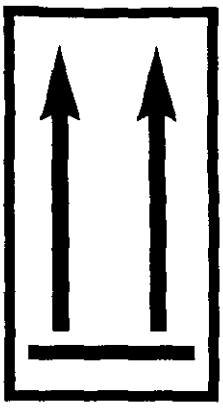
PM33 65402-2 1/21/99 1 of 3



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**

For Industrial Use Only

Active Ingredients:	*Peroxyacetic Acid*	5.1%
	Hydrogen Peroxide	21.7%
Inert Ingredients:		73.2%

KEEP OUT OF REACH OF CHILDREN
DANGER

See side panel for additional precautionary statements

FMC®

FMC Corporation
Active Oxidants Division
1735 Market Street
Philadelphia Pennsylvania 19103

Precautionary Statements
Hazards to Humans and Domestic Animals

DANGER
Corrosive, causes eye and skin damage. Harmful or fatal if swallowed. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling. Do not breathe vapor or spray mist. Do not enter an enclosed area without proper respiratory protection.

Physical or 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 of other materials.

Environmental Hazards

This pesticide is toxic to birds, mammals, fish and aquatic invertebrates. 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 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.

Any solution released from the system should be diluted with water and tested for residuals to ensure that there is less than 3 ppm peroxygen remaining.

Statement of Practical Treatment

If swallowed: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do *not induce vomiting. See a physician.*

If inhaled: Remove to fresh air. If breathing discomfort occurs, call a physician. If breathing has stopped, apply artificial respiration and see a physician.

If in eyes: Immediately flush with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. See a physician.

If on skin: Immediately flush with plenty of water while removing contaminated clothing and/or shoes. Wash skin thoroughly with soap and water. See a physician. Wash contaminated shoes and clothing before reuse.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

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 a 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 66°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 material 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 fol*lowed by discharge into suitable treatment system in accordance with all local, state, and Federal environmen*tal 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

Empty drums are not returnable to FMC unless special arrangements have been made. Triple rinse drums with water. Dispose of drums in accordance with local, state, and Federal regulations. **Do not 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 the 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.

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 systems 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™ solution per 1000 gallons of water in the system. When microbial control is achieved, start adding VigorOx™ solution continuously at a rate of 1.5 lb. (21 Fluid ounces) per 1000 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 a paper coatings.

Add 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 water. This will provide 300 to 1500 ppm of product (15 to 80 ppm peroxyacetic acid and 70 to 340 ppm hydrogen peroxide).

ACCEPTED

JAN 21 1999

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 65402-2

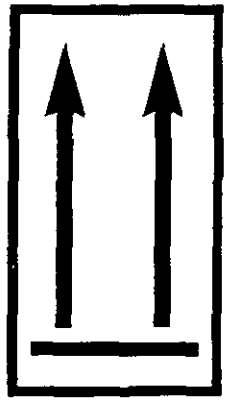
In all applications always prepare a new solution daily to ensure effectiveness. Do not re-use solutions. Dispose of unused solution.

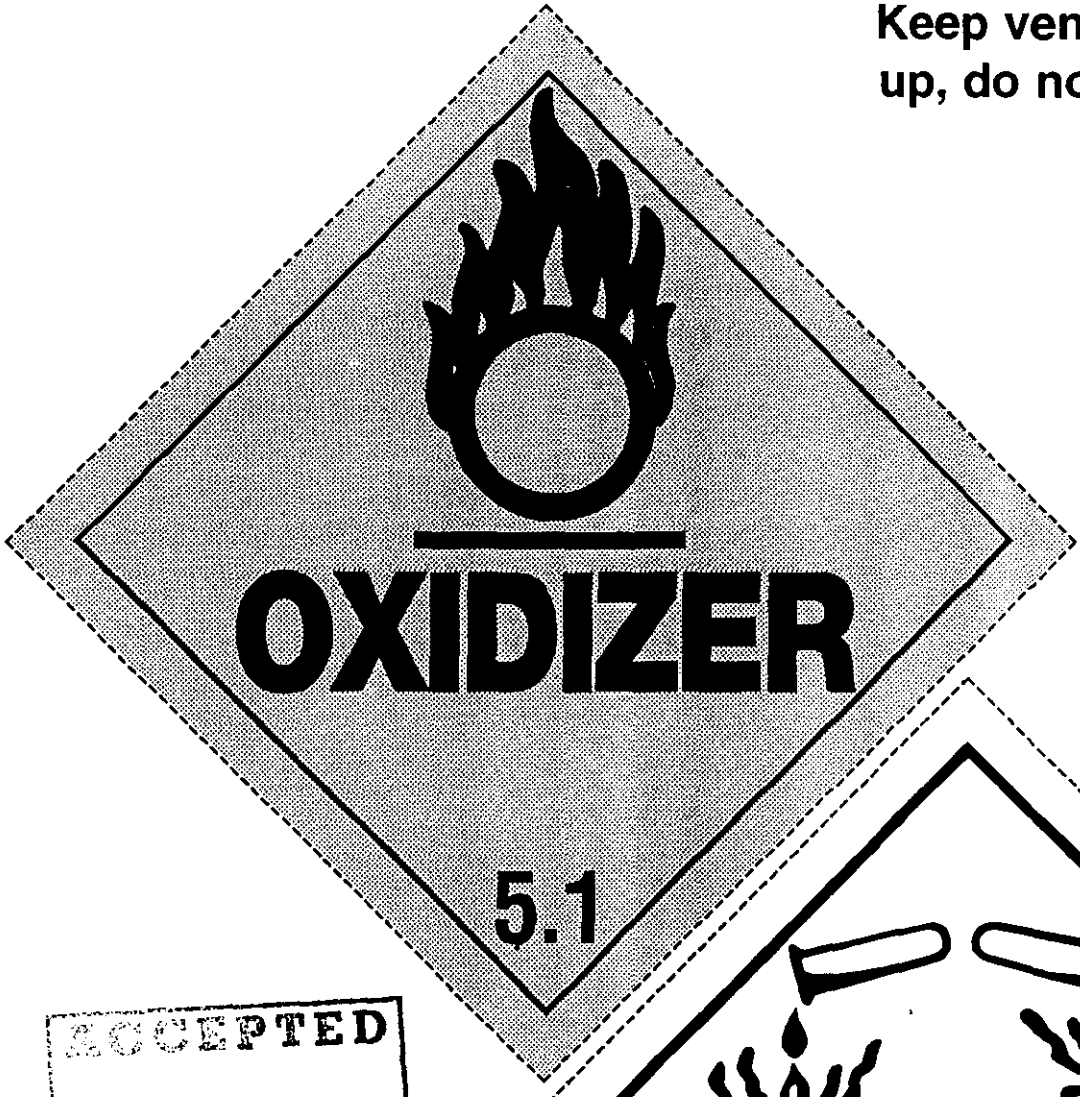
EMERGENCY TELEPHONE NUMBERS
(24 HOURS)
MEDICAL: COLLECT 303-595-9048
TRANSPORTATION: 800-424-9300
OTHER: COLLECT 716-879-0400

For more information see Material Safety Data Sheet
Label Effective Date: January 1999

Net Contents Gallons Pounds

Keep vent end up, do not roll





D.O.T. Description:
Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water and not more than 6% peroxyacetic acid.

UN 3149