



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Antimicrobials Division (7510P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

89871-1

Date of Issuance:

8/19/19

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Bio-Shield BS-912

Name and Address of Registrant (include ZIP Code):

Spring Trading Company  
203 Dogwood Trail  
Magnolia, Texas 77354-5201

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Sincerely,

Zeno Bain, Product Manager 33  
Regulatory Management Branch I  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

Date:

8/19/19

2. You are required to comply with the data requirements described in the DCI Order identified below:
  - a. GDCI-043901-1668 EPA-HQ-OPP-2015-0738
  - b. GDCI-069149-1681- EPA-HQ-OPP-2015-0740
  - c. GDCI-069105-1679- EPA-HQ-OPP-2015-0737

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Reevaluation Team Leader (Team 36): <http://www2.epa.gov/pesticide-contacts/contacts-office-pesticide-programs-antimicrobial-division>

3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 89871-1.”
4. Submit one copy of the final printed label for the record before you release the product for shipment.

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.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated July 23, 2019

If you have any questions, please contact Zebora Johnson by phone at (703) 308-7080, or via email at [johnson.zebor@epa.gov](mailto:johnson.zebor@epa.gov).

**ACCEPTED**

Aug 19, 2019

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 89871-1

{Bracketed} / [Bracketed] Text is Optional

# Bio-Shield BS-912

**ACTIVE INGREDIENTS:**

Glutaraldehyde .....	12.0%
Didecyl dimethyl ammonium chloride .....	1.4%
Alkyl (50%C <sub>14</sub> , 40%C <sub>12</sub> , 10%C <sub>16</sub> ) dimethyl benzyl ammonium chloride .....	1.0%
<b>OTHER INGREDIENTS:</b> .....	<b>85.6%</b>
<b>TOTAL:</b> .....	<b>100.0%</b>

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER-PELIGRO**

*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.)*

{See {{left} {back} {side} {right} {insert} {panel} {of label}} {below}] for {additional} {precautionary statements} {and}{or}{first aid}}.

<b>First Aid</b>	
<b>IF IN EYES:</b>	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 poison control center or doctor for treatment advice.
<b>IF SWALLOWED:</b>	Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center. Do not give anything by mouth to an unconscious person
<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
<b>IF ON SKIN OR CLOTHING:</b>	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.
<b>HOTLINE NUMBER:</b>	
<ul style="list-style-type: none"> <li>• Have the product container or label with you when calling a poison control center or doctor or going for treatment.</li> <li>• For medical emergencies, call the poison control center at 1-800-222-1222</li> <li>• For general information on this product, call 1-800-328-2418 between the hours of 8AM-4PM CST, or contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8AM to 12PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a>.</li> </ul>	

{See {additional} {sheet} {insert} {inside} {outer container} for {other} {directions for use} {information} {claims} {organisms}.}

Net Contents:

{{Batch} {Lot} No} {Manufacturing Date}:  
 {Product of USA} {Made in the USA}

**AEGIS CHEMICAL SOLUTIONS, LLC**  
 4560 Kendrick Plaza Dr. Suite 190  
 Houston, TX 77032

EPA Reg. No. 89871-R  
 EPA Est. No. 89871-TX-1

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed, absorbed through the skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist. Wear goggles or face shield when handling, chemical-resistant gloves and protective clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### ENVIRONMENTAL HAZARDS

*(If container is equal to or greater than 5 gal., the following statement must appear on the label.)*

This product is toxic to fish, aquatic invertebrates, oysters and shrimp. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

*(If container is less than 5 gal., use the following as an alternate to the above statement.)*

This product is toxic to fish, aquatic invertebrates, oysters and shrimp.

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## DIRECTIONS FOR USE

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

*(Note to Reviewer (General Considerations): Numbered instructions will be used if label space permits, otherwise may appear in paragraph format. Unit abbreviations can be spelled out. When choosing optional text, appropriate punctuation can be inserted or deleted. Equivalent use dilution ratios may be substituted within the directions.)*

{Please read entire label and use strictly in accordance with precautionary statements and directions.}

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### WATER TREATMENT (Not for Use in CA.)

Do not use water containing residues from use of this product to irrigate crops for food or feed.

*(Note to Reviewer: The following sentence must be used with the air washer use listed in the direction:)*  
For use only in industrial air washers and air washer systems which have mist-eliminating components.

**AIR WASHERS, INDUSTRIAL {{AND/OR} COMMERCIAL} RECIRCULATING COOLING WATER TOWERS, RETORT WATER SYSTEMS, EVAPORATIVE CONDENSERS, HEAT {{EXCHANGE} {TRANSFER}} {WATER} SYSTEMS, DAIRY SWEETWATER SYSTEMS, HYDROSTATIC STERILIZERS, PASTEURIZERS AND WARMERS:** For best results, clean heavily contaminated systems before treatment with this product. If soap or anionic detergent is used, rinse thoroughly before charging with this algacide. {Cooling tower waters that are inherently low in algae growth and bacteria count may be adequately controlled by the lower range of these dosages.} Repeat every seven days or increase frequency if needed. Should slime develop again, repeat initial dosage.

1. **Dosing Location:** This product is to be applied at a point in the system where it will be uniformly mixed, such as the basin area, the sump, or another reservoir or collecting area.
2. **Dosing Conditions:** This product must be applied when the system is in jeopardy of being affected or after cleaning systems where efficiency is already impaired. {Tower bleed off valves must be closed to permit a retention time of 4 hours.}
3. **Method of Application:**
  - a. **INTERMITTENT OR SLUG METHOD**

**Initial Dose:** When the system is noticeably fouled, apply 41 - 83 oz. of this product per 1,000 gal. of water {(50 - 100 ppm active)} in the system. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 17 - 41 oz. of this product per 1,000 gal. of water {(20 - 50 ppm active)} in the system weekly or as needed to maintain control.

b. **CONTINUOUS FEED METHOD**

**Initial Dose:** When the system is noticeably fouled, apply 41 - 83 oz. of this product per 1,000 gal. of water {(50 - 100 ppm active)} in the system.

**Subsequent Dose:** Maintain this treatment by starting a continuous feed of 8 - 41 oz. of this product per 1,000 gal. of water {(10 - 50 ppm active)} lost by blowdown.

**AUXILIARY SYSTEMS AND SERVICE WATER:** Add 41 - 83 oz. of this product per 1,000 gal. of water {(50 - 100 ppm active)} in the system continuously. This product must be added to the system at a point of uniform mixing by slug or intermittent feed or by spraying onto a waste pile. The frequency of feed or spray and the duration of treatment will depend upon the severity of the contamination. Additions to water systems must be made during the pumping operation and as close to the pump as possible to ensure adequate mixing.

**INDUSTRIAL WASTEWATER SYSTEMS {Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks}**

This product is added to a wastewater system or sludge at a convenient point of uniform mixing such as digester. Add 1.6 - 8 gal. of this product per 1,000 gal. of wastewater or sludge {(250 - 1250 ppm active)}.

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**OIL FIELD, GAS PRODUCTION AND TRANSMISSION PIPELINE AND SYSTEMS (Not for use in CA.)**

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**{{OIL FIELD} {GAS PRODUCTION} {TRANSMISSION PIPELINE} {AND} {SYSTEMS}:}** Specific treatment requirements vary among oil and/or gas field sites and subsystem components. {Oil field fluids and subsystems most commonly requiring microbial contamination control are raw water sources, separators, ballasts, storage and mixing tanks, screens, surface injection equipment, production equipment {(such as injection and production piping casting, completion and valving)} and the formation itself.} The primary point of treatment will vary among oil and/or gas field operations depending on the site problems, water-flood treatment methods and equipment. This product must be added where it will disperse rapidly and uniformly to the desired area of treatment.

Additions of this product must be made with the proper type of metering pump equipment, suction (low pressure) side of pumping equipment or similar device. This product must be added to the system by slug, continuous or on an intermittent basis, depending on the degree of system fouling.

**OIL FIELD WATER FLOOD SYSTEMS AND FRACTURING FLUIDS:** This product must be added to the water flood at a point of uniform mixing.

1. **Continuous Use:** Add 3 - 16 gal. of this product per 1,000 gal. of flood water {(50 - 2500 ppm active)} to control slime forming and sulfate reducing bacteria. Levels for effective control will vary depending on conditions at the site.
2. **Intermittent Use:** Add at a rate of 0.3 - 16 gal. of this product per 1,000 gal. of flood water {(50 - 2500 ppm active)} for 4 to 8 hrs. per day, one to four times a week as needed to maintain control.
3. **Treatment of flow back return water {(Post Hydraulic Fracturing)}:** Dose at a rate of 0.3 - 16 gal. of this product per 1,000 gal. of flood water of water {(50 - 2500 ppm active)} for 4 - 8 hours per day, one to four times a week as needed to maintain control.

**[[FRACTURING] {FRAC}] FLUIDS:** Add this product to the frac water storage tanks or directly into the well head injection pipeline as the water is being pumped down-hole.

**Dose Range:** Add 3 - 160 gal. of this product per 10,000 gal. of flood water {(50 - 2500 ppm active)} to control slime forming and sulfate reducing bacteria. Levels for effective control will vary depending on conditions at the site.

**OIL AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS:** For the control of sulfate-reducing bacteria and slime forming bacteria, this product must be added to a gas production or transmission pipeline via direct injection at a point where uniform and maximum distribution will occur. The application must be conducted to ensure maximum distribution of the product through the internal surface of the pipeline by adding an amount of biocide which eventually comes out the other end of the pipeline. Criteria for success of the treatment will be reduction in bacterial count and/or corrosion rates. To facilitate application, it is desirable to dilute the product with an appropriate solvent immediately before use. The concentration in the solvent must not fall below an active concentration range of 500 - 5000 ppm active based on the volume of water in the pipeline. Injections to the system must be weekly, or as needed to maintain control.

**GAS STORAGE WELLS AND SYSTEMS:** Treat individual injection wells with 1.6 - 16 gal. of this product per 1,000 gal. of water {(250 - 2500 ppm active)}. Update treatment rate as needed. This product must be diluted by the water present in the formation. Injection takes place before gas is injected and may be repeated yearly or as needed to maintain control.

Individual drips should be treated with a sufficient quantity of this product to produce a concentration of 100 - 1000 ppm active of this product when diluted by the water present in the drip. Injections should be repeated yearly or as needed to maintain control.

**PIPELINE PIGGING AND SCRAPING OPERATIONS:** Add this product to slug water immediately following the scraper {(keep the water volume to a minimum and contained between the scraper and the [{following} {trailing}] pig)}. Add an effective concentration of 3 - 32 gal. of product per 1,000 gal. of water {(500 - 5000 ppm active)} depending on the length of the pipeline and the severity of the biofouling.

**DRILLING, COMPLETION AND WORKOVER FLUIDS SYSTEMS:** This product is to be added to these fluid systems at a point of uniform mixing, such as a circulating, holding or mud tank. Levels for effective control will vary depending on conditions at the site and the severity of the contamination.

1. **Initial treatment:** Add 0.2 - 3.2 gal. of this product per 1,000 gal. of freshly prepared fluid {(25 - 500 ppm active)}.

2. **Maintenance dosage:** Add 0.2 - 3.2 gal. of this product per 1,000 gal. of freshly prepared fluid {(25 - 500 ppm active)}.

**PACKER FLUIDS:** This product is to be added to the packer fluid at a point of uniform mixing such as a circulating holding tank {and} {other mixing device locations}. Add 0.2 - 1.9 gal. of this product per 1,000 gal. of freshly prepared packer fluid {(25 - 300 ppm active)}. Levels for effective control vary depending on conditions at the site and the severity of contamination. Seal the treated packer fluid in the wall between the casing and the production tube.

**HYDROTESTING:** Treat water used to hydrotest pipelines or vessels by adding 0.3 - 13 gal. of this product per 1,000 gal. of water {(50 - 2000 ppm active)} depending on the water quality and length of time the equipment will remain idle.

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## STORAGE AND DISPOSAL

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

**{PESTICIDE} STORAGE:** Store only in original container. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

### CONTAINER HANDLING:

*(Note to Reviewer: One or more of the following paragraphs for Container Handling will be selected, depending on packaging use/type.)*

*{For non-refillable containers equal to or less than 5 gal.}*

Non-Refillable Container. Do not reuse or refill this container. Triple rinse container {(or equivalent)} promptly after emptying. Triple rinse as follows: Fill the container 1/4 full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

*{For non-refillable containers greater than 5 gal.}*

Non-Refillable Container. Do not reuse or refill this container. Triple rinse container {(or equivalent)} promptly after emptying. Triple rinse as follows: 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 back and forth several times. Turn the container over onto its other end and tip back and forth several times. Follow Pesticide Disposal instructions for rinsate disposal. Repeat this



procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

*{Refillable containers}*

Refillable Container. Refill this container with this product 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 a mix tank. Fill container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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## WARRANTY STATEMENT

It is the manufacturer's intention that this product is to be used in accordance with the Directions for Use as stated on this label. The use of this product being beyond control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such use or the results to be obtained if not used in accordance with printed directions and established safe practice. To the fullest extent permitted by law, the buyer's exclusive remedy and manufacturer's or seller's exclusive liability for any and all claims, losses, damages or injuries resulting from the use or handling of this product, whether or not based in contract, negligence, strict liability in tort or otherwise, shall be limited, at the manufacturer's option, to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed.

[Read Product Material Safety Data Sheet prior to use, PRODUCT WARRANTY, DISCLAIMER AND LIMITATION OF LIABILITY ARE FOUND on the Product Material Safety Data Sheet. Unless inconsistent with applicable law, use of Product signifies agreement with these provisions.]

Lea la Hoja de Seguridad del Producto antes de usarlo. LA GARANTIA DEL PRODUCTO, DECLINACION Y LIMITACION DE RESPONSABILIDAD SE ENCUENTRAN en la Hoja de Seguridad del Producto. A menos de que sea inconsistente con la ley, el uso del product signigica acuerdo con esteas disposiconies.]

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## MARKETING CLAIMS

### {LOCATIONS/SURFACES}

*(Note to Reviewer: The locations/surfaces have been grouped for space purposes only; they can be used individually or grouped together in any order however at least **one** location/surface must appear on the label. In the case where one or more location/surface is chosen, an "and" "&" "or" may be used to link locations/surfaces.)*

[This product is for use in *(insert location)* Oilfield Brines]

[For use {in} {on} *(insert location/surface)*. Oilfield Drilling, Completion, Production, and Transportation Equipment]

### {LOCATIONS}

{Auxiliary water systems.}

[Drilling, completion and workover fluids systems.]

[Gas storage wells and systems.]

[Hydrotesting facilities.]

[Oil field water flood systems and fracturing fluid systems.]

[Packer fluid systems.]

[Pipeline pigging and scraping operations]

### {SURFACES}

- *Oilfield Drilling, Completion, Production, and Transportation Equipment*

### WATER TREATMENT MARKETING CLAIMS

*(Note to Reviewer: The following marketing claims may be used with the prefix “This product” or “This product is {a} {an}”.)*

- [A microbiocide for use in controlling sulfate-reducing bacteria and slime forming bacteria in oil well drilling, oil field processing applications, oil field water systems, oil and gas productions and transmission pipelines and systems, and gas storage fields and equipment; such as steam-injection water holding tanks, flood water, injection water, holding pond water, disposal-well water, water holding tanks, fuel storage tanks and related refinery and oil field closed systems, industrial recirculating water handling systems.]
- [Has been designed specifically for control of sulfate-reducing bacteria that contribute to souring, the production of sulfide, and abiotic corrosion in water cooling systems, paper mill process water systems, oil field systems, gas production and transmission pipelines and systems.]
- [Helps inhibit the growth of unsightly algae.]
- [Is a microbiocide that helps clean and loosen slime debris from cooling and flooding system surfaces.]
- [Kills and prevents algae.]
- [The residual effectiveness of this algaecide tends to stabilize the total chemical treatment system.]
- [This product is effective for the control of odor-forming and slime-forming bacterial, fungi and algae in auxiliary service water systems such as fire protection systems and pump or screen bays, waste water systems such as storage tanks, storage piles, associated piping, setting ponds or lagoons, transport spillways or canals and disposal wells.]
- [This product reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations.]
- [To control algae and bacterial slimes, use this water treatment microbiocide as directed.]

### GENERAL MARKETING CLAIMS

*(Note to Reviewer: The following marketing claims may be used with the prefix “This product” or “This product is {a} {an}”.)*

- [Efficient and non-staining when used as directed.]
- [Is non-staining when used as directed]
- [Will not damage tile, concrete, metal or plastics.]

### PACKAGING CLAIMS

- [Concentrate{d}.]
- [Easy to use.]
- [Is an economical concentrate.]

OPTIONAL MARKETING GRAPHICS MAY APPEAR ANYWHERE ON THE LABEL

