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BITHOR SC

EPA Reg. No. 83923-2

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. See individual use sites for specific pollinator protection application restrictions. If none exist under the specific use site, for outdoor foliar applications, follow these application directions. 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 requirement specific to your State or Tribe, consult the agency responsible for pesticide regulation. **RESTRICTIONS** • Do not allow people or pets on treated surfaces until the spray has dried.

- Do not water the treated areas to the point of run-off.
- Do not make applications during rain.
- Do not make applications directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.
- Do not use household utensils to measure BITHOR SC.
- For broadcast applications, do not apply more than 4.5 pints (0.25 lb imidacloprid, 0.2 lb bifenthrin) per acre or 1.65 fluid ounces per 1000 square feet per application. Do not apply more than 9 pints (0.5 lb of imidacloprid active ingredient, 0.4 lb bifenthrin) per acre per year or 3.3 fluid ounces per 1000 square feet per year.
- For application to lawns, turf, vegetation or to the soil by injection or drench, do not exceed 0.4 lb of imidacloprid (7 pints of Bithor SC) per acre per year.
- Do not apply this product, by any application method, to linden, basswood or other Tilia species in the State of Oregon
- Do not harvest or consume fruit or nuts from any tree that has been treated within 1 year (365 days).
- BITHOR SC is not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.
- BITHOR SC is not for use in commercial greenhouses, nurseries, or on grasses grown for seed, golf courses, turfgrass grown for sale (sod farms) or on commercial fruit and nut trees.
- Do not apply to turf that is frozen, waterlogged or is saturated with water. Turf in this condition will not allow the necessary vertical distribution of the active ingredient down into the soil.
- Do not apply within aircraft cabins.
- Do not apply in food/feed areas of food and feed handling establishments.
- Do not apply to furniture or upholstery where prolonged contact with humans will occur.
- Do not spray bed linens, mattresses, blankets or pillows. Do not apply to materials which come in direct contact with occupants of the bed.
- Remove or cover and disconnect aquariums during application.
- Do not apply a broadcast application to interior surfaces of living areas.
- Do not apply to pets, crops, sources of electricity or firewood.
- During any application to overhead areas of structure, cover surfaces below with plastic sheeting or similar material, except for soil surfaces in crawlspaces.
- Wear protective clothing, unvented goggles, gloves and respirator when making an overhead application or when applying in poorly ventilated indoor areas.
- Do not allow dripping or runoff to occur during indoor applications.
- For indoor uses apply only as a spot, crack or crevice treatment. Do not apply as a space spray.
- Do not allow spray to contact food, foodstuffs, food contacting surfaces, food utensils or water supplies.
- Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product.

- Do not apply this product in nursing home or patient rooms or in any rooms while occupied by the elderly or infirmed.
- Do not apply in classrooms when they are in use.
- Do not apply when occupants are present in the immediate area in institutions such as health care facilities, libraries, schools, offices, etc.
- Do not apply in livestock buildings such as barns.
- Do not apply where electrical short circuits can occur.
- Do not graze treated areas or use clippings from treated areas for feed or forage. • Do not allow runoff or puddling of irrigation water following application.
- Do not apply by air.
- Do not apply by any type of irrigation system. Restrictions

Applicable to New York State only:

- Do not apply BITHOR SC containing solutions to grass or turf within 100 feet of a body of water (lake, pond, river, stream, wetland or drainage ditch).
- Soil Injection is not allowed in Nassau and Suffolk Counties of New York.

Additional Application Restrictions for Residential Outdoor Surface and Space Sprays:

All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Applications to soil or vegetation, as listed on this label, around structures;
 - (2) Applications to lawns, turf, and other vegetation, as listed on this label;
 - (3) Applications to the side of a building, up to a maximum height of 3 feet above grade;
 - (4) Applications to underside of eaves, soffits, doors or windows permanently protected from rainfall by a covering, overhang, awning or other structure;
 - (5) Applications around potential pest entry points into buildings, when limited to a surface band not to exceed one inch width;
 - (6) Applications made through the use of a coarse, low pressure spray to only those portions of surfaces that are directly above bare soil, lawn, turf, mulch or other vegetation, as listed on this label, and not over an impervious surface, drainage or other conditions that could result in runoff into storm drains, drainage ditches, gutters, or surface waters, in order to control occasional invaders or aggregating pests.
- Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, windows, door and eaves are limited to spot and crack-and-crevice applications only

Brown Marmorated Stink Bug, Spotted Lanternfly

APPLICATION SITE	Dilution %	Milliliters of Bithor SC to add per gallon
Outside Surfaces & Around Structures	0.068% - 0.135%	26 - 52
Indoors	0.068% - 0.135%	26 - 52

PESTS OUTSIDE AND AROUND STRUCTURES

Application Methods

Apply Bithor SC as a solution in the form of a general surface, spot, crack and crevice, void, pinstream or coarse spray to the structure or areas around the structure where pests can enter the structure or where they have been seen or found or can find shelter. Bithor SC may also be applied with a paintbrush. Bithor SC may be converted to foam and used to treat structural voids. First form a solution of Bithor SC of the appropriate percentage concentration and volume. Then add required volume of a compatible foaming agent. Verify that the foaming agent is compatible with Bithor SC. When treating overhead, wear safety glasses, goggles or face shield and a dust/mist respirator.

Restrictions: Do not contact treated surfaces until they are dry. Do not apply as a space spray. Follow additional application restrictions for residential outdoor surface and space sprays under Directions for Use. Do not apply more than 9.0 pints (0.5 lb of imidacloprid and 0.4 lb of bifenthrin) per acre per year. Do not treat firewood.

Application Use Rates and Volumes Select a Use Rate from the Bithor SC Mixing Table above. Use the 0.135% rate for severe infestations, faster knockdown or longer residual control. Apply at a high enough volume to adequately wet the treated area without excessive dripping or runoff. Higher application volumes may be used if necessary to sufficiently wet vegetation and landscaping with the spray solution. Higher application volumes may also be used for severe infestations, faster knockdown or longer residual control. For high volume applications, Bithor SC may be diluted to lower concentrations by applying the same amount of Bithor SC in greater volumes of water.

Re-Application

Do not repeat treatments more often than once every 7-10 days. The best efficacy and longest residual control is achieved when the highest listed concentration is used.

Application Locations

The following procedures must be followed to help achieve maximum control of the pest. Apply spray to the exterior surfaces of structures and to grounds, lawns, landscaping and plants. Can also be applied to any areas where pests congregate or have been seen. Treat non-porous surfaces only in areas protected from rainfall and spray from sprinklers with low volume applications at the rate of one gallon product

diluted with water (refer to "Mixing Table for Bithor SC Inside and Outside of Structures" for dilution rates) per 1,000 square feet. Applications to vertical surfaces (e.g., foundations) are permitted to a maximum height of 3 feet from ground level. Sections of vertical exterior surfaces that abut non-porous horizontal surfaces can only be treated if either 1) these sections are protected from rainfall and spray from sprinklers or 2) they do not drain into a sewer, storm drain, or curbside gutter (e.g., not to sections that abut driveways or sidewalks that drain into streets).

Perimeter Band Treatment To help prevent pest infestation of structures, create a treated zone or band on the structure, soil and vegetation around the entire perimeter of a structure. Apply solution to all surfaces within a band beginning 6 to 10 feet from the exterior foundation of the structure that extends back to the structure and then continues 2 to 3 feet up the exterior surface of the structure from the ground. Application volume will depend upon the nature of the surface being treated. Mulch areas, for example, require more volume and hard surface areas requiring less. For sections of foundation that abut non-porous horizontal surfaces, the treated areas must be protected from rainfall and spray from sprinklers or they do not drain into a sewer, storm drain, or curbside gutter (e.g. not to sections that abut driveways or sidewalks that drain into streets).

PESTS INSIDE STRUCTURES (OTHER THAN FOOD/FEED AREAS OF FOOD/FEED HANDLING ESTABLISHMENTS) INCLUDING MODES OF TRANSPORT

Application Preparation

When treating in home food preparation and storage areas, cover all food preparation surfaces and utensils prior to beginning treatment. Thoroughly wash surfaces or items that cannot be covered or removed after treatment and before use. Remove food that cannot be covered. Disconnect fish tanks aerators and remove tanks or securely cover before application occurs. Restriction: Do not allow people and pets to touch treated surfaces until they have dried.

Application Use Rates

Use a 0.068% or 0.135% solution of Bithor SC. Use the higher rate for severe infestations, faster knockdown or longer residual.

Application Methods Apply Bithor SC as a solution in the form of a spot, crack and crevice, void, pinstream or coarse spray. Bithor SC may also be applied with a paintbrush. Bithor SC may be converted to foam and used to treat structural voids. First form a solution of Bithor SC of the appropriate percentage concentration and volume. Then add required volume of a compatible foaming agent. Verify that the foaming agent is compatible with Bithor SC. When treating overhead, wear safety glasses, goggles or face shield and a dust/mist respirator. Restriction: For indoor uses apply only as a spot, crack or crevice treatment. Do not apply as a space spray.

Application Locations

Apply to and around any areas pests or their evidence is seen or found, could hide or rest or could enter the premises including cracks and crevices, behind and under cabinets and appliances, around doors, windows and eaves, in attics and storage areas and around pipes and under appliances. Spot treat floor or rugs beneath furniture, in closets, and storage areas. Do not treat an area larger than 3 feet x 3 feet.

Brown Marmorated Stink Bug, Spotted Lanternfly

APPLICATION SITE	Use Rate Table for Bithor SC
Turf & Lawn	0.4 – 1.65 fl oz per 1,000 square feet
Foliar & Broadcast	0.4 – 1.65 fl oz per 1,000 square feet

TURF & LAWN APPLICATION

BITHOR SC can be used for the control of Brown Marmorated Stinkbugs on turfgrass. Because BITHOR SC's active ingredients have long lasting residual activity, applications for control of subsurface feeders can be made before the occurrence of egg laying activity. BITHOR SC's active ingredients also have sufficient knockdown and residual activity to provide remedial and residual control.

Restrictions:

Do not apply more than 4.5 pints (0.25 lb imidacloprid, 0.2 lb bifenthrin) per acre or 1.65 fluid ounces per 1000 square feet per application. Do not apply more than 9 pints (0.5 lb of imidacloprid active ingredient, 0.4 lb bifenthrin) per acre per year or 3.3 fluid ounces per 1000 square feet per year. Do not allow this product to contact plants in bloom while bees are foraging the treatment area. Not for use on commercial sod farms. Do not apply BITHOR SC while bees are foraging. Do not apply BITHOR SC to plants that are flowering. Only apply after all flower petals have fallen off. Page 3 of 6

Application Sites

Permitted sites: lawns, grounds and landscapes at and/or around residential dwellings (single and multi-family), office, commercial, shopping and institutional buildings and complexes, grounds, parks, recreational areas, athletic fields, playgrounds, airports and cemeteries.

Application Timing

The active ingredients in BITHOR SC have sufficiently long-lasting residual activity that applications can be made prior to egg laying by the target pest(s). Optimum control of turf pests will be achieved when application is made prior to egg hatch followed by sufficient irrigation or rainfall to move the active ingredient through the thatch and down into the underlying soil. Applications can be timed based on past experiences at the site or in the area, current results of adult monitoring/trapping or other methods.

Post Application Watering and Mowing

Do not mow turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected. Optimum control is achieved if irrigation or rainfall occurs within 24 hours after application. Uniformity of application may be adversely affected if turf is mowed prior to irrigation/rainfall occurring.

Application Preparations

BITHOR SC can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

Because certain cultivars may be sensitive to the final spray solution, test the effects of applications of different rates and volumes of mixed solution on a small patch of a type of grass (with observations over one week to detect the occurrence of negative effects) before application of solutions to large areas of that type of grass.

Application Equipment and Methods

Apply BITHOR SC mixed in water (according to the table below) as a spray of uniform, coarse droplets at a pressure low enough to eliminate drift from the target area. Properly calibrated application equipment must be used to apply BITHOR SC. Check calibration periodically to ensure that equipment is working properly.

Reapplication

Reapplications may be necessary particularly in the event of high pest pressure. Reapply as necessary to achieve control using higher listed application rates as pest pressure and foliage area increases but make reapplications no more often than once every 7 days, not exceeding 9 pints (0.5 lb of imidacloprid active ingredient, 0.4 lb bifenthrin) per acre per year or 3.3 fluid ounces per 1000 square feet per year.

Restriction: (New York State only)

Make a single reapplication of BITHOR SC if there is renewed insect activity, but not sooner than two weeks after first application. Turf Pest Application Use Rates Use rates for BITHOR SC for turf pests are stated in fluid ounces of BITHOR SC per 1000 square feet and pints per acre. The application use rates listed below provide control of the listed pests under normal conditions. Apply BITHOR SC at 0.4 to 1.65 fluid ounces per 1000 square feet or 1.1 to 4.5 pints per acre, depending on the level of infestation. Use the higher listed application rates when maximum residual control is needed. However, applications of up to 1.65 fluid ounce per 1000 square feet or 4.5 pints per acre are permitted at the discretion of the applicator to control any pest.

Restriction:

Do not apply more than 9 pints (0.5 lb of imidacloprid active ingredient, 0.4 lb bifenthrin) per acre per year or 3.3 fluid ounces per 1000 square feet of product per year.

Turf Application Volumes Apply the indicated amount of BITHOR SC mixed in a volume of water sufficient to adequately distribute the active ingredient to the target area(s) and to wet all foliage. Do not exceed the maximum application rate by applying solution to an area smaller than intended when it was mixed unless doing so will not result in an application rate in excess of the maximum application rate.

Calculating Amounts of BITHOR SC to Mix for Turf Applications

To mix and apply any amount of BITHOR SC for turf applications based on number of square feet, determine: $S = \# \text{ of Square feet of area to be treated} / 1000$ (for example $5,500 \text{ sq. ft.} / 1000 = 5.5$) $R = \text{Applicable BITHOR SC Use Rate (fluid ounces per 1000 square feet)}$ for the target pest(s) from the Use Rate Table for BITHOR SC for Turf Applications. If treating for more than one type of pest, select the highest rate. Calculate the amount of BITHOR SC to mix for turf pests as follows: $\text{Ounces BITHOR SC to use} = S \times R$ Mix this amount of BITHOR SC in the amount of water needed to make the application. To mix and apply any amount of BITHOR SC for turf pests based on number of acres, determine: $S = \# \text{ of acres of area to be treated} = \text{square feet of area to be treated} / 43,560$ (1 acre = 43,560 sq. ft.) $R = \text{Applicable BITHOR SC Use Rate (pints per acre)}$ for the target pest(s) from the Use Rate Table for BITHOR SC for Turf Applications. If treating for more than one type of pest, select the highest rate. Calculate the amount of BITHOR SC to mix for turf pests as follows: $\text{Pints BITHOR SC to use} = S \times R$ Mix this amount of BITHOR SC in the amount of water needed to make the application. 1 Pint = 16 fluid ounces

FOLIAR AND BROADCAST APPLICATION

BITHOR SC, applied to foliage and broadcast on the soil, controls or suppresses pests on trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowering plants (only apply product prior to bloom or after all flower petals have fallen off) ground covers, bedding plants and foliage plants including plants in interior landscapes. (Non-bearing trees are perennial plants that will not produce a harvestable agricultural commodity within the next 12 months.) BITHOR SC is a systemic insecticide meaning it can be translocated by the plant's vascular system from the roots up into the body of the plant. This means optimum effectiveness of BITHOR SC is realized when BITHOR SC is applied on or near a growing portion of the plant from which it may be translocated to other parts of the plant. Combining BITHOR SC with a nitrogen containing fertilizer may accelerate or otherwise enhance the uptake of the active ingredient into the plant. Translocation of soil directed applications made to woody stemmed plants can be delayed by up to 60 days. For this reason, applications should be made prior to anticipated pest infestation to achieve optimum levels of control. Foliar applications of BITHOR SC also have local systemic activity against insect pests.

Restrictions:

BITHOR SC is not for use on plants being grown for sale, fruit, nut or commercial seed production or for research purposes. Outdoor applications cannot exceed a total of 9.0 pints (0.5 lb of imidacloprid and 0.4 lb of bifenthrin) per acre per year

Application Sites

For use on ornamental plants: trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, ground covers, bedding plants and foliage plants including plants in interior landscapes.

Application Preparation

BITHOR SC can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

Foliar Application

Foliar Application Volumes and Application Methods

BITHOR SC mixes readily with water and may be used in many types of application equipment. Mix required amount of product (from the Use Rate Table for BITHOR SC for Foliar Applications above) with the amount of water required to uniformly wet foliage and apply as desired dependent upon the selected use pattern. When making foliar applications on hard to wet foliage such as holly, pine, or ivy, the addition of a spreader/ sticker is recommended. If concentrate or mist type spray equipment is used, use an equivalent amount of product on the area sprayed, as would be used in a dilute application. Begin treatments prior to establishment of high pest populations. Reapply as needed, not to exceed 9.0 pints (0.5 lb of imidacloprid and 0.4 lb of bifenthrin) per acre per year.

Foliar Application Use Rates

Use rates for BITHOR SC for foliar application are stated in fluid ounces (and milliliters) of BITHOR SC per 100 gallons of water. The application rates listed below provide control under normal conditions. Apply BITHOR SC at 6.7 to 21.3 fluid ounces per 100 gallons, depending on the level of infestation. Use the higher listed application rates when maximum residual control is needed. However, applications of up to 21.3 fluid ounces per 100 gallons are permitted at the discretion of the applicator to control any pest.

Turf Application Volumes

Apply the indicated amount of BITHOR SC mixed in a volume of water sufficient to adequately distribute the active ingredient to the target area(s) and to wet all foliage. Do not exceed the maximum application rate by applying solution to an area smaller than intended when it was mixed unless doing so will not result in an application rate in excess of the maximum application rate. Calculating Amounts of BITHOR SC to Mix for Turf Applications To mix and apply any amount of BITHOR SC for turf applications based on number of square feet, determine: $S = \# \text{ of Square feet of area to be treated} / 1000$ (for example 5,500 sq. ft. /1000 = 5.5) $R = \text{Applicable BITHOR SC Use Rate (fluid ounces per 1000 square feet)}$ from the Use Rate Table for BITHOR SC for Turf Applications. Calculate the amount of BITHOR SC to mix for turf applications as follows: Ounces BITHOR SC to use = $S \times R$ Mix this amount of BITHOR SC in the amount of water needed to make the application. To mix and apply any amount of BITHOR SC based on number of acres, determine: $S = \# \text{ of acres of area to be treated} = \text{square feet of area to be treated} / 43,560$ (1 acre = 43,560 sq. ft.) $R = \text{Applicable BITHOR SC Use Rate (pints per acre)}$ from the Use Rate Table for BITHOR SC for Turf Applications. If treating for more than one type of pest, select the highest rate. Calculate the amount of BITHOR SC to mix for turf pests as follows: Pints BITHOR SC to use = $S \times R$ Mix this amount of BITHOR SC in the amount of water needed to make the application. 1 Pint = 16 fluid ounces

IMPORTANT READ BEFORE USE

NOTICE: Read the entire Directions for Use, Conditions of Sale, Disclaimer of Warranties and Limitations of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

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