



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 18, 2019

Coleen Gerber
Registration Counsel Agent
PeroxyChem, LLC
2005 Market Street, Suite 3200
Philadelphia, PA 19103

Subject: Notification per PRN 98-10 – Add Optional Background Graphic
Product Name: VigorOX Antimicrobial Agent
EPA Registration Number: 65402-2
Application Date: May 14, 2019
Decision Number: 551250

Dear Ms. Gerber:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

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 have any questions, you may contact Terria Northern at 703-347-0265 or via email at northern.terria@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Zeno Bain", written over a horizontal line.

for

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

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

06/18/2019

MASTER LABEL

VigorOx[®] Antimicrobial Agent

EPA Registration No. 65402-2
EPA Est. No. 00279-NY-003

VigorOx[®] Antimicrobial Agent is for biofouling and slime control in :

- Pulp and paper mill systems
- Recirculating cooling water systems
- Coating preservation
- Dispersed pigment preservation

Active Ingredients:

Peroxyacetic Acid 5.1%
Hydrogen Peroxide 21.7%

Inert Ingredients:

Total 73.2%
100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

See side panel for additional precautionary statements



Manufactured by:
PeroxyChem, LLC
2005 Market St Ste 3200
Philadelphia PA 19103-7014

Bracketed [] Words and/or Phrases are Optional Language That May or May Not Appear on Label

The PeroxyChem logo and VigorOx[®] are trademarks of PeroxyChem, LLC

NET CONTENTS: GALLONS: POUNDS:

**Precautionary Statements:
Hazards to Humans and Domestic Animals**

Danger – Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed. May be fatal if absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), chemical resistant apron or coveralls and chemical gloves when handling concentrate. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

Physical and Chemical Hazards. Strong oxidizing agent. Mix only with water. VigorOx[®] Antimicrobial Agent is not combustible, however, at temperatures exceeding 156°F, decomposition occurs releasing oxygen. The oxygen released could initiate or promote combustion or other materials.

Environmental Hazards – This pesticide is toxic to birds, mammals, fish and aquatic life. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with 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 local sewage treatment plant authority. For guidance, contact your state Water Board or Regional Office of the EPA.

First Aid	
If in eyes	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 Inhaled	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Call 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.	

MASTER LABEL

Storage and Disposal

Storage

Never return VigorOx® to the original container after it has been removed. Avoid all contaminants especially dirt, caustic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of decomposition, isolate container, douse container with cool water and dilute VigorOx® with large volumes of water.

Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store at temperatures below 86°F. Do not store on wooden pallets.

Procedure for Leak or Spill

Stop leak if this can be done without risk. Shut off ignition sources: no flames, smoking, flares or spark producing tools. Keep combustible and organic materials away. Flush spilled materials with large quantities of water. Undiluted material should not enter confined spaces.

Disposal

Pesticide Disposal

If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state, and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal.

VigorOx® which is to be discarded, should be disposed of as hazardous waste after contacting the appropriate local, state, or Federal agency to determine proper procedures.

Container Disposal

Nonrefillable containers less than 5 gallons. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) 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.

Nonrefillable containers greater than or equal to 5 gallons.

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Empty drums are not returnable to PeroxyChem unless special arrangements have been made. Dispose of drums in accordance with local, state, and Federal regulations.

All Refillable containers. Refillable container. Refill this container with pesticide 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 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. Return to PeroxyChem for reuse.

Directions For Use

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

Biofouling Control In Pulp and Paper Mill Systems

For use in the manufacture of paper and paperboard intended for food and non-food contact. VigorOx® Antimicrobial Agent can be used to control bacterial, fungal and yeast growth in pulp, paper and paperboard mills.

1. Severely fouled systems should be cleaned before initial treatment with VigorOx® Antimicrobial Agent. VigorOx® should be added directly to the system and not mixed with any other chemicals or additives. Other chemicals can be added separately. Contamination with other chemicals could result in product decomposition.

2. Add VigorOx® Antimicrobial Agent at a point in the system where it can be mixed uniformly with the pulp, e.g., the beater, hydropulper, fan pump, broke pump, etc.

3. Intermittent feed method: Apply 0.5 lb. to 4.5 lbs. (7 to 65 fluid ounces) of VigorOx® per ton (dry basis) of pulp or paper produced, for two to three hours every eight hour shift. Maintain a concentration that provides adequate control. Daily rate could change depending on the severity of the biofouling.

4. Continuous feed method: Initially, use the intermittent feed method to achieve control. When control is accomplished apply VigorOx® continuously at the rate determined adequate for intermittent control. Then reduce the rate of addition to the lowest level sufficient to maintain control. Depending on the severity of the biofouling, control usually can be maintained using a continuous rate of 0.3 to 4.5 lb. (4 to 65 fluid ounces)

of VigorOx® solution per ton (dry basis) of pulp or paper produced on a continuous basis. This will provide 10 to 110 ppm of peroxyacetic acid and 35 to 490 ppm of hydrogen peroxide.

Control of Bacteria and Fungi in Dispersed Pigments

VigorOx® Antimicrobial Agent can be used to control bacteria and fungi in the manufacture and storage of dispersed pigments such as kaolin clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate and kieselguhr used in paint and paper production.

1. Apply 0.3 to 1.5 lb. (4 to 21 fluid ounces) (135 to 680 grams of VigorOx® solution to each 1,000 lb. (454 kg) of fluid. This will provide 300 to 1500 ppm of product. (15 to 80 ppm peroxyacetic acid and 70 to 340 ppm hydrogen peroxide)

Control of Slime Forming Bacteria in Recirculating Cooling Water Systems (Cooling Towers, Evaporative Condensers)

1. Severely fouled system should be cleaned before adding the VigorOx® solution. VigorOx® should be added directly to the system and not mixed with any other chemicals or additives. Other chemicals should be added separately. Contamination with other chemicals could result in product decomposition.

2. Add the VigorOx® solution at a point in the system where uniform mixing and even distribution will occur, for example the cooling tower basin sump.

3. Intermittent feed method: When the system is noticeably fouled apply 1.0 to 1.5 lb (14 to 21 fluid ounces) of VigorOx® solution per 1000 gallons of water in the system. Repeat until control is achieved. When microbial control is evident, add 1.0 lb. (14 fluid ounces) of VigorOx® solution per 1000 gallons of water in the system every day, or as needed to maintain control. The daily dose rate could vary depending upon the severity of the biofouling.

4. Continuous feed method: Initial dose – When the system is just noticeably fouled, apply 1.0 to 1.5 lb. (14 to 21 fluid ounces) of VigorOx® solutions per 1,000 gallons of water in the system. When

MASTER LABEL

microbial control is achieved, start adding VigorOx® solution continuously at a rate of 1.5 lb (21 fluid ounces) per 1,000 gallons of water. (This will provide 10 ppm peroxyacetic acid and 40 ppm hydrogen peroxide). Then reduce the rate of addition to a level that is sufficient to maintain control. The dose rate may have to be adjusted to account for losses due to blowdown and evaporation.

Control of Bacteria and Fungi in Coating Preservation

Not for use in the manufacture of materials intended for food contact. VigorOx® Antimicrobial Agent can be used as an in-container preservative for the control of bacteria and fungi in water-based coatings such as paper coatings.

1. Add 0.3 to 1.5 lb. (4 to 21 fluid ounces/135 to 680 grams) of VigorOx® solution to each 1,000 lbs. (454 kg) of water. This will provide 300 to 1500 ppm of product (15 to 80 ppm peroxyacetic acid and 70 to 340 ppm hydrogen peroxide).

In all applications always prepare a new solution daily to ensure effectiveness. Do not re-use solutions. Dispose of all used solutions.

EMERGENCY TELEPHONE NUMBERS (24 HOURS)

MEDICAL: COLLECT 303-595-9048

TRANSPORTATION: 800-424-9300

OTHER: COLLECT 716-879-0400

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4847-3664-5527, v. 1

