

71227-1

6/10/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL, SAFETY
AND POLLUTION PREVENTION

JUN 10 2014

Abigail T. Downs
Technology Sciences Group Inc.
1150 18th Street, Suite 100
Washington, DC 20036

Subject: **Zeomic Type AJ Silver Zeolite A**
EPA Registration Number 71227-1
Application Date March 17, 2014
EPA Receive March 18, 2014

Dear Ms. Downs:

The following amendment submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable.

Proposed Amendment:

- Submit Confidential Statements of Formula (CSF) basic and alternate (#1) formulations
Per Agency letter dated 2/10/2014 Update the label

Product Chemistry:

The product chemistry is acceptable. Enclosure is the review for product chemistry review dated 5/5/2014.

The submitted label is acceptable.

Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

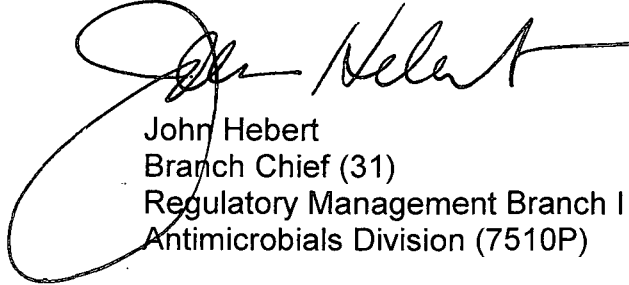
The next label printing of this product must use this labeling unless subsequent changes have been approved. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and it's implementing regulation at 40 CFR 152.3.

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General Comment:

Should you have any questions concerning this letter please contact Drusilla Copeland at (703) 308-6224.

Sincerely,

A handwritten signature in black ink, appearing to read "John Hebert", written over a large, loopy circular scribble.

John Hebert
Branch Chief (31)
Regulatory Management Branch I
Antimicrobials Division (7510P)

Enclosure: stamped label

Revised copy 3/10
4/8/14

Zeomic® Type AJ Silver Zeolite A

A preservative and bacteriostatic agent for use in the
manufacture of polymer, plastic and latex products.
For commercial and industrial use.

Active Ingredient:

Silver	2.5 %
Other Ingredients	97.5 %
Total	100.0 %

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE INSERT LABEL FOR PRECAUTIONARY STATEMENTS

Manufactured by:

Sinanen Zeomic Company, Ltd.
1-1 Nakagawa-honmachi,
Minato-ku
Nagoya, Japan 455-0051

EPA Registration No. 71227-1

EPA Establishment No. 71227-JPN-001

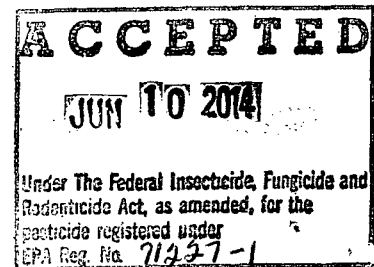
Net Wt. XXXX

Lot No. XXXXXXXXXX



Standard 51 Listed

Nonfood Compounds
Program Listed PX



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Directions for Use

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

For all uses listed*:

- * 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." Any incorporation of this product into an approved and listed food contact polymer must comply with the specific use conditions listed in 21 CFR, Parts 174 through 186 (inclusive), or in the United States Food and Drug Administration's "Food Contact Substance Notification System," for such food contact polymer. 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 applications involving direct or indirect food or human drinking water contact, Zeomic® Type AJ must be used with an FDA approved polymer or coating. Non-food and non-drinking water contact applications can use either FDA or non-FDA approved coatings.
- * This product may be used for the following human drinking water contact uses:
 - water filter components and housing units
 - water bottle dispensers and components
 - water dispensers
 - ice machine trays
 - ice machine bins
 - ice machine water hoses
 - ice dispensers and other ice machine components
 - water bottles
 - cups
 - water storage vessels
- * This product may be incorporated into food and water bowls, dishes and other containers used by domestic animals. Do not use for any food or drinking water applications involving non-domestic animals.

Zeomic® Type AJ Silver Zeolite A is an antimicrobial additive to be used by compounding into many polymeric materials. It is designed to be incorporated during and after the manufacturing process to impart antimicrobial activity to the manufactured products. Approved post manufactured product upgrade applications are detailed in the label section titled "Coatings for Upgrade Applications." *Zeomic® Type AJ Silver Zeolite A* suppresses the growth of algae, mold, mildew, fungi and bacteria which cause unpleasant odors, discoloration, staining, deterioration or corrosion only. No finished product incorporating *Zeomic® Type AJ Silver Zeolite A* may make any public health claims relating to antimicrobial activity without first obtaining an EPA registration for the finished product which permits such claims, and without a tolerance or exemption from the requirement of a tolerance. When incorporated into treated articles, this product does not protect users of any such treated article or others against food borne or disease causing bacteria, viruses, germs or other disease causing organisms.

Types of Finished Products

Plastics - including films, sheets, slabs, and molded plastic parts

The additive may be incorporated into the finished product at up to 5.0% by weight or at least 0.1% for bulk plastics. Contact Sinanen Zeomic Company Ltd. to determine the appropriate amount of Zeomic® Type AJ Silver Zeolite A for individual finished products.

Food contact* and non-food contact uses (in all food contact cases, when the article itself is a FDA-approved polymer):

packaging	kitchen and food processing utensils and supplies
gaskets	cutting boards
general purpose containers	countertops
food and drink containers	sinks
food trays and covers	tiles
sponges	dishes
plastic film	cups
food wrap (including coated deli paper, coated meat interleavers and plastic wrap)	bottles
tubing	conveyor belts
brush bristles (including personal care grooming items, toothbrushes (Claims allowed: <i>odor, discoloration, staining</i>), and cosmetic brushes (Claims allowed: <i>odor, discoloration, staining</i>))	food processing equipment (including slicers, formers, juicers, washers, canners, freezers, refrigerators, shelving, cookers, grinders, choppers, peelers and countertops)
liners	beverage processing equipment (including mixers, transfer equipment, pumps, bottlers, canners, dispensers and fermenters)
non-woven fabrics	garbage bags and garbage cans
appliances and equipment	

Non-food contact uses only:

automobile parts	mouthguards (Claims allowed: <i>odor, discoloration, staining</i>)
shower curtains	siding for housing
mats	kitchen and bathroom hardware
protective covers	flooring
tape	floor coverings
waste containers	footwear (including boots, sports equipment and tools)
brush handles	insulation for wire and cable
mops	insulators
vacuum cleaner bags	indoor and outdoor furniture
plumbing supplies and fixtures (including toilet bowl seats)	toys (Claims allowed: <i>odor, discoloration, staining, deterioration</i>)
drain pan liners	spas, bathtubs, showers and filters and components thereof
office equipment and supplies (including binders, filing and storage systems, pens, pencils, markers, printers, facsimile machines, desk accessories, computers, keyboards, mice, scanners, and printers)	Telephones, mobile devices, head phones, headsets and accessories
personal care items (including grooming items, toothbrushes (Claims allowed: <i>odor, discoloration, staining</i>), sports and dental	Cameras and imaging equipment
	Electrical wiring devices and wall plates

Fibers

The additive may be incorporated into the finished product at up to 5.0% by weight or at least 0.1% for fibers. Contact Sinanen Zeomic Company Ltd. to determine the appropriate amount of Zeomic® Type AJ Silver Zeolite A for individual finished products.

Food contact* and non-food contact uses (in all food contact cases, when the article itself is a FDA-approved polymer, or as a FDA-approved polymer coating on an article):

- napkins, tablecloths and wiping cloths
- bags
- brush bristles (including personal care grooming items, toothbrushes (Claims allowed: *odor, discoloration, staining*), and cosmetic brushes (Claims allowed: *odor, discoloration, staining*))
- filters
- clothing apparel (including uniforms, outerwear, gloves, aprons, coats and shoes)
- sponges
- packaging (including bags, sacks, wraps, cushion and absorbent materials, and containers)
- conveyor belts
- kitchen, commercial and industrial wipes and fabrics

Non-food contact uses only:

Interior furnishings -

- mattress cover pads and filling
- pillow covers
- sheets
- blankets
- fiberfill for quilts and pillows
- curtains
- draperies
- carpet and carpet underlay
- rugs
- upholstery
- mops
- towels
- wall covering fabrics
- cushion pads
- sleeping bags

- automotive and truck upholstery
- carpeting
- rear decks
- trunk liners
- convertible tops
- interior liners

Industrial and Other Household Items -

- artificial leather
- filters
- book covers
- mops
- cloth for sails
- ropes
- tents and other outdoor equipment
- tarps
- awnings
- drain pan liners

Apparel -

- umbrellas
- outerwear
- sportswear
- sleepwear
- stockings
- socks and hosiery
- caps
- undergarments
- inner liners for jackets
- trim for outerwear and garments

Luggage

- Sports bags
- Shoe bags
- Sports bag accessories
- Luggage
- Duffel bags
- Laundry bags
- Cosmetic bags
- Packing Organizers
- Luggage Lining

Transportation -

Coatings, Films and Laminates

The additive may be incorporated into the coating, film or laminate applied to the finished product at up to 5.0% by weight, or at least 0.05% for paper or 0.1% for bulk plastics. Contact Sinanen Zeomic Company Ltd. to determine the appropriate amount of Zeomic® Type AJ Silver Zeolite A for individual finished products. Types of coatings include water-borne, solvent-borne, 100% solids, radiation cure, liquid and powder.

Food contact* and non-food contact uses (in all food contact cases, when the article itself is a FDA-approved polymer, or as a FDA-approved polymer coating, film or laminate on an article):

- packaging
- paper products (including wipes and tissues)
- food wrap (including coated deli paper, coated meat interleavers and plastic wrap)
- natural and synthetic fibers and fabrics
- sinks
- countertops
- cutting boards
- dishes
- cookware
- general purpose containers
- kitchen, commercial and industrial utensils and supplies
- collection and storage equipment (including conveyor belts, piping systems, silos, tanks and process vessels)
- appliances and food processing equipment (including slicers, formers, juicers, washers, canners, freezers, refrigerators, shelving, cookers, grinders, choppers, peelers and countertops)
- beverage processing equipment (including mixers, transfer equipment, pumps, bottlers, canners and fermenters and dispensers)
- building materials and components (including walls, hardware, floors, ceilings and components thereof for kitchen, commercial and industrial applications)

Non-food contact uses only:

- walls
- wallboard
- floors
- concrete
- siding
- roofing
- shingles
- industrial equipment
- furniture
- automotive and vehicular parts
- packaging
- paper products (including wall coverings, towels, book covers)
- barrier fabrics
- glazing for cement tile
- glazing for vitreous china used in plumbing fixtures (including toilets, sinks, countertops)
- Heating, Ventilation and Air Conditioning equipment and related materials (including insulation, ducts, heat exchangers, drain pans, air filters, air purifiers, diffusers, and parts and components thereof)
- spas, bathtubs, showers, and filters and components thereof
- Electrical wiring devices and wall plates

- Luggage
- Sports bags
- Shoe bags
- Sports bag accessories
- Luggage
- Duffel bags
- Laundry bags
- Cosmetic bags
- Packing Organizers
- Luggage Lining

Coatings for Upgrade Applications.

Upgrade Applications are defined as the incorporation of Zeomic into polymeric coatings that are applied to articles onsite (after the article has been manufactured and is in the place of use). Coatings may be used on articles that have not previously incorporated the antimicrobial compound. Zeomic may be incorporated into the finished coating at up to 5.0% by weight, or at least 0.1% of the coating. Types of coatings include waterborne coatings/adhesives, solvent borne coatings and two part reactive coatings consisting of a resin and curing agent. Upgrade Applications are for onsite application at Commercial, Industrial or Institutional Establishments. Unless otherwise specified, the coating is applied to the entire article. Contact Sinanen Zeomic Company Ltd. to determine the appropriate application technique and amount of Zeomic for individual products.

Food contact* and non-food contact articles (in all food contact cases, when the article itself is a FDA-approved polymer, or as a FDA-approved polymer coating on an article):

- food collection, conveyance and storage equipment (including conveyor belts, silos, tanks and process vessels)
- appliances and food processing equipment (including slicers, formers, juicers, washers, canners, freezers, refrigerators, shelving, cookers, grinders, choppers, peelers, and countertops)
- beverage processing and ice machine equipment (including mixers, transfer equipment, pumps, bottlers, canners, fermenters and dispensers and other components)
- food and chemical transportation equipment including railcars, tankers, trailers and components thereof
- building materials and components (including walls, ceilings and floors consisting of concrete, gypsum board, and cellulose ceiling tile)

Incorporate this product into coatings that are intended for application to the surface of articles. The purpose of the coating is to seal the article from moisture and corrosion. The purpose of Zeomic® in the coating is to inhibit the growth of mold, mildew, fungus and bacteria that cause odor, discoloration, staining, deterioration or corrosion on the surface of the coating film. The product protects the applied coating itself from microorganism attack, not the underlying substrate. This product is not intended for remediation, prevention or control of existing or anticipated public health related microorganisms.

HVAC articles:

Heating, ventilation and air conditioning systems and related materials including air handlers, drain pans, heat exchangers, distribution lines, flexible ductwork, diffusers, and insulation lined porous ductwork.

Incorporate this product into coatings that are intended for application to HVAC systems. The purpose of the coating is to seal the HVAC system from moisture and corrosion. The purpose of Zeomic® in the coating is to inhibit the growth of mold, mildew, fungus and bacteria that cause odor, discoloration, staining, deterioration or corrosion on the surface of the coating film. The product protects the applied coating itself from microorganism attack, not the underlying substrate. This product is not intended for remediation, prevention or control of existing or anticipated public health related microorganisms.

Adhesives and Sealants

The additive may be incorporated into the finished product at up to 5.0% by weight, or at least 0.05% for paper or 0.1% for bulk plastics. Contact Sinanen Zeomic Company Ltd. to determine the appropriate amount of Zeomic® Type AJ Silver Zeolite A for individual finished products.

Food contact* and non-food contact uses (in all food contact cases, when the article itself is a FDA-approved polymer incorporated into FDA-approved adhesives or sealants):

- plumbing adhesives
- pipe sealants and insulating materials
- grout and joint compound for; countertops, building materials and components, and food and beverage related equipment

Non-food contact uses only:

- adhesives used in the manufacture of wood and plastic composites
- adhesives for ceramic tile, wood, paper, cardboard, rubber and plastic
- glazing for windows
- grout
- sealants for pipes
- adhesives, sealants and insulating materials for; appliances, bathrooms, showers, kitchens and construction

Miscellaneous Applications

The additive may be incorporated into the finished product at up to 5.0% by weight. Contact Sinanen Zeomic Company Ltd. to determine the appropriate amount of Zeomic® Type AJ Silver Zeolite A for individual finished products.

Non-food contact uses only:

- | | |
|----------|------------------------------|
| toilets | plaster |
| sinks | cat litter |
| tile | drainage and sewerage pipe |
| flooring | interior paints and coatings |
| stucco | |

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PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals. CAUTION: Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing dust. Avoid contact with skin, eyes or clothing. Wear goggles or face shield and rubber gloves when handling the dry powder. 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 clothing before reuse.

FIRST AID	
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 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 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 the 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.	

Storage and Disposal

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

Pesticide Storage: Do not store in areas accessible to children. Keep product dry and containers covered during storage; store below 130°F.

Container Disposal: Nonrefillable container. Do not reuse or refill inner plastic bag or outer steel can. **Inner Plastic Bag:** Completely empty plastic bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. **Outer Steel Can:** Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Pesticide Disposal: Wastes from the use of this product may be disposed of on site or at an approved waste disposal facility.