

1258-840

4/30/2001

page 185

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APR 30 2001

Garrett Schifilliti  
Arch Chemicals, Inc.  
501 Merritt 7  
P.O. Box 5204  
Norwalk, CT 06856-5204

**RE: Zinc Omadine Powder Industrial Microbiostat**  
**EPA Reg. No. 1258-840**  
**Your Submission Dated 12/12/2000**

The submission referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, to provide a revised label as per our faxed label comments dated 11/28/2000, and to have the "conveyor belts" use on the label before PR Notice 2000-1 becomes effective, and to provide a label that is more specific as to food uses, is acceptable.

A stamped copy of the label (accepted with comments) is attached for your records.

If you have any questions about the comments in this letter, please feel free to contact Tony Kish at 703-308-9443, or myself at 703-308-6341.

Sincerely,



Marshall Swindell,  
Product Manager Team 33,  
Regulatory Management Branch I  
Antimicrobials Division (7510C)

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

# PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## DANGER

Corrosive. Causes irreversible eye damage. May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, safety glasses or face shield). Do not breathe dust. Wash thoroughly after handling with soap and water, and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

## FIRST AID:

**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. **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 Inhaled:** 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 further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.  
**IN CASE OF EMERGENCY CALL**  
1-800-654-6911

## ZINC OMADINE® POWDER INDUSTRIAL MICROBIOSTAT

### Active Ingredient:

Zinc, 2-pyridinethiol-1-oxide\* 95.0%

Inert Ingredients: 5.0%

Total: 100.0%

\*Zinc Pyrithione

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

See Side Panel For Statement of Practical  
Treatment and Additional Precautions

Net Wt 25 Lbs.

ARCH CHEMICALS, INC.  
501 MERRITT SEVEN  
NORWALK, CT 06856

EPA Reg. No. 1258-840  
EPA Est. No. 1258-NY-3

Omadine® is a registered trademark of  
Arch Chemicals, Inc.

## CHEMICAL HAZARDS

Handling conditions may form dust clouds which are susceptible to ignition by electrical (static) discharge. Ground container and personnel before transferring material. Do not store or mix with strong oxidizing agents or strong (concentrated) acids. In case of contamination do not reseal container. If possible, isolate container in open or well-ventilated area. Fumes caused by contamination may be hazardous.

## ENVIRONMENTAL HAZARD

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, ponds, streams, 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 local sewage treatment plant authority. For guidance contact our State Water Board or Regional Office of the EPA.

## STORAGE AND DISPOSAL

**PESTICIDE STORAGE:** Do not store above 100°F. Keep container tightly closed when not in use. Do not store with strong oxidizing agents or strong (concentrated) acids.

**ACCEPTED**  
with COMMENTS  
in EPA Letter Dated:

APR 30 2001

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

1258-840

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**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticides, 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. Do not reuse empty container.

**CONTAINER DISPOSAL:**

Metal Containers: Triple rinse. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Plastic Containers: Triple rinse. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

ACCEPTED  
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1258-840

**DIRECTIONS FOR USE:** It is a violation of federal law to use this product in a manner inconsistent with its labeling. We recommend that users contact Arch Chemicals Technical Service for formulation assistance.

**Overview:**

Formulations differ in terms of their composition and as a result, they differ in terms of their susceptibility to microbial attack. In addition, the conditions of use and the performance expectations differ from product to product. A warranted high performance paint, for example, that is under consideration for use in severe tropical environments, is likely to need a high dose of biocide. Our first recommendation in such circumstances would be a recommendation for testing at higher biocide use levels. In this example, we would recommend testing at 3000, 4000 and 5000 ppm. As the product adds cost to the formulation and as performance requirements need to be met, laboratory and field tests are conducted to establish the antimicrobial performance of this product. A use level recommendation is made following evaluation of extensive laboratory and field trial results. An unwarranted paint that is not intended for use in severe environments would likely need a lower dose. Again, a recommendation would be made for testing at lower concentrations based on formulation, performance and cost considerations. As before, a use level recommendation would be made following evaluation of extensive laboratory and field trial results. Recommendations are rarely made outside this process. When they are, the recommendations are based on our knowledge of a customer's formulation, expected use conditions, cost considerations and performance requirements. Typically, these recommendations are mid-range. As the maximum allowable concentration of biocide varies from application to application, the recommendation typically remains mid-range. A minimum cost effective use level recommendation can only be established through testing of a specific formulation intended for use in a specific application.

Minimum inhibitory concentrations (MIC's) have been developed for this product against a broad spectrum of microorganisms, *in vitro*. Many bacterial species were found to have a MIC of less than 32 ppm. Many fungal species were found to have a MIC of less than 16 ppm. Most algal species tested had a MIC of less than less than 1 ppm. With this product history and product related variables in mind, minimum use level recommendations are not included.

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### **For the Dry Film Preservation of Flooring Adhesives, Caulks, Sealants, Grouts and Patching Compounds:**

**Flooring Adhesives:** For fungal control add 750 ppm of this product and for bacterial control add 2400 ppm. (Add 0.75 lbs. of this product to 1000 lbs. of adhesive to control fungus and add 2.4 lbs. per 1000 lbs. of adhesive to control bacteria.)

**Caulks/Sealants:** For fungal control add 2083 ppm of this product and for bacterial control add 5000 ppm of this product. (Add 2.083 lbs. of this product per 1000 lbs. of caulk/sealant to control fungus, add 5.0 lbs. of this product to control bacteria.)

**Grouts/Patching Compounds:** For fungal control add 1000 ppm of this product and for bacterial control add 4000 ppm of this product. (Add 1 lb. of this product to 1000 lbs. of grouts/patching compounds to control fungus and 4 lbs. of this product to control bacteria.)

**For the Control of Mildew and Bacteria In Styrene Butadiene Rubber and Thermoplastic Resins Used In the Manufacture of the Following Products:** Carpet Fibers; Carpet Backings; Rubber or Rubber Backed Bath Mats; Foam Underlay For Carpets; Synthetic, Non-Leather Materials; Foam Stuffing for Cushions and Mattresses; Wire and Cable Insulation; Vinyl, Linoleum and Synthetic Floor Coverings; Wall Coverings; Plastic Furniture; Athletic Flooring and Mats; Mattress Liners, Covers or Ticking; Molding; Mats; Gaskets; Weather Stripping; Coated Fabrics For Furniture Cushions, Boat Covers, Tents; Tarpaulins; Awnings; Non-Surgical Rubber Gloves; Garbage Bags, Refuse Containers; Bathtub Appliques; Garden Hose; Non-Potable Water Pipe; Ductwork for industrial, hospital, residential, and commercial heating and cooling; Shower Curtains; Sponge or Fiber Mops; Household Use Sponges; Toilet Brush Receptacles, Toothbrush Receptacles (Non Bristle Contact); Non-Medical Scrub Brushes; Sink Mats and Drain Boards; Storage Containers; Soap Dish Holders; Towel Bars and Components of Footwear.

Addition of up to 4000 ppm (4 lbs./1000 lbs. of formulation) of this product can inhibit the growth of mildew & bacteria in styrene butadiene rubber & thermoplastic resins such as vinyl chloride-vinyl acetate copolymers, polyurethanes, polyamides, polyolefins, polystyrene, polyesters and acrylonitrile copolymers. It can be added at a time during the formulation procedure that will insure uniform distribution throughout the polymer system. Add by pouring or by use of metering equipment. For example, to inhibit mildew growth in polyurethane footwear components, add 2000 ppm (2 lbs./1000 lbs. of formulation) of this product to the polyurethane formulation.

**For the In Can Preservation of Latex Emulsions, Clay, Mineral, Pigment and Guar Gum Slurries Used In the Manufacture of Adhesives, Caulks, Patching Compounds, Sealants and Grouts:** A dosage of up to 5000 ppm is recommended to control bacteria and fungi. This dosage is equivalent to 5 lbs. of this product per 1000 lbs. of slurry. It may be added at any time during the formulation procedure.

**DRY FILM PRESERVATION: THIS PRODUCT PROTECTS THE APPLIED DRY FILM ITSELF AND DOES NOT PROTECT THE UNDERLYING SURFACE FROM ATTACK BY ALGAE OR BACTERIA.**

**For the Dry Film Preservation of Aqueous Latex Architectural and Industrial Non-Marine Paints and Coatings:** Addition of up to 5000 ppm of this product can inhibit the growth of algae, bacterial slime, mildew, and other fungi. It can be added at any time during the formulation procedure. For example, the dry film of a house paint having a density of 10 lbs. per gallon can be protected against the growth of algae, bacterial slime, mildew and other fungi by the addition of 5000 ppm of this product. (Add 5 lbs. of this product to 100 gallons of wet paint.)

APR 30 2001

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No.  
105-0-011

**For the Dry Film Preservation of Residential Latex Paints Against Fungus or Algae:** Use a minimum of 2500 ppm of this product. For maximum protection against the growth of fungus or algae, use 5000 ppm of this product. For control of bacterial growth on the dry paint film surface, use 2500 ppm of this product. (Add a minimum of 2.5 lbs. of this product to 100 gallons of wet paint, with a density of 10 lbs per gallon, to control fungus or algae. Add a maximum of 5.0 lbs. of this product to 100 gallons.)

**For the Dry Film Preservation of Joint Compounds, Glazing Compounds and Wood Fillers:** Addition of up to 5000 ppm (5.0 lbs. of this product per 1000 lbs. of formulation) of this product will inhibit microbial growth (bacteria and fungi) in the dry film of these products. This product can be added at any time during the formulation procedure.

**To Inhibit the Growth of Bacteria and Fungi In Dry Wall and Gypsum, Pearlite, Plaster-Like or Mineral Based Building Materials Used In the Manufacture of Ceilings, Ceiling Tile, Walls and Partitions:** Addition of up to 4000 ppm of this product (4 lbs. of product per 1000 lbs. of the formulation, i.e., wet slurry) will inhibit the growth of bacterial and fungi. It can be added at any time during the formulation procedure. Alternatively the product may be added to latex or other types of coating systems routinely applied to the surfaces of walls, ceiling tiles, partitions, etc. at the same dosage as above.

**To Inhibit Bacterial and Fungal Growth On Laundered Fabrics:** Fabrics to be treated include nylon, polypropylene, polyethylene, polyesters, cellulose and blends of these polymers. At a sour density of 8.3 pounds per gallon, add 3-9 ounces of this product with 2000 gallons of acid sour to reach a use level of 23 to 68 ppm. Apply to the sour operation and run for a minimum of five minutes. Product is to be used in industrial applications. Product is not intended for use in residential, commercial or institutional settings.

#### INDIRECT FOOD CONTACT USES:

##### **To Control Growth of Bacteria and Fungi In Adhesives Used For Food Packaging:**

For food packaging adhesives, at use temperatures up to 120°F, and subject to Good Manufacturing Practices, including the conditions specified in 21 CFR 175.105 (a) and (b), add a dosage of 750 ppm to a maximum of 1000 ppm of this product (0.75 to 1.0 lb. of this product per 1000 lbs. of food packaging adhesive) at a point where thorough mixing will take place.

##### **To Control the Growth of Bacteria/Fungi on Food Contact Surfaces Made from Polymers:**

Do not incorporate this product into any food contact polymer unless the subject food contact polymer is approved and listed in 21 CFR, Parts 174 through 186 (inclusive), or in the United States Food and Drug Administration's "Food Contact Substance Notification System." Restricted to use applications at or below room temperature. Any incorporation of this product into any food contact substance (including but not limited to non-polymer substances) other than an approved and listed food contact polymer is prohibited. For incorporation into articles made from, or coated with FDA approved polymers. Applications include food processing equipment, conveyor belts, utensils, and storage containers. Add 750 ppm to a maximum of 1000 ppm of product (0.75 to 1.0 lb. of this product per 1000 lbs. of polymer) at a point where thorough mixing will take place.

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