

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 12, 2022

Mary Swain Registration Specialist Canyon Group LLC P.O. Box 5569 Yuma, AZ 85366

Subject: Registration Review Label Mitigation for Pyridaben

Product Name: GWN-1973

EPA Registration Number: 81880-7

Application Date: 7/10/2020 Decision Number: 564635

Dear Mary Swain:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Pyridaben Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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If you have any questions about this letter, please contact Quinn Gavin by phone at 202-566-2284, or via email at gavin.quinn@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure



Sep 12, 2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 04.000 7

81880-7

PYRIDABEN GROUP 21A ACARICIDE

GWN-1973

Aqueous Suspension
Miticide/Insecticide/Fungicide (MIF)

For use on nectarines, peaches, plums, prunes, pistachios, almonds and other tree nuts and stone fruit

ACTIVE INGREDIENT:	% By Wt.
Sulfur	49.50%
Pyridaben: [2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one]	4.03%
OTHER INGREDIENTS:	
	Total 100.0%

Contains 5.54 lbs sulfur per gallon Contains .45 lbs pyridaben per gallon

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID				
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 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 a poison control center or doctor.			
	•Do not give anything to an unconscious person.			
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 first 5 minutes, then continue rinsing eye.			
	Call a poison control center or doctor for treatment advice.			
	HOT LINE NUMBER			

Have the product container or label with you when calling a poison control center or doctor or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT CALL 1-888-478-0798.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Harmful if inhaled. Avoid breathing 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)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material, such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate
- Goggles or face shield

Follow the 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.

Engineering Controls Statement: 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.

NET CONTENTS ____ GALLONS



USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, 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. For Terrestrial uses: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply when weather conditions favor drift from target area. Drift and runoff from treated areas may be hazardous to fish in adjacent sites. This product is highly toxic to bees. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Application early in the morning or at dusk is suggested.

ENDANGERED SPECIES CONCERNS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law

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.

All applicable directions, restrictions, precautions and Notice of Conditions of Sale and Warranty and Liability Limitations are to be followed. This labeling must be in the user's possession during 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, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Goggles or face shield

PRODUCT INFORMATION

This package contains **GWN-1973**, an aqueous suspension, miticide/insecticide/fungicide. **GWN-1973** is a selective contact miticide/insecticide/fungicide that controls pests in groves when used at recommended rates. (Refer to Table 1. **GWN-1973** Application Rate Table.) **GWN-1973** provides knockdown and residual control. A good performance evaluation can be made 10 days after treatment. For optimum results, **GWN-1973** should be applied as pest populations build and prior to reaching economic thresholds. **Mite Resistance Management**

For resistance management, **GWN-1973** contains a Group (21A) insecticide/acaricide. Any insect/mite population may contain individuals naturally resistant to **GWN-1973** and other Group (21A) insecticides/acaricides. The resistant individuals may dominate the insect/mite population if this group of insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of GWN-1973 or other Group 21A insecticides/acaricides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - o Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.

- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM
 recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Gowan Company representative

Cleaning Spray Equipment: Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and by triple rinsing the equipment before and after applying this product.

MANDATORY SPRAY DRIFT MANAGEMENT

Airblast Applications:

- Sprays must be directed into the canapy.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversion.

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 4 ft. above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

BOOM HEIGHT - Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Boom-less Ground Applications:

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

APPLICATION INSTRUCTIONS

GWN-1973 may be applied by ground equipment using either diluted or concentrated sprays. Apply recommended rates of **GWN-1973** as instructed by Crop-Specific Information Section. Spray the last 3 rows windward of surface water using nozzles on only one side with the spray directed away from surface water. Avoid spraying over the tops of trees by adjusting or turning off the top nozzles. Shut the nozzles off on the side away from the grove off when spraying the outside row. Shut the nozzles off when turning at the ends of the rows and when passing tree gaps in rows.

Coverage: Apply **GWN-1973** in sufficient water to ensure thorough coverage of foliage and fruit. Thorough coverage is required for optimum control. To achieve adequate coverage, use proper spray pressure, nozzle type, nozzle spacing, volume per acre, and tractor speed. Consult spray nozzle and accessory guide for information pertaining to proper equipment calibration.

Ground Application

Water Volume: Use 50-400 gallons of spray solution per broadcast acre for optimal performance.

ADDITIVES

Silicone additives such as Sylgard® 309 are recommended for improved performance of **GWN-1973**. Additives should be considered for certain conditions such as obtaining better spray coverage, adhesion or penetration of product onto leaf or plant surfaces. Consult a local agricultural authority for more information concerning additives.

TANK MIXING INFORMATION

The phytotoxic potential of **GWN-1973** aqueous suspension miticide/insecticide/fungicide has been assessed on a wide variety of trees with no phytotoxicity observed. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also

influence crop tolerance and may not match the conditions in existence at the time of original product testing. Therefore, before using **GWN-1973** test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications.

Compatibility Test for Mix Components: Before mixing components, always perform a compatibility jar test.

For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the Mixing Order section using 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

Mixing Order

- 1. Water: Begin by agitating a thoroughly clean sprayer tank three-quarters (3/4) full of clean water.
- 2. Agitation: Maintain constant agitation throughout mixing and application.
- Water-dispersible products (such as GWN-1973): Pour required material into water. Wait until the product is evenly mixed in the spray tank before continuing.
- 4. Water-soluble products
- 5. Emulsifiable concentrates (except crop oil concentrates).
- 6. Water-soluble additives (such as nutrients).
- 7. Remaining quantity of water: Maintain constant agitation during application.

RESTRCITIONS AND LIMITATIONS

- Maximum Seasonal Use Rate: Do not apply more than a total of 2.2 gallons of GWN-1973 (1.0 pound Pyridaben a.i.) per acre, per season.
- Do not make more than 2 applications of GWN-1973 per year.
- Allow a minimum of 30 or 90 days between sequential applications of GWN-1973 as specified in the Crop Specific Information section.
- Preharvest Interval (PHI): Do not apply within 7 days of harvest.
- Do not make applications of GWN-1973 within 30 days before or after a spray oil application.
- Do not tank mix **GWN-1973** with a crop oil concentrate.
- Restricted Entry Interval (REI): 24 hours.
- Do not apply GWN-1973 by air.
- Do not apply through any type of irrigation equipment.
- Do not use less than 50 gallons of water per acre.
- DRIFT: Do not apply GWN-1973 when weather conditions favor drift to surface water. Do not apply within 110 feet upwind of surface water or when wind speed is above 8 mph. Do not apply during temperature inversion.
- Applications of GWN-1973 during periods when shade temperatures exceed or are likely to exceed 90°F may cause injury to foliage and fruit.

TABLE 1. GWN-1973 APPLICATION RATE TABLE

Pests Controlled	Rate Per Acre Per Application
Black Margined Aphid Broad Mite European Red Mite Grape Leafhopper (nymphs) McDaniel Spider Mite Pacific Spider Mite Peach Silver Mite Southern Red Mite Two Spotted Spider Mite Variegated Leafhopper Willamette Spider Mite Yellow Pecan Aphid	1 to 1.1 Gallon
Pests Suppressed	Rate Per Acre
Powdery Mildew Rust Scab Silverleaf Whitefly	1 to 1.1 Gallon

CROP-SPECIFIC INFORMATION

Tree Nut Group and Pistachios

Apply **GWN-1973** in 50-400 gallons of water per acre. Use higher water volumes to ensure adequate concentration in full size trees with dense foliage.

Specifically for Almonds – Applications may be made after petal fall through summer. For best control, pest populations must be building with primarily immature stages present at the time of application. Allow a minimum of 30 days between applications. See Table 1 for application rates for specific pests.

TABLE 2. CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Crop	Minimum Time Application to Harvest (PHI)	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Aircraft Application
Apricots ¹ Cherries ¹	300 Days	1.1 Gals.	2.2 Gals.	No
Nectarines Peaches Plums Prunes	7 Days	1.1 Gals.	2.2 Gals.	No
Tree Nut Group: Almond Beech Black Walnut Brazil Butternut Cashew Chestnut Chinquapin English Walnut Filbert Hickory Macadamia Pecan Pistachio	7 Days	1.1 Gals.	2.2 Gals.	No
¹ Do not Apply GWN-1973 to apr	ricots and cherries in California			

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original container only and keep sealed. Store in closed storage areas. Use caution when moving, opening, closing or pouring. Store in cool place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. After cleaning, if recycling is not available, puncture and dispose of in a sanitary landfill or by incineration or if allowed by State and local authorities by burning. If burned stay out of smoke.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300. For other product information, contact Gowan Company or see Material Safety Data Sheet.

NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Canyon Group LLC. To the extent consistent with applicable law, all such risks are assumed by the Buyer and User.

Canyon Group LLC warrants that this product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. CANYON GROUP LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY

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EPA TEXT PENDING: GWN-1973 (to EPA 7-14-20 Reg Review)