



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

June 14, 2016

Ms. Leesha N. Square  
Regulatory Specialist for,  
Lonza, Inc.  
1200 Bluegrass Lakes Pkwy  
Alpharetta, GA 30004

Subject: Notification per PRN 98-10 – To revise the product labeling  
Product Name: Zinc Omadine ZOE Dispersion Mildewcide  
EPA Registration Number: 1258-1235  
Application Date: May 19, 2016  
Decision Number: 517999

Dear Ms. Square:

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 Karen M. Leavy at (703)-308-6237 or via email at [Leavy.Karen@epa.gov](mailto:Leavy.Karen@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Karen M. Leavy Esq,". The signature is written in a cursive style with a large, stylized 'K' and 'L'.

Julie Chao  
Product Manager 31  
Regulatory Management Branch I  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

## Zinc Omadine ZOE Dispersion Mildewcide

### ACTIVE INGREDIENT:

Zinc, 2-pyridinethiol-1-oxide.....37.6%  
Other Ingredients.....62.4%  
Total.....100.0%

## NOTIFICATION

1258-1235

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:

06/14/2016

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

SEE [SIDE] [BACK] [RIGHT] [LEFT] PANEL FOR FIRST AID AND PRECAUTIONS

Net Weight [Enter Net Weight]

### MANUFACTURED FOR/BY:

Arch Chemicals, Inc.

1200 Bluegrass Lakes Parkway  
Alpharetta, GA 30004

Made in the USA.

EPA Reg. No. 1258-1235

EPA Est. No. [Enter EPA Establishment number]

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

Note: Text in [Square Brackets] are notes to the label reviewer. Text in {Curly Brackets} is optional.

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**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. Avoid breathing vapor or spray mist. Users must wear protective eyewear (goggles, safety glasses, or face shield), long sleeved shirt and long pants, socks, chemical resistant gloves and chemical resistant footwear. Users must wear a fit tested, NIOSH approved full face respirator equipped with a combination organic vapor/P-100 prefilter. When mixing and loading, or cleaning equipment, wear a chemical resistant apron. 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 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 Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible. Call a Poison Control Center or doctor for further 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.

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. In case of emergency, for additional information call 1-800-654-6911.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, ponds, streams, 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.

**CHEMICAL HAZARDS:** 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.

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**STORAGE AND DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not freeze. Store above 50°F. Keep container tightly closed when not in use. Do not store with strong oxidizing agents or strong (concentrated) acids.

**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:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container promptly after emptying. 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

[For containers > 5 gallons or 50 pounds] 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.

[For containers < 5 gallons or 50 pounds] 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 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.

**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: A minimum cost effective use level recommendation can only be established through testing of a specific formulation intended for use in a specific application. Formulations differ in their composition and as a result, of their susceptibility to microbial attack. Conditions of use and the performance expectations differ from product to product. A warranted high performance preserved product, for example, that is under consideration for use in severe tropical environments, is likely to need a high dose of biocide. Testing at biocide use levels would be recommended 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. An unwarranted preserved product 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.

**{NON- FOOD CONTACT USES:}**

**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 Flooring and Other Non-Food Contact Adhesives, Caulks, Sealants, Grouts and Patching Compounds:**

**Adhesives:** For fungal control add 1900 ppm of this product and for bacterial control add 6100 ppm. (Add 1.9 lbs. of this product to 1000 lbs. of adhesive to control fungus and add 6.1 lbs. per 1000 lbs. of adhesive to control bacteria.)

**Caulks/Sealants:** For fungal control add 5300 ppm of this product and for bacterial control add 12,760 ppm of this product. (Add 5.3 lbs. of this product per 1000 lbs. of caulk/sealant to control fungus, add 12.76 lbs. of this product per 1000 lbs. to control bacteria.)

**Grouts/Patching Compounds:** For fungal control add 2550 ppm of this product and for bacterial control add 10,100 ppm of this product. (Add 2.55 lbs. of this product to 1000 lbs. of grouts/patching compounds to control fungus and 10.1 lbs. of this product per 1000 lbs. to control bacteria.)

**For the Dry Film Preservation of Aqueous Latex and Other Types of Architectural and Industrial Non-Marine Paints and Coatings Including Powder Coatings:** Addition of up to 12,760 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 12,760 ppm of this product. (Add 12.76 lbs. of this product to 100 gallons of wet paint.)

**\*For the Dry Film Preservation of Residential Latex and other Paints Against Fungus or Algae:** Use a minimum of 6400 ppm of this product. For maximum protection against the growth of fungus or algae, use 12,760 ppm of this product. For control of bacterial growth on the dry paint film surface, use 6400 ppm of this product. (Add a minimum of 6.4 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 12.76 lbs. of this product to 100 gallons.)

\*Not approved for use in California

**\*(For Unit-Dose Packages of 10.4 ml & 49.4 ml unit-dose packets) For the Dry Film Preservation of Residential Latex & Other Paints Against Fungus or Algae in interior/low humidity conditions:**

For each gallon of paint with a density of about 10 gal., use one 10.4 ml packet (0.35 fl oz, 13 grams) which provides a dosage of 3000 ppm of this product. For more severe conditions of exposure to weather or humidity, use 2 packets (which provides a dosage of 6000 ppm of this product). For each 5 gallons of paint, use one 49.4 ml packet (1.66 fl oz, 62 grams) which provides 2800 ppm of this product. For more severe conditions of exposure to weather or humidity, use 2 packets (which provides a dosage of 5600 ppm of this product).

**\*For the Dry Film Preservation of Joint Compounds, Glazing Compounds and Wood Fillers:**

Addition of up to 12760 ppm (12.76 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.

**\*For the Control of Mildew and Bacteria In Styrene Butadiene and Natural Rubber and Thermoplastic Resins, and Textiles Used In the Manufacture of the Following Non-Food/Non-Medical Products:**

Rubber bands, 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, Sails, Tents; Tarpaulins; Awnings; Non-Surgical Rubber Gloves; Garbage Bags, Refuse Containers; Bathtub Appliques; Garden Hose; Non-Potable Water Pipe; Ductwork, air filtration components and air filtration media for industrial, hospital, residential, and commercial heating and cooling; Conveyor belts; Shower Curtains; Sponge or Fiber Mops; Toilet Brush Receptacles (Non Bristle Contact); Non-Medical Scrub Brushes; Sink Mats and Drain Boards; Storage Containers; Soap Dish Holders; Towel Bars and Components of Footwear and Toilet Seats. Addition of up to 10100 ppm (10.1 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 5100 ppm (5.1 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 12760 ppm of this product is recommended to control bacteria and fungi. This dosage is equivalent to 12.76 lbs. of this product per 1000 lbs. of slurry. It may 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, Mineral Based or Cellulite Derived Building Materials Used In the Manufacture of Ceilings, Ceiling Tile, Walls and Partitions:** Addition of up to 10100 ppm of this product (10.1 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.

\*Not approved for use in California

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**\*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 8 – 23 ounces of this product per 1000 lbs. dry weight of fabric to reach a use level of 48 to 142 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.

\*Not approved for use in California.

**{\*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 2000 ppm to a maximum of 2600 ppm of this product (2.0 to 2.6 lb. of this product per 1000 lbs. of food packaging adhesive) at a point where thorough mixing will take place.

**\*To Control Growth of Bacteria and Fungi In Latex Emulsions or Aqueous Inorganic Slurries Used In the Manufacture of Food-Contact Coated Paper:**

To control the growth of bacteria and fungi in aqueous paper coatings and paper coatings components including latex, starch solutions, and mineral or pigment slurries (clay, kaolin clay, calcium carbonate, or titanium dioxide) at a dosage not to exceed 1300 ppm of this product in the paper coatings components and not to exceed 250 ppm of this product in the paper coating formulation. Add this product at any point in the paper coating process.

\*Not approved for use in California.

**ZINC OMADINE ® ZOE PRODUCT LICENSING & PATENT NOTICE** This product contains ZINC OMADINE® and zinc oxide and may be used in the preparation of paints with zinc oxide in accordance with the label and processes, compositions and methods claimed in U.S. Patents 6,096,122; 5,939,203; 5,883,154; 5,562,995; and 5,518,774; European Patents 0963291; 0857087; and 0807152; and their other corresponding foreign patents. Purchase of this product from Arch Chemicals, Inc. gives the purchaser a nonexclusive license to use this product in the processes, compositions and methods claimed in the above-mentioned patents, and the royalty for this license is incorporated into the purchase price of the product

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