0.2	5.0	10.0	20.0
50	0.1	0.4	10.0	20.0	40.0
50	0.2	0.8	20.0	40.0	80.0
100	0.025	0.05	1.25	2.5	5.0
100	0.05	0.1	2.5	5.0	10.0
100	0.1	0.2	5.0	10.0	20.0
100	0.2	0.4	10.0	20.0	40.0
150	0.025	0.03	0.83	1.67	3.3
150	0.05	0.07	1.67	3.33	6.7
150	0.1	0.133	3.33	6.67	13.3
150	0.2	0.266	6.67	13.33	26.7
200	0.025	0.025	0.63	1.25	2.5
200	0.05	0.05	1.25	2.5	5.0
200	0.1	0.1	2.5	5.0	10.0
200	0.2	0.2	5.0	10.0	20.0
250	0.025	-	0.5	1.0	2.0
250	0.05	-	1.0	2.0	4.0
250	0.1	-	2.0	4.0	8.0
250	0.2	-	4.0	8.0	16.0
300	0.025	-	0.42	0.83	1.7
300	0.05	-	0.83	1.67	3.3
300	0.1	-	1.67	3.33	6.7
300	0.2	-	3.33	6.67	13.3

*To convert to milliliters, multiply by 29.57
1 fl. oz. = 29.57 ml = 2 tablespoons = 6 teaspoons
Do not use household utensils to measure Quali-Pro Bifenthrin Golf & Nursery 7.9F.

Formula for Determining the Active Ingredient Content of the Finished Spray Mixture: To determine the percent active ingredient that is in the spray tank after mixing Quali-Pro Bifenthrin Golf & Nursery 7.9F, use the formula below:

$$\frac{(7.9)(\text{Fl. Oz. of Quali-Pro Bifenthrin Golf \& Nursery 7.9F added to tank})}{(\text{Gallons of finished spray mix})(128)} = \text{Percent a.i. of spray mix}$$

ORNAMENTALS

Ornamentals in Greenhouses, Lath Houses, Shade Houses, and Outdoor Nurseries including Nonbearing Fruit and Nut Trees

Apply 0.025 to 0.2 lb. ai/A (5 to 40 fl. oz.) of Quali-Pro Bifenthrin Golf & Nursery 7.9F. Provided the maximum label rate (0.2 lb. ai/A or 40 fl. oz.) is not exceeded, Quali-Pro Bifenthrin Golf & Nursery 7.9F can be diluted and applied in various volumes of water. It may also be applied through low-volume application equipment by dilution with water or other carriers. Refer to **Dilution Chart** for specific instructions.

ORNAMENTAL APPLICATION RATES

Under typical conditions, the application rates in the table below will provide control of the pests listed. However, at the discretion of the applicator, Quali-Pro Bifenthrin Golf & Nursery 7.9F may be applied at up to 0.2 lb. ai/A (40 fl. oz.) to control the pests listed in this table.

Pest	Application Rate Quali-Pro Bifenthrin Golf & Nursery 7.9F	
	Lb. Ai/A	Fluid Ounces Per Acre
Aphids, Bagworms[1], Cutworms, Elm Leaf Beetles, Fall Webworms, Lace Bugs, Leaf Feeding Caterpillars, Plant Bugs (Including *Lygus* spp.), Tent Caterpillars	0.025-0.05	5-10
Beet Armyworm, Black Vine Weevil (Adults), Brown Soft Scales, Broad Mites, Budworms, California Red Scale (Crawlers)[2], Centipedes, Citrus Thrips, Clover Mites, Crickets, Diaprepes (Adults), Earwigs, European Red Mite, Flea Beetles, Fungus Gnats (Adults), Grasshoppers, Gypsy Moth Caterpillars, Leafhoppers, Leafrollers, Mealybugs, Millipedes, Mites, Orchid Weevil, Pillbugs, Pine Needle Scales (Crawlers)[2], San Jose Scales (Crawlers)[2], Sowbugs, Spider Mites, Spiders, Thrips, Tip Moths, Twig Borers[2], Weevils, Whiteflies	0.05-0.1	10-20
Ants, Imported Fire Ants**, Japanese Beetle (Adults), Leafminers, Pecan Leaf Scorch Mite, Pine Shoot Beetle (Adults)	0.1-0.2	20-40
**For foraging ants.		

[1]**Bagworms:** For optimum control, treat when larvae have started to hatch and are young, directing spray to contact as many larvae as possible.

[2]**Scale Crawlers and Twig Borers:** Apply to plant foliage; also treat trunks, stems, and twigs.

Treat a small number of plants, and observe for one week to determine if certain cultivars are sensitive to the final spray solution.

- Apply with ground equipment only.
- Do not apply when wind direction favors downwind drift towards nearby water bodies.
- Do not apply when wind velocity exceeds 10 mph.
- Avoid application when wind gusts approach 10 mph.
- Do not apply when a temperature inversion exists.
- Apply using the largest nozzle size compatible with adequate coverage.
- Do not apply if rain is expected within 12 hours (or whatever time is necessary for the spray to dry).
- Do not apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. Do not apply within 150 feet of aquatic areas when treating tall trees (>15 feet) from the ground with high-pressure sprays or during any application with air-assisted equipment (mist blower).

Imported Fire Ant (IFA) Quarantine Treatment

For imported fire ants (IFA) in potting media (including balled and containerized nursery-grown ornamental trees, shrubs, plants, flowers, conifers, bushes, Christmas trees, and nonbearing fruit and nut trees). Quali-Pro Bifenthrin Golf & Nursery 7.9F is approved and can be used in accordance with the USDA Imported Fire Ant Quarantine Program. Quali-Pro Bifenthrin Golf & Nursery 7.9F may be applied either as a high-volume drench treatment, soil incorporated, or as a topical application.

Soil Incorporation: By sprinkling or spraying it onto the media, incorporate the appropriate volume of Quali-Pro Bifenthrin Golf & Nursery 7.9F (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media). The applications are based on the dry bulk density of the potting media. This application will provide a 6-month certification period when used in accordance with USDA guidelines.

Rates for Soil Incorporation of Quali-Pro Bifenthrin Golf & Nursery 7.9F to Control Imported Fire Ants (IFA) in Potting Media.

Potting Media Bulk Density (lbs. cubic yard)	Fluid Ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F in one cubic yard
200	1.9
400	3.8
600	5.7
800	7.6
1000	9.5
1200	11.4
1400	13.3

Use proportional amounts of Quali-Pro Bifenthrin Golf & Nursery 7.9F for potting media with bulk densities not listed.

Topical Application: Mix Quali-Pro Bifenthrin Golf & Nursery 7.9F in 1000 ounces of water based on container size and bulk density of the potting media (see table below). Use one (1) ounce of the mixture, evenly distributing over the potting media surface of each container. After treatment, irrigate all treated containers with 1.5 inches of water. This application will provide a 6-month certification period when used in accordance with USDA guidelines.

Application Rate for Topical Drench of Quali-Pro Bifenthrin Golf & Nursery 7.9F to Control IFA in Potting Media

Potting Media Bulk Density (lbs. cubic yard)	Fluid Ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F per 1000 ounces of water	
	3 Qt. Container	4 Qt. Container
200	3.6	5.2
400	7.2	10.4
600	10.8	15.6
800	14.4	20.8
1000	18.0	26.0
1200	21.6	31.2
1400	25.2	36.4

Use proportional amounts of Quali-Pro Bifenthrin Golf & Nursery 7.9F for potting media with bulk densities not listed.

High-Volume Drench: Mix the appropriate amount based on the bulk density of the media in 100 gallons of water (see table below). Use Quali-Pro Bifenthrin Golf & Nursery 7.9F as a high-volume treatment drenching each of the containers to the point of saturation. The amount of mix used for each plant is normally 1/5 volume of the container. This application will provide a 6-month certification period when used in accordance with USDA guidelines.

Application Rate for High Drench of Quali-Pro Bifenthrin Golf & Nursery 7.9F to Control Imported Fire Ants (IFA) in Potting Media

Potting Media Bulk Density (lbs. cubic yard)	Fluid Ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F in 100 gallons
200	2.4
400	4.8
600	7.2
800	9.6
1000	12.0
1200	14.4
1400	16.8

Use proportional amounts of Quali-Pro Bifenthrin Golf & Nursery 7.9F for potting media with bulk densities not listed.

LARVAL CONTROL IN POTTING MEDIA OF CONTAINERIZED PLANTS

PREVENTATIVE TREATMENT			
PEST	**APPLICATION TYPE**	**TREATMENT WITH QUALI-PRO BIFENTHRIN GOLF & NURSERY 7.9F**	**REMARKS**
Black Vine Weevil Larvae	Topical Drench	Use at the rate of 10 to 40 fl. oz. (0.05 to 0.2 lb./AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6” (diameter) container. Treat the media to the point of saturation, which generally requires 1/5 the volume of the container.	10 fluid ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F per 100 gallons and applying 8 fluid ounces of finished spray per 6” (diameter) container will provide control for one growing season when the application is made in the spring. 20 to 40 fluid ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F per 100 gallons and applying 8 fluid ounces of finished spray per 6” (diameter) container will provide control for two growing seasons when the application is made in the spring. Use a proportional volume of finished spray for containers less than or greater than 6” in diameter.
White Grubs - Japanese beetle - Oriental beetle - European chafer	Topical Drench	Use at the rate of 40 to 80 fluid ounces (0.2 to 0.4 lb./AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6” (diameter) container. Treat the media to the point of saturation, which generally requires 1/5 the volume of the container.	Use the higher application rate for a longer period of control. Use a proportional volume of finished spray for containers less than or greater than 6” in diameter.

PREVENTATIVE TREATMENT			
PEST	**APPLICATION TYPE**	**TREATMENT WITH QUALI-PRO BIFENTHRIN GOLF & NURSERY 7.9F**	**REMARKS**
Black Vine Weevil Larvae and White Grub	Media Incorporation	Incorporate the appropriate volume of Quali-Pro Bifenthrin Golf & Nursery 7.9F (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media.	Use the higher application rates for longer periods of control.
Fungus Gnat Larvae	Topical Drench	Use at the rate of 20 to 40 fl. oz. (0.1 to 0.2 lb./AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fl. oz. of finished spray per 6” (diameter) container. Treat the media to the point of saturation, which generally requires 1/5 the volume of the container.	Use a proportional volume of finished spray for containers less than or greater than 6” in diameter
Root Weevil Larvae	Bare Root Treatment	Use at the rate of 1 gallon in 100 gallons of water and treat the bare roots of plants that are being transplanted into the field. Either dip the roots into the insecticide solution for ten seconds or spray the insecticide solution onto the roots.	

Potting Media Bulk Density (lbs. per cubic yard)	Fluid ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F in one cubic yard			
	10 PPM	15 PPM	20 PPM	25 PPM
200	0.4	0.6	0.8	1.0
300	0.6	0.9	1.2	1.5
400	0.8	1.2	1.6	2.0
500	1.0	1.5	2.0	2.5
600	1.2	1.8	2.4	3.0
700	1.4	2.1	2.8	3.5
800	1.6	2.4	3.2	4.0
900	1.8	2.7	3.6	4.5
1000	2.0	3.0	4.0	5.0

The application rates in the table above are based on the dry bulk density of the potting media. For potting media with dry bulk densities not listed above, use proportional volumes of Quali-Pro Bifenthrin Golf & Nursery 7.9F.

CURATIVE TREATMENT			
PEST	APPLICATION TYPE	TREATMENT WITH QUALI-PRO BIFENTHRIN GOLF & NURSERY 7.9F	REMARKS
Black Vine Weevil Larvae	Topical Drench	Use at the rate of 10 to 40 fl. oz. (0.05 to 0.2 lb./AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6" (diameter) container. Treat the media to the point of saturation, which generally requires 1/5 the volume of the container.	10 fluid ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F per 100 gallons and applying 8 fluid ounces of finished spray per 6" (diameter) container will provide control for one growing season when the application is made in the spring. 20 to 40 fluid ounces of Quali-Pro Bifenthrin Golf & Nursery 7.9F per 100 gallons and applying 8 fluid ounces of finished spray per 6" (diameter) container will provide control for two growing seasons when the application is made in the spring. Use a proportional volume of finished spray for containers less than or greater than 6" in diameter.

CURATIVE TREATMENT			
PEST	**APPLICA-TION TYPE**	**TREATMENT WITH QUALI-PRO BIFENTHRIN GOLF & NURSERY 7.9F**	**REMARKS**
Diaprepes Weevil Larvae	Topical Drench	Use at the rate of 10 to 40 fl. oz. (0.05 to 0.2 lb./AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6" (diameter) container. Treat the media to the point of saturation, which generally requires 1/5 the volume of the container.	Use the higher application rate for a longer period of control. Use a proportional volume of finished spray for containers less than or greater than 6" in diameter.
Fungus Gnat Larvae	Topical Drench	To control fungus gnat larvae infesting containerized plants, dilute Quali-Pro Bifenthrin Golf & Nursery 7.9F at the rate of 10 to 40 fl. oz. (0.05 to 0.2 lb./AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6" (diameter) container. Treat the media to the point of saturation, which generally requires 1/5 the volume of the container.	Use the higher application rates for longer periods of control. Use a proportional volume of finished spray for containers less than or greater than 6" in diameter.

TURF (GOLF COURSES AND SOD FARMS)

Do not use this product on golf courses and sod farms in Nassau County or Suffolk County, New York.

In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).

In New York State, do make a single repeat application of Quali-Pro Bifenthrin Golf & Nursery 7.9F if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

Quali-Pro Bifenthrin Golf & Nursery 7.9F may be applied as a surface or sub-surface treatment. To get uniform coverage when treating dense and/or long turf foliage, use application volumes of up to 10 gallons per 1000 sq. ft.

For low volume applications (less than 2 gallons/1000 square feet): Irrigate treated area with at least 0.25 inches of water immediately following treatment to ensure control of sub-surface pests such as, but not limited to, mole crickets.

APPLICATION RATES

TURF (Golf Courses and Sod Farms)

Under typical conditions, the application rates listed in the table below will provide control of the pests that are listed. During periods of high pest pressure or for maximum residual control, Quali-Pro Bifenthrin Golf & Nursery 7.9F can be applied at up to 0.1 lb. ai/A (20 fl. oz.) (0.2 lb. ai/A or 40 fl. oz. for ants, imported fire ants, and mole crickets).

Pest	Active Ingredient lb. per acre	Application Rate Quali-Pro Bifenthrin Golf & Nursery 7.9F	
Armyworms[3], Cutworms[3], Sod Webworm[3]	0.05 lb. ai per acre	10 fl. oz. per acre	0.25 fl. oz. per 1000 sq. ft.
Annual Bluegrass Weevil (Hyperodes)(Adult)[4], Ants, Billbugs (Adult)[5], Black Turfgrass Ataenius (Adult)[6], Centipedes, Chinch Bugs[7], Crickets, Earwigs, Fleas (Adult), Grasshoppers, Leafhoppers, Mealybugs, Millipedes, Mites[8], Mole Cricket (Adult)[9], Mole Cricket (Nymph)[10], Pillbugs, Sowbugs	0.05-0.1 lb. ai per acre	10-20 fl. oz. per acre	0.25-0.5 fl. oz. per 1000 sq. ft.
Fleas (Larvae)[11], Imported Fire Ants, Japanese Beetle (Adult), Ticks[12]	0.1 lb. ai per acre	20 fl. oz. per acre	0.5 fl. oz. per 1000 sq. ft.
Ants, Imported Fire Ants[14], Mole Crickets	0.2[13] lb. ai per acre	40[13] fl. oz. per acre	1 fl. oz.[13] per 1000 sq. ft.

[3]**Armyworms, Cutworms, and Sod Webworms:** Postpone irrigation or mowing for 24 hours following application to obtain the best possible control. Higher treatment rates (up to 0.1 lb. ai/A or 20 fl. oz. of Quali-Pro Bifenthrin Golf & Nursery 7.9F) may be necessary if high pest pressure exists and if the turf area is maintained at a height taller than 1 inch.

[4]**Annual Bluegrass Weevil (*Hyperodes*) Adults:** Treatment of this species should be timed as they travel into grass areas and away from their overwintering sites. Travel usually begins when *Forsythia* is in full bloom and ends when *Cornus florida* (flowering dogwood) is in full bloom. For additional detailed information regarding treatment timing, check with your State Cooperative Extension Service.

[5]**Billbug Adults:** Treatment of adult billbugs should be made when they are first noticed in April and May. To optimize treatment timing, degree day models have been developed. For detailed information particular to your region, check with your State Cooperative Extension Service. Spring treatments for billbug adults will also offer control of overwintered chinch bugs in temperate climates.
[6]**Black Turfgrass Ataenius Adults:** In order to control the 1st and 2nd generation of black turfgrass ataenuis adults respectively, treatments should take place in May and July. Time the May treatment to match with the full-bloom stage of Vanhoutte spiraea (*Spiraea vanhoutte)* and horse chestnut (*Aesculus hippocastanum).* Time the July treatment to match with the blooming Rose of Sharon (*Hibiscus syriacus).*
[7]**Chinch Bugs:** Mostly found in the thatch layer, chinch bugs infest the base of turf plants. In order to optimize the penetration of the insecticide to location of the chinch bugs, irrigation of the turf prior to treatment may be necessary. If a long mowing height is being maintained or if the thatch layer is excessive, use higher volume treatments. It may be necessary to use higher application rates (up to 0.1 lb. ai/A or 20 fl. oz. of Quali-Pro Bifenthrin Golf & Nursery 7.9F) to control populations made up of both adults and nymphs in mid-summer.
[8]**Mites:** Apply Quali-Pro Bifenthrin Golf & Nursery 7.9F in combination with a labeled rate of a surfactant to achieve optimal control of eriophyid mites. A second application may be needed 5 to 7 days after the first to ensure optimal control.
[9]**Mole Cricket Adults:** Because preferred turf areas are subject to constant invasion during the early spring by this very active stage, it is difficult to attain suitable control of adult mole crickets. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately following treatment. To bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized, it is imperative to irrigate prior to application if the soil is not moist. To obtain optimum control of subsequent nymph populations (see below), turf areas that receive pressure from adult mole crickets should be treated at peak egg hatch.
[10]**Mole Cricket Nymphs:** Treat those turf areas that are hit with intense adult mole cricket pressure in the spring right before peak egg hatch. Young nymphs are more vulnerable to insecticides at this time because they are close to the soil surface where the insecticide is most concentrated; therefore, the greatest amount of control is reached. In order to sustain adequate control of larger, more damaging nymphs later in the year, it may be necessary to use higher application rates more often. It is ideal to treat the areas as late in the day as possible and water immediately after treatment with up to 0.5 inches of water. To get mole crickets nearer to the soil surface where there will be maximum contact, it is necessary to irrigate prior to application if the soil is not moist.
[11]**Flea Larvae:** Immature fleas mature in shaded areas accessible to pets or other animals. When treating these areas, use a higher volume treatment so that the insecticide penetrates into the soil. Note: If the lawn area is being treated with Quali-Pro Bifenthrin Golf & Nursery 7.9F at 0.05 lb./ai/A (10 fl. oz.) for adult flea control, then the larval application rate can be achieved by doubling the application volume.

[12]**Ticks:** Make application to the entire area where contact with ticks may occur. Do not make spot treatments. When applying to areas with heavy leaf litter or dense ground cover, use higher spray volumes. To attain and/or sustain control in times of high pest pressure, re-treatments may be necessary; re-treat only if signs of continued or renewed tick activity are present. Do not make repeat treatments more than once per 7 days. **Deer ticks (*ixodes* spp.)** have a 4-stage life cycle spanning 2 years. Treat in late fall and/or early spring to both larval and nymphal stages present in leaf litter and the soil and adults living in the grass and low-lying vegetation above ground. **American dog ticks** invade suburban settings in areas where residences and dwellings are constructed on former fields or wooded areas. These pests normally gather by paths or roadways where they are likely to find a host. To control tick larvae, nymphs, and adults, treatments should take place as needed from mid-spring to early fall.

[13]**Note:** A single application of 0.2 lb. ai/A (40 fl. oz. of Quali-Pro Bifenthrin Golf & Nursery 7.9F) may be applied once per year for larger infestations of ants, imported fire ants, and mole crickets.

[14]**Imported Fire Ants:** The best control will be achieved by using broadcast treatments in combination with mound drenches. This will control present colonies along with foraging workers and newly mated fly-in queens. It is critical either to use high-volume treatments or to irrigate prior to application if the soil is dry. Apply 0.2 lb. ai/A (40 fl. oz. of Quali-Pro Bifenthrin Golf & Nursery 7.9F) when making broadcast treatments. For mound drenches, dilute 1 teaspoon of Quali-Pro Bifenthrin Golf & Nursery 7.9F per gallon of water and use 1 to 2 gallons of finished dilution using sufficient force to penetrate the top and allow dilution to flood ant channels. Treat a 4-foot diameter around each ant mound. Treatment should take place in cool weather (65-80˚F) or in the early morning or late evening hours in order to achieve the greatest results. Note: A spray rig that is calibrated to apply 0.2 lb. ai/A (40 oz.) of Quali-Pro Bifenthrin Golf & Nursery 7.9F in 5 gallons per 1000 square feet contains the approximate dilution (1 teaspoon per gallon) that is required for fire ant mound drenches in the spray tank.

- Apply with ground application equipment only (and apply with nozzles not more than two feet above the turf).
- Do not apply when wind conditions favor downwind drift to nearby water bodies.
- Do not apply when wind velocity exceeds 10 mph.
- Avoid application when wind gusts approach 10 mph.
- Do not apply when a temperature inversion exists.
- Apply using nozzles that provide the largest droplet size compatible with sufficient coverage.
- If rain is expected within 12 hours (or whatever time is necessary for the spray to dry), do not apply for surface-feeding pests.
- Do not apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.
- Do not apply when turf areas are waterlogged or soil is saturated with water (i.e., will not accept irrigation).

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 Handling:
For Containers equal to or less than 5 Gallons: Nonrefillable container. Do not reuse or refill this container. 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 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. Offer for recycling if available. 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.

Quali-Pro is a registered trademark of Makhteshim Agan of North America, Inc.

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.

Quali-Pro Bifenthrin Golf & Nursery 7.9F

ADDITIONAL PERSONAL PROTECTIVE EQUIPMENT AND EXTENDED REAPPLICATION INTERVALS REQUIREMENTS FOR GREENHOUSE USE IN CALIFORNIA.

EPA Reg. No. 66222-192

DIRECTIONS FOR USE
RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This supplemental labeling must be in possession of all users of the product in greenhouses in California.

CALIFORNIA SPECIFIC REQUIREMENTS FOR GREENHOUSE APPLICATORS AND HARVESTERS:

In addition to following all applicable precautionary statements on the label on the product container, the following is required for greenhouse applicators and harvesters:

Greenhouse Applicator: Greenhouse applicators must wear a full body chemical-resistant protective suit (such as barrier laminate, butyl rubber, nitrile rubber, polyvinyl chloride, or equivalent).

Reapplication Interval: Reapplications to greenhouses must be at intervals of 30 days or longer.

Greenhouse Harvesters: Greenhouse harvesters must wear either regular-length gloves plus a long-sleeved shirt or elbow-length (gauntlet-type) gloves during the 30 days following application.

PLEASE REFER TO CONTAINER LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS. FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE CONTAINER LABEL.

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QUALI-PRO®

Bifenthrin Golf & Nursery 7.9F

Insecticide

For Commercial Non-Food Use on Indoor and Outdoor Ornamentals, Greenhouses, Nurseries, and Turf on Golf Courses and Sod Farms.

ACTIVE INGREDIENT:	**% BY WT.**
Bifenthrin*	7.9%
OTHER INGREDIENTS:	92.1%
TOTAL	100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum. Bifenthrin Golf & Nursery 7.9F contains 2/3 pound active ingredient per gallon.

Contains bifenthrin, the active ingredient used in Talstar S Select Insecticide. Bifenthrin Golf and Nursery 7.9F is not manufactured or distributed by FMC Corp.

EPA Reg. No. 66222-192

KEEP OUT OF REACH OF CHILDREN

CAUTION

For additional precautionary, handling, and use statements, see inside of this booklet.

NOTE:

- **USERS OF THIS PRODUCT IN CALIFORNIA MUST BE IN POSSESSION OF STATE-SPECIFIC SUPPLEMENTAL LABELING.**
- **DO NOT USE THIS PRODUCT ON GOLF COURSES AND SOD FARMS IN NASSAU COUNTY OR SUFFOLK COUNTY, NEW YORK.**

Manufactured for: **Makhteshim Agan of North America, Inc.**
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609

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EPA Est. No. 53883-TX-002[CSI]; 37429-GA-001[BT]; 37429-GA-002[BO]
Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

Label #13791

Net Contents: 1 Gallon