



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Antimicrobials Division (7510P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

12446-20014

Date of Issuance:

2/5/25

NOTICE OF PESTICIDE:

☒ Registration

☐ Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

ACID SHINE

Name and Address of Registrant (include ZIP Code):

Crystal Maira

Zeco, LLC

Electronic Transmittal: Crystal Maira [crystal.maira@VINCITGROUP.com](mailto:crystal.maira@VINCITGROUP.com)

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(B). You must comply with the following conditions:

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

Signature of Approving Official:

Steven Snyderman, Product Manager 33  
Regulatory Management Branch II  
Antimicrobials Division (7510M)  
Office of Pesticide Programs

Date:

2/5/25

2. You are required to comply with the data requirements described in the DCI identified below:

- a. Hydrogen Peroxide: GDCI-000595-1127
- b. Peracetic Acid: GDCI-063201-1125

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Reevaluation Team Leader (Team 36): <http://www2.epa.gov/pesticide-contacts/contacts-office-pesticide-programs-antimicrobial-division>

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
4. Make the following label changes before you release the product for shipment:
- Revise the EPA Registration Number to read, "EPA Reg. No. 12446-20014."
5. Submit one copy of the final printed label for the record before you release the product for shipment.

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 FIFRA and is subject to review by the Agency. See FIFRA section 2(p)(2). 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) lists 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, FIFRA section 12(a)(1)(B). 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 Assurance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 10/01/2024
- Alternate CSF 1 dated 10/01/2024

If you have any questions, please contact Lorena Rivas via email at [rivas.lorena@epa.gov](mailto:rivas.lorena@epa.gov).

Enclosure: Stamped label

# ACID SHINE

Hard, non-porous, food-contact surface cleaner, sanitizer, and disinfectant for use in commercial and industrial settings

**Active Ingredient:**

Hydrogen Peroxide..... 6.0%

Peracetic Acid..... 5.2%

**Inert Ingredients**..... 88.8%

**Total**..... 100.0%

**ACCEPTED**

02/05/2025

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 12446-20014

**KEEP OUT OF REACH OF CHILDREN**  
**{MANTENER FUERA DEL ALCANCE DE LOS NIÑOS}**  
**ANGER PELIGRO**

((**Note to Reviewer** : In accordance with 40 CFR 156.68(d), all first aid statements, as prescribed, will appear on the front panel of the label.))

{See [left] [back] [side] panel [of label] for additional precautionary statements.}

## FIRST AID

<b>If in Eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on Skin or Clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If Swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• 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.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.</li> <li>• Call a poison control center or doctor immediately for treatment advice.</li> </ul>

**General Information:** Have the product container or label with you when calling a poison control center or doctor or going for treatment. For non-emergency and general information on product use, etc., information pertaining to this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday – Friday, 8:00 am – 12:00 pm Pacific Time; email: [npic@ace.orst.edu](mailto:npic@ace.orst.edu); or web site: [www.npic.orst.edu](http://www.npic.orst.edu). For emergencies, call the poison control center 1-800-222-1222.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. {For [{chemical} {and} {or} {medical} {and} {or} {environmental}] emergencies, call {insert number of emergency contact} {hours of operation} {24 hours a day} {7 days a week}}.

Manufactured [(for) (by)]: \_\_\_\_\_

EPA Est. No.: \_\_\_\_\_

NET CONTENTS: \_\_\_\_\_

EPA Reg. No.: 12446-ENRU

{[BATCH] [LOT] NO.:} \_\_\_\_\_

{PRODUCT OF USE} {MADE IN USA}

**Note to Reviewer:** Text in { } is optional. Brackets [ ] indicate that at least one option within the brackets must be used in the final label text. Parentheticals ( ) are meant to appear on final label. "This product" can be substituted with actual product name in the marketing and directions for use.

## PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS: DANGER: Corrosive.** Causes irreversible eye damage and skin burns. May be fatal if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wear coveralls over long-sleeved shirt and long pants, socks, chemical-resistant footwear, and gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**PHYSICAL OR CHEMICAL HAZARDS: STRONG OXIDIZING AGENT. CORROSIVE.** Do not use in concentrated form. Mix only with potable water below 140° F in accordance with label instructions. Never bring concentrate in contact with other pesticides, cleaners or oxidative agents.

### PERSONAL PROTECTIVE EQUIPMENT

Handlers who may be exposed to the undiluted product through mixing, loading, application, or other tasks must wear: coveralls over long-sleeved shirt and long pants, rubber gloves, chemical resistant footwear plus socks, and protective eyewear (goggles or face shield).

Follow manufacturer's instructions for cleaning/maintaining PPE. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)**

### USER SAFETY RECOMMENDATIONS

Users should wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, birds, and aquatic organisms. 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.

## DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and Restricted-Entry Interval (REI). The requirements in this box only apply to the uses of this product that are covered by the Workers Protection Standard. There is a restricted entry of zero (0) hours for this product.

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### **Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

### **AGRICULTURAL USE**

**AGRICULTURAL OR HORTICULTURAL USES:** There is a Restricted-Entry-Interval of zero (0) hours after the use of this product. This product should never be mixed or combined with any other pesticide or fertilizer. Upon soil contact this product decomposes rapidly to oxygen and water. This product may be harmful to fish if exposed on a continuous basis at concentrations of 0.5 ppm or more of active peroxyacetic acid. Meter this product into pressurized pipes using a plastic or stainless steel injection/backflow device installed far enough upstream from the target equipment to ensure thorough mixing. For open flowing bodies of water, apply this product as far upstream as possible to allow adequate mixing prior to the flow entering any larger body of water. If open pouring of this product is required pour product as close to the surface of the water as possible to reduce odor exposure.

**Treatment of Irrigation Water Systems (Sand filters, humidification systems, storage tanks, ponds, reservoirs, canals:** *(Not for use in California)*: For the control of odor, sulfides, slime and algae in water systems, apply this product at 2.2 fl. oz. per 100 gallons of water (10 ppm peroxyacetic acid). Repeat dose as necessary to maintain control, which will vary with seasonal conditions. For prevention of algae some systems may require continuous low level dosing during warm sunny periods.

**Drip Irrigation System Cleaning** *(Not for use in California)*: To clean slime and algae from drip system tapes and emitters, meter this product upstream from pumps or filters at the rate of 1.1 – 2.2 fl. oz. per 50 gallons of water (10-20 ppm peroxyacetic acid). When required, during normal irrigation cycles, use this product at the recommendation dose for a minimum of 30 minutes. Thereafter, the irrigation cycle should be discontinued and the line should not be flushed.

**Commercial Greenhouses** *(Not for use in California)*: This product can be used to suppress/control algae and slime formations in and around greenhouse structures, including ventilation/cooling and watering systems, coolers, storage rooms, walkways, floor/mats and on other inanimate surfaces.

For normal use in various processes, irrigation or sprinkler watering systems, this product may be used at 1:12,800 to 1:1,700 dilutions (4 - 30 ppm as peroxyacetic acid). Heavily fouled systems, such as evaporative coolers or irrigation/drip lines may need shock doses of up to 100 ppm as peroxyacetic acid (1:520 dilution).

**NOTE:** This product is highly acidic. Do not use with or around chlorinated products. This product at its use dilution is compatible with stainless steel surfaces. If product is intended to be used on any other surface, it is recommended that you apply product to a smaller test area to determine before proceeding with its use.

### **SANITIZATION – FOOD CONTACT SURFACES**

ACID SHINE is a hydrogen peroxide and peroxyacetic acid sanitizer recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, filters, evaporators, pasteurizers, and aseptic equipment in dairies, breweries, wineries, beverage and food processing/packaging plants, egg processing/packaging equipment surfaces, and eating establishments. ACID SHINE is effective as a sanitizer when solution is prepared in water of up to 300 hardness as CaCO<sub>3</sub>. This product has demonstrated greater than 99.999% reduction of organisms after 60 seconds exposure periods in the AOAC Germicidal and Detergent Sanitizing Action of Disinfectant study.

**NOTE:** FOR MECHANICAL OPERATIONS prepared use solution may not be reused for sanitizing but may be reused for other purposes such as cleaning.

**FOR MANUAL OPERATIONS** Fresh sanitizing solutions must be prepared daily or more often if the solution becomes diluted or soiled.

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**Pre-Treatment Prior to Sanitization of Food-Contact Surfaces** This product can be used as a pre-treatment on food contact surfaces prior to sanitization. For use dilute 2.1 – 13.4 fl. oz. of this product in 6 gallons of water, this will provide 160 – 1000 ppm peroxyacetic acid. Let soak for 15 minutes and follow with a potable water rinse.

**SANITIZING FOOD CONTACT SURFACES:** This product may be used in Federally Inspected Meat, Poultry, Dairy, Egg, Beverage and Sea Food processing facilities as a sanitizer. Prior to sanitizing, remove visible food particles, then wash with a detergent solution, followed by a potable water rinse. Sanitize with concentration of 1.0– 3.3 fl. oz. ACID SHINE dissolved in 6 gallons of water (0.14% -0.5% v/v concentration, or 75-250 ppm active peroxyacetic acid). At this dilution ACID SHINE is effective against *Staphylococcus aureus* {ATCC 6538}, *Escherichia coli* {ATCC 11229}, *Salmonella enterica* {ATCC 10708}, *Pseudomonas aeruginosa* {ATCC 15442}, *Campylobacter jejuni* {ATCC 29428} and *Listeria monocytogenes* {ATCC 19117}.

Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces should be exposed to sanitizing solution for a period of at least 60 seconds or more if specified by a governing code. Drain excess solution. Do not rinse.

**SANITIZATION OF CONVEYORS AND EQUIPMENT FOR MEAT, POULTRY, SEAFOOD, FRUIT, NUTS AND VEGETABLES:** ACID SHINE is effective against the gram negative and gram positive organisms *Staphylococcus aureus*, *Escherichia coli*, *Salmonella enterica*, *Pseudomonas aeruginosa*, *Campylobacter jejuni* and *Listeria monocytogenes*. For use in the static or continuous sanitizing, washing or rinsing of conveyors, slices, saws, and equipment, apply a solution of this product using of 1.0 – 3.3 fl. oz. per 6 gallons of water (0.14% -0.5% v/v concentration, or 75 - 250 ppm active peroxyacetic acid). Apply sanitizer solution to the return portion of the conveyor or equipment using coarse spray or similar means of wetting or soaking surfaces, so as to affect draining and prevent puddling. Surfaces should remain visibly wet for a minimum of 60 seconds.. No rinse is needed.

**SANITIZING EATING, DRINKING AND FOOD PREP UTENSILS:** Remove visible food particles by a prescrape, a preflush, and, when necessary, a presoak treatment. Wash with a recommended detergent. Rinse with clean water. Sanitize using a solution of 1.0 – 3.3 fl. oz. per 6 gallons of water (0.14%-0.5% v/v concentration, or 75-250 ppm active peroxyacetic acid). Immerse all utensils for at least 60 seconds or more if specified by a governing sanitary code. Drain excess solution.

**FOR USE IN DAIRIES:** Regular use of ACID SHINE on dairy farm equipment will prevent formation of milkstone and mineral stone on hard, non-porous surfaces and reduce microorganisms. On pre-cleaned hard non-porous surfaces, ACID SHINE at a concentration of 1.0– 3.3 fl. oz. dissolved in 6 gallons of water (0.14% -0.5% v/v concentration, or 75-250 ppm active peroxyacetic acid) for a minimum of 60 seconds, is effective against *Staphylococcus aureus*, *Escherichia coli*, *Salmonella enterica*, *Pseudomonas aeruginosa*, *Campylobacter jejuni* and *Listeria monocytogenes*.

#### **CONVENTIONAL AND ROBOTIC MILKING EQUIPMENT ACID RINSE AND SANITATION**

**Step 1.** Pre-rinse milking equipment with potable water. Remove soil by a pre-flush or pre-scraper and when necessary, pre-soak treatment. **Step 2.** Clean milking equipment with a suitable detergent at manufacture's recommended temperature. **Step 3.** Sanitize and acidify milking equipment after cleaning and prior to use with a solution of 1.0 – 3.3 fl. oz. of ACID SHINE dissolved in 6 gallons of water to provide 75 – 250 ppm of peroxyacetic acid. Be sure the solution is in contact with food contact surfaces for at least 1 minute. Thoroughly drain milking equipment. Do not post rinse.

#### **FLUSHING CONVENTIONAL CLAWS and/or LINERS**

For use through claws and liners between milking each cow. Helps reduce microorganisms in claws / liners.

**Step 1:** Thoroughly pre-rinse claws / liners with potable water. **Step 2:** Flush claws / liners with a well-mixed solution of 1.0 – 3.3 fl. oz. ACID SHINE per 6 gallons of water. Allow to remain visibly wet for at least 1 minute contact time. This solution provides 75 – 250 ppm of peroxyacetic acid. **Step 3:** Thoroughly drain.

#### **GENERAL WASH DOWN**

For general cleaning of the milking parlor, use a well-mixed solution containing 2.1 – 13.4 fl. oz. ACID SHINE per 6 gallons of water. Thoroughly hose down all surfaces.

#### **SANITIZING NON FOOD CONTACT SURFACES**

ACID SHINE can be used in Federally Inspected Meat, Poultry, Dairy, Egg, Beverage and Sea Food processing facilities as a sanitizer. Prior to sanitizing, remove visible food particles, then wash with a detergent solution, followed by a potable water rinse. Sanitize with concentration of 2.1 – 13.4 fl. oz. ACID SHINE dissolved in 6 gallons of water (0.3% -1.9% v/v concentration, or 160 - 1000 ppm active peroxyacetic acid). At this dilution ACID SHINE is effective

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against *Staphylococcus aureus*, *Enterobacter aerogenes* (ATCC 13048), *Escherichia coli* O157:H7 (ATCC 35150), *Salmonella enterica*, *Pseudomonas aeruginosa*, *Campylobacter jejuni* and *Listeria monocytogenes*.

Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces should be exposed to sanitizing solution for a period of at least 5 min or more if specified by a governing code. Drain excess solution. Do not rinse.

**REVERSE OSMOSIS (RO), ULTRA FILTRATION (UF), NANO FILTRATION (NF), AND OTHER MEMBRANE CLEANING-SANITIZING** (*Not for use in California*): ACID SHINE may be used in the sanitization of ultra filtration (UF), nano filtration (NF) and reverse osmosis (RO) membranes and other similar type membranes and their associated piping systems. This product may be added continuously in food, beverage, and drinking water systems for RO (reverse osmosis) systems only and in accordance with the instructions below. This product is not for use in kidney dialysis equipment. This product may not totally eliminate all vegetative microorganisms in RO or NF or UF membranes and their associated piping systems due to their construction or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. Prior to using this product, consult with the membrane manufacturer to confirm compatibility of membranes with this peroxyacetic acid solutions.

**Batch Sanitation of NF, UF and RO Systems** (*Not for use in California*): Isolate incompatible equipment, such as carbon filters and ion exchangers. Clean system with an appropriate cleaner and follow with RO permeate water or potable water rinse. Remove mineral deposits if necessary with an acidic cleaner, and rinse as before. Fill entire system with water and add 2.1 – 13.4 fl. oz. ACID SHINE dissolved in 6 gallons of water (0.3% -1.9% v/v concentration, or 160 - 1000 ppm active peroxyacetic acid). Recirculate the sanitizing solution through the piping and membrane system with cold water for 10 minutes minimum, or up to 4 hours, depending on the severity of cleaning to be done. Open and close process valves and solenoids to be sure all parts are in contact with the solution. For occasional intermittent feed, do not exceed 100 ppm active peroxyacetic acid, which equals 1.3 fl. oz. of this product per 6 gallons of feed water. Do not use the intermittent feed method for on-line use for potable water or direct food contact systems. Rinse the system with RO permeate or potable water, until residual hydrogen peroxide concentration is below 1 ppm.

**RO Continuous or Intermittent Addition** (*Not for Use in California*): For continuous addition methods for RO system, use 2- 5 ppm active peroxyacetic acid, which equals 2.0 – 4.9 fl. oz. ACID SHINE per 450 gallons of process water. For occasional intermittent feed, do not exceed 100 ppm active peroxyacetic acid, which equals 1.3 fl. oz. of this product per 6 gallons of feed water. Do not use the intermittent feed method for on-line use in potable water or direct food contact systems.

## **FOAM SANITIZING**

**FOAM SANITIZING OF FOOD AND NON-FOOD CONTACT SURFACES** (*Not for Use in California*): As an adjunct to descaling and sanitizing procedures, ACID SHINE may be added to a foam additive, and foamed on environmental or equipment surfaces using conventional foam-generating equipment. The resultant foam blend can be used on equipment, floors, walls, ceilings, drains, etc. and should be left on surface for a minimum of 1 minute. Do not allow foam to dry onto the surface. On food contact surfaces apply a solution of 1.4 - 3.3 fl. oz. of ACID SHINE per 6 gallons of water (0.2% - 0.5% v/v concentration, or 106-250 ppm active peroxyacetic acid). At this concentration, the product is effective against *Staphylococcus aureus* {ATCC 6538} and *Escherichia coli* {ATCC 11229}. On non-food contact surfaces apply a solution of 2.1 – 13.4 fl. oz. ACID SHINE dissolved in 6 gallons of water (0.3% -1.9% v/v concentration, or 160 - 1000 ppm active peroxyacetic acid). At this concentration, the product is effective against *Staphylococcus aureus* {ATCC 6538}, *Enterobacter aerogenes* {ATCC 13048}. Directions for foam mixing: Follow label instructions of approved foaming additives. Perafoam™ is the only approved foam-generating additive for use with ACID SHINE. When using Perafoam™, blend 4 – 24 fl. oz. of Perafoam™ to 6 gal. of solution. Do not use at elevated temperatures. Perafoam™ is a trademark of Enviro Tech Chemical Services, Inc., Modesto CA.

## **DISINFECTION**

### **NON-FOOD CONTACT HARD SURFACE DISINFECTION:**

**Combination Disinfection and Cleaning:** ACID SHINE disinfects as it cleans when used according to disinfection directions. ACID SHINE can be used to disinfect floors, walls and other hard nonporous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, shelves, racks, carts, tile, linoleum, vinyl, and glazed porcelain. Also use ACID SHINE in veterinary clinics, industrial facilities, office buildings, recreational facilities, retail and wholesale establishments.

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ACID SHINE is effective against *Staphylococcus aureus* {ATCC 6538}, *Salmonella enterica* {ATCC 10708}, *Listeria monocytogenes* {ATCC 19117}, *Escherichia coli* O157:H7 {ATCC 35150}, Avian Influenza A {(H5N1)} virus, Porcine epidemic diarrhea (PED) virus, Rhinovirus, Norovirus, and SARS-CoV-2 at 106 – 2000 ppm of peroxyacetic acid (1.4 - 27.2 fl. oz. per 6 gallon of water) in hard water (300 ppm CaCO<sub>3</sub>) and 5% organic soil loading on hard nonporous surfaces. For visibly soiled areas a pre-cleaning step is required, followed by a potable water rinse. Apply solution with a mop, cloth, sponge, brush, etc. or by soaking or immersion so as to visibly wet all surfaces thoroughly. Allow to remain visibly wet for 10 minutes, and then remove solution and entrapped soil with a clean wet mop, cloth, wet vacuum pickup, or by draining. A rinse for non-food contact surfaces is optional. Prepare a fresh solution daily or when it becomes soiled or diluted.

#### **KILLS BIOFILM BACTERIA\* ON HARD NON-POROUS SURFACES**

ACID SHINE is effective against bacteria\* in biofilms on hard non-porous surfaces such as those in [{restrooms}, {floors}, {shower stalls}, {sink basins}, {drain covers}, {walls}, {countertops}], {instrument trays in patient care areas of hospitals}, {healthcare}, {and} {clean room}]. Pre-clean surfaces to remove soil and filth. Allow to dry. Visibly wet pre-cleaned surface with ACID SHINE in up to 300 ppm CaCO<sub>3</sub> hard water. Apply a 3.7 fl. oz. per 6 gallons of water solution (285 ppm of active peroxyacetic acid) to the surface. Allow surface to remain visibly wet for 10 minutes. Rinse thoroughly.

#### **ASEPTIC FOOD PROCESSING OPERATIONS**

ACID SHINE may be used to achieve commercial sterility of equipment used in aseptic food processing applications. Apply ACID SHINE on the exterior and interior of food containers and closure systems (caps, seals, etc.). Apply up to 250 ppm of active peroxyacetic acid (0.5% v/v dilution of 3.3 fl. oz. per 6 gallons of water). Rinse containers with sterile water prior to filling with processed food; in lieu of a rinse, films may be mechanically stripped of excess sanitizing solution.

#### **DISINFECTION OF ANIMAL AND POULTRY PREMISES, TRUCKS, COOPS, CRATES AND CALF HUTCHES:**

ACID SHINE is designed for use in animal hospitals, animal laboratories, kennels, pet shops, zoos, pet animal quarters, poultry premises, poultry hatcheries†, and livestock quarters. When use as directed, ACID SHINE is specifically designed to disinfect, deodorize, and clean inanimate, hard surface such as walls, floors, sink tops, furniture, operating tables, kennel runs, cages and feeding equipment. In addition, ACID SHINE will deodorize those areas which are generally hard to keep smelling fresh, such as garbage storage areas, empty garbage bins and cans, and any other areas which are prone to odors caused by microorganism.

**Disinfection of Poultry Premises:** For visibly soiled areas, a pre-cleaning step is required. Prepare a fresh solution for each use. Remove all poultry and feeds from premises, trucks, coops and crates. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry. Empty all troughs, racks and other feedings and watering appliances. Clean all surfaces with a detergent and rinse with water. Saturate surfaces with a 0.4%-1.5% v/v (2.6 – 10.5 fl. oz. per 6 gal of water) solution of ACID SHINE for a period of 10 minutes (for a peroxyacetic concentration of 200 - 800 ppm). Scrub treated feed racks, troughs, automatic feeders, fountains and waterers with a detergent and rinse with potable water before reuse. Ventilate building, coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried. All treated equipment that will contact food, feed, or drinking water must be rinsed with potable water before reuse. See your technical representative for specific recommendations for all cleaning and rinsing requirements.

**Disinfection and Deodorizing of Animal Housing Facilities (Barns, Kennels, Hutches, Etc.):** Remove animals and feed from premises, vehicles, and enclosures. Remove litter, waste matter from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering equipment. Clean all surfaces with soap or detergent and rinse with water. Saturate surfaces by applying a 0.4% - 1.5% v/v (2.6 - 10.5 fl. oz. per 6 gal of water) solution of ACID SHINE with a mop, brush or coarse spray (for a peroxyacetic concentration of 200 - 800 ppm). Wet all surfaces and allow to remain wet for 10 minutes. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as fork, shovels and scrapers used for removing litter and manure. Ventilate buildings and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set, or dried. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

#### **CONTROL OF SLIME FORMING BACTERIA IN RECIRCULATING AND COOLING WATER SYSTEMS**

**(COOLING TOWERS, EVAPORATIVE CONDENSERS, PATEURIZERS AND AIR WASHERS)** (Not for use in California): Severely fouled systems should be cleaned before adding ACID SHINE solution. ACID SHINE should be

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added in the system directly and not mixed with any other chemicals or additives. Discontinue the use of chlorine or bromine products prior to using this product. Contaminations with other chemicals could result in product decomposition. Add ACID SHINE at a point in the system where uniform mixing and even distribution will occur. For slug treatment add 22 fl. oz. of product per 1000 gallons of process water (equivalent to 10 ppm of peroxyacetic acid). Repeat as necessary until microbiological control is evident. Thereafter, to maintain control, use 4.4- 20.0 fl. oz. of ACID SHINE per 1000 gallons of process water (2 - 9 ppm active peroxyacetic acid) as a continuous or intermittent slug treatment. Continuous dosing methods usually require 2 - 5 ppm active peroxyacetic acid (4.4 - 11.0 fl. oz. per 1000 gallon of process water) to achieve adequate control.

**Air Washers:** This product may be used to control bacteria and biofouling in industrial air washing/scrubbing systems. The air washer must have operational and effective mist elimination systems. Prior to use of this product, heavily fouled systems must be pre-cleaned using the appropriate cleaner. Continuous dosing methods will require 2- 7 ppm of peroxyacetic acid (0.4 – 1.5 fl. oz. of product per 100 gallons of water) and intermittent dosing methods require 7-14 ppm of peroxyacetic acid (1.5 fl. oz. – 3.0 fl. oz. of product per 100 gallons of water).

**Evaporated or Condensed Water:** This product may be used to treat SWEET or COW water (e.g. condensate of whey) collected from evaporated or condensing water systems in food or dairy plants. Typically, the dosing regimen would be using intermittent or continuous methods at 2-14 ppm as peroxyacetic acid (0.4 – 3.0 fl. oz. of product per 100 gallons of water).

**FRUIT AND VEGETABLE WATER TREATMENT** (*Not for use in California*): This product may be used to help control spoilage or decay-causing bacteria and fungi in water or ice that contacts raw unprocessed fruits and vegetables outside of a food processing facility. The commodity should be continuously sprayed, using coarse spray, or submerged using solution containing 1.1 fl. oz. ACID SHINE per 20 gallons of water to remain visibly wet for a minimum contact time of 60 seconds. Adjust dose as necessary to maintain no more than 25 ppm active peroxyacetic acid. Remove excess water or allow to drain. If using the submersion method, replace with a fresh solution as necessary, or when it becomes visibly soiled. A final potable water rinse is not necessary.

## **NON PESTICIDAL CLEANING**

All surfaces must be disinfected in accordance with this label prior to fogging.

**FOGGING IN FILLING, PACKAGING, PROCESSING, STORAGE, WAREHOUSE, AND WORKER WELFARE ROOMS OR AREAS:** Prior to fogging remove food products and packaging materials from the room or area or carefully protect them. Fog desired areas using 1 quart of a 1.6 – 13.1 fl. oz. per 6 gallons of water (0.23%-1.9% v/v concentration, or 120-1000 ppm active peroxyacetic acid) per 1000 cu. ft. of room area. Conventional corrosion resistant fogging devices are recommended. Vacate the area of all personnel prior to, during and after fogging until the hydrogen peroxide concentration is below 0.5 ppm.

**To determine concentration of dilution, refer to an appropriate Peracetic Acid Test Kit. Concentration of this product may also be monitored by conductivity. Consult your ZEE representative for use and set up instructions.**

### **[Optional Label Claims:]**

This product is efficacious against the following organisms:

Bacteria

*Staphylococcus aureus* {ATCC 6538}

*Salmonella enterica* {ATCC 10708}

*Listeria monocytogenes* {ATCC 19117}

*Escherichia coli* {ATCC 11229}

*Escherichia coli* O157:H7 {ATCC 35150}

*Campylobacter jejuni* {ATCC 29428}

*Pseudomonas aeruginosa* {ATCC 15442}

*Enterobacter aerogenes* {ATCC 13048}

Viruses

Avian Influenza A (H5N1) Virus, CDC #2006719965, Strain: VNH51-PR8/CDC-RG

Porcine epidemic diarrhea Virus, from NVSL, Strain Colorado 2013 Isolate

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Rhinovirus {ATCC VR-1607}  
Norovirus (Feline Calicivirus {ATCC VR-782} tested as surrogate)  
SARS-CoV-2, Isolate USA-WA1/2020

#### STORAGE AND DISPOSAL

**Do not contaminate food or feed by storage or disposal or cleaning of equipment.**

**STORAGE:** Never return ACID SHINE 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 ACID SHINE 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.

**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.

**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 by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance. 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. ACID SHINE 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:**

*(For non-refillable containers equal to or less than 5 gal.)*

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling if available. If recycling is not available, puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. 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. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. 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 non-refillable containers greater than 5 gal.)*

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling if available. If recycling is not available, puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Triple rinse as follows: Empty the 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

† Not for use on eggs

\* *Pseudomonas aeruginosa* and *Staphylococcus aureus* tested as a biofilm

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EMERGING VIRAL PATHOGEN CLAIMS

(Note to Reviewer: None of the language in this section is to appear on any final printed label.)

This product qualifies for emerging viral pathogen claims per EPA’s “Guidance to Registrants: Process for Making Claims Against Emerging Viral Pathogens Not on EPA-Registered Disinfectant Labels” when used according to the appropriate directions for use, as indicated below.

This product meets the criteria to make claims against emerging viral pathogens from the following viral categories:

- Enveloped viruses
- Large non-enveloped viruses
- Small non-enveloped viruses

<i>For an emerging viral pathogen that is a(n)...</i>	<i>...follow the use directions for the following organisms on the label:</i>
Enveloped virus	Norovirus (Feline Calicivirus)
Large non-enveloped virus	Norovirus (Feline Calicivirus)
Small non-enveloped virus	Rhinovirus & Norovirus (Feline Calicivirus)

The following statements may be used only in off-label communications as described in EPA’s Emerging Viral Pathogens guidance, and only under the conditions outlined in that guidance:

*(Product name)* has demonstrated effectiveness against viruses similar to *(insert name of emerging virus)* on hard, nonporous surfaces. Therefore, *(product name)* can be used against *(insert name of emerging virus)* when used in accordance with the directions for use against Norovirus (Feline Calicivirus) on hard, nonporous surfaces. Refer to the [{CDC} {OIE}] website at *(insert pathogen-specific website address)* for additional information.

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