



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:

3377-81

Date of Issuance:

11/5/25

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

PureShield

Name and Address of Registrant (include ZIP Code):

David Swain
Agent
Albermarle Corporation
Electronic Transmittal: david.swain@srcconsultants.com

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 (FIFRA).

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:

Demson Fuller, Product Manager (32)
Regulatory Management Branch I
Antimicrobials Division (7510M)

Date:

11/5/25

2. You are required to comply with the data requirements described in the DCI identified below:

- a. Sodium N-bromosulfamate, mixture with sodium N-chlorosulfamate
GDCI - 028964-1760

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): <https://www.epa.gov/pesticide-contacts/contacts-office-pesticide-programs-antimicrobials-division>

- 3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
- 4. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 3377-81.”
- 5. 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 FIFRA and is subject to review by the Agency. See FIFRA section 2(p)(2). 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) lists 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, FIFRA section 12(a)(1)(B). 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 Assurance.

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 8/9/2024

If you have any questions, please contact Carlos Corona via email at Corona.Carlos@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Fuller', with a long horizontal stroke extending to the right.

Demson Fuller, Product Manager 32
Regulatory Management Branch I
Antimicrobials Division (7510P)
Office of Pesticide Programs

Enclosure: Product Label

PureShield™

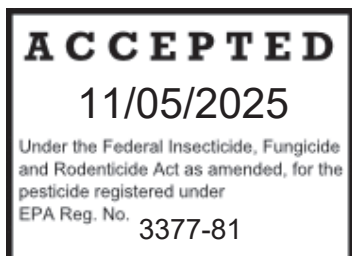
EFFECTIVELY CONTROLS BACTERIA, FUNGI, ALGAE, AND SLIME IN
MEMBRANE SYSTEMS FOR INDUSTRIAL WATER AND WASTEWATER
(NON-POTABLE WATER)

ACTIVE INGREDIENTS

Sodium N-bromosulfamate, mixture with sodium N-chlorosulfamate22%

OTHER INGREDIENTS.....78%

TOTAL.....100%



Total Halogen (calculated as bromine = approximately 18%)
(calculated as chlorine = approximately 8%)

KEEP OUT OF REACH OF CHILDREN
ANGER/PELIGRO

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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.

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 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 by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.
See side panel for additional precautionary statements

In case of emergency endangering life or property involving this product, call collect (225) 344-7147

ALBEMARLE CORPORATION
4250 CONGRESS STREET, SUITE 900
CHARLOTTE, NC 28209

EPA Reg. No. 3377-XX
EPA Est. 3377-AR-1, 42403-TX-1

Net Contents: _____

Batch number: _____

(Note to reviewer: The following text will be included if more than one EPA Est. No. is listed on the market label:)
Beginning of batch code indicates Est. No.

**PRECAUTIONARY STATEMENTS:
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER: Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear protective eyewear (chemical goggles or face shield), protective clothing and rubber gloves resistant to chemical permeation. Harmful if swallowed, or absorbed through the skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash separately before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public 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 to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Apply this pesticide only as specified on the label.

PHYSICAL AND CHEMICAL HAZARDS

PureShield™ is not flammable. This product is strongly basic and an oxidizing agent. Avoid contact with organic materials such as alcohols and aldehydes, strong reducing agents, strong oxidizers, acids, and ammonia containing products. In concentrated form, avoid contact with common metals such as steel, aluminum, iron and copper. Use of incompatible materials can promote the exothermic decomposition of the product. In extreme cases, this could result in vigorous gas formation and over-pressurization of storage containers.

DIRECTIONS FOR USE

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

When used as directed, PureShield™ effectively controls bacteria, fungi, algae and slime in membrane systems for industrial water and wastewater (non-potable water).

INITIAL DOSES: When the system is noticeably fouled, apply sufficient PureShield™ to achieve a total bromine level of 4 – 10 ppm or as needed to maintain control. Applying 3 fluid ounces to 1000 gallons of water yields a maximum of 6.2 ppm of total bromine.

SUBSEQUENT DOSES: When microbial control is evident, apply sufficient PureShield™ to achieve a total bromine level of 4 – 10 ppm or as needed to maintain control.

Treatment levels of PureShield™ can best be measured with test kits for either bromine or chlorine. Tests should be made immediately after drawing water samples from the system. Use test kits according to directions. When a bromine test kit is used, results can be read directly as ppm bromine. When a chlorine test kit is used, results can be expressed in terms of bromine by multiplying chlorine values by the conversion factor 2.25.

MEMBRANE SYSTEMS FOR INDUSTRIAL WATER AND WASTEWATER (NON-POTABLE WATER):

When used as directed, PureShield™ effectively controls bacteria, fungi, algae, and slime in various membrane system types (microfiltration, nanofiltration, ultrafiltration and reverse osmosis) used for industrial water processing and wastewater treatment. Potential applications may include membrane systems used in the production of water for boiler makeup water, water used for rinsing of electronic components, water for process use, and for industrial wastewater treatment in water reuse and water recycle applications. Use of this product in potable water or dialysis is prohibited. Add a sufficient amount of this product to achieve a total bromine level of up to 10 ppm or as needed to maintain control of the system. Feed this product directly into the water to be treated. Sampling of the treated systems should be at a bleed-off point after sufficient mixing of the treated water and this product is achieved. Total bromine levels should be determined with an appropriate test kit.

STORAGE AND DISPOSAL

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

STORAGE: Avoid freezing, excessive heat or exposure to light, especially direct sunlight. If heating is necessary to prevent freezing, care must be taken to prevent overheating. The average product temperature should be maintained below 110°F. Temperature monitoring is recommended. At elevated temperatures, self-heating can lead to vigorous gas generation and over-pressurization of storage containers.

STORAGE CONTAINER: Vented and opaque containers: The product should be stored in vented containers as pressure can build-up in the headspace (nitrogen). To maximize product shelf life, store in opaque containers in a cool, dry, well-ventilated area.

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 DISPOSAL: *[5 gallon]* Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Offer for reconditioning if appropriate. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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.

CONTAINER DISPOSAL: *[30 and 55 gallon drums]* Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Offer for reconditioning if appropriate. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

CONTAINER DISPOSAL: *[275-300 gallon tote or IBC]* Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Offer for reconditioning if appropriate. Triple rinse as follows: Empty the remaining contents from this container into application equipment or a mix tank. Fill the 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.

[The following statement will be used on labels for tank trucks]

Do not rinse or clean the tank after unloading the contents. Release the tank truck for return to Albemarle Corporation.

[The following statements will be used on labels for stationary tanks]

Refillable container. Refill this container with like pesticide products. Do not reuse this container for any other purpose.

CONTAINER DISPOSAL: Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the 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.