



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

May 6, 2020

Heidi Popelka  
Senior Regulatory Specialist II  
ECOLAB, INC.  
1 Ecolab Place  
St. Paul, MN 55102

Subject: Label Amendment: Emerging Viral Pathogens Claim  
Product Name: OCTAVE FS  
EPA Registration Number: 1677-209  
Application Date: March 25, 2020  
Decision Number: 561525

Dear Ms. Popelka:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one 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 its implementing regulation at 40 CFR 152.3.

Because you have opted to add statements pertaining to emerging viral pathogens to your label as described in the August 19, 2016, Guidance to Registrants: Process For Making Claims Against Emerging Viral Pathogens Not On EPA-Registered Disinfectant Labels ("Guidance"), [https://www.epa.gov/sites/production/files/2016-09/documents/emerging\\_viral\\_pathogen\\_program\\_guidance\\_final\\_8\\_19\\_16\\_001\\_0.pdf](https://www.epa.gov/sites/production/files/2016-09/documents/emerging_viral_pathogen_program_guidance_final_8_19_16_001_0.pdf), you are subject to the following additional terms of registration:

1. You may make statements pertaining to emerging viral pathogens only through the following communications outlets: technical literature distributed exclusively to health care facilities, physicians, nurses and public health officials, "1-800" consumer information services, social media sites and company websites (non-label related). These statements shall not appear on marketed (final print) product labels.

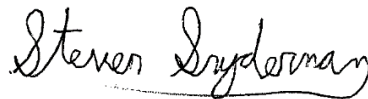
2. Your statements pertaining to emerging viral pathogens must adhere to the format approved on the Agency-accepted master label.
3. You may make statements pertaining to emerging viral pathogens only upon a disease outbreak that meets all the following criteria:
  - a. The causative organism must be a virus that causes an infectious disease that has appeared in a human or animal population in the U.S. for the first time, or that may have existed previously but is rapidly increasing in incidence or geographic range.
    - i. For human disease, the outbreak is listed in one of the following Centers for Disease Control (CDC) publications:
      - A. CDC Current Outbreak List for “U.S. Based Outbreaks” ([www.cdc.gov/outbreaks](http://www.cdc.gov/outbreaks)),
      - B. CDC Current Outbreak List for “Outbreaks Affecting International Travelers” with an “Alert” or “Advisory” classification ([www.cdc.gov/outbreaks](http://www.cdc.gov/outbreaks)) (also released through the CDC’s Health Alert Network (HAN) notification process)
      - C. Healthcare-Associated Infections (HAIs) Outbreaks and Patient Notifications page ([www.cdc.gov/hai/outbreaks](http://www.cdc.gov/hai/outbreaks))
    - ii. For animal disease, the outbreak is identified as an infectious disease outbreak in animals within the U.S. on the World Organization for Animal Health (OIE) Weekly Disease Information page ([www.oie.int/wahis\\_2/public/wahid.php/Diseaseinformation/WI](http://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)).
      - A. The CDC or OIE has identified the taxonomy, including the viral family and/or species, of the pathogen and provides notice to the public of the identity of the emerging virus that is responsible for an infectious disease outbreak. Based on the taxonomy of the outbreak pathogen identified by the CDC or OEI, the pathogen's viral subgroup is large non-enveloped and enveloped.
      - B. The virus can be transmitted via environmental surfaces (non-vector transmission), and environmental surface disinfection has been recommended by the CDC, OIE or EPA to control the spread of the pathogen.
4. You may begin communicating statements pertaining to emerging viral pathogens only upon CDC or OIE’s publication per term 3.a. of an outbreak of an emerging viral pathogen meeting all of the criteria of term 3. You must cease and remove all such non-label communications intended for consumers no later than 24 months after the original publication of the outbreak per term 3.a., unless the Agency issue written guidance to the contrary due to continued public health concerns. The emerging pathogen claim language may remain on the master label.

5. Terms from points 1 through 4 above shall become immediately void and ineffective if registration for use against Norovirus (Feline calicivirus surrogate) is suspended or cancelled or no longer meets the criteria for a disinfectant claim (see EPA Product Performance Test Guideline 810.2200). In addition, terms B.1 through B.4 above shall become immediately void and ineffective upon your receipt of evidence of ineffectiveness against any pathogen in a less-resistant Spaulding category.

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.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, you may contact the disinfectants list at [disinfectantslist@epa.gov](mailto:disinfectantslist@epa.gov).

Sincerely,



Steven Snyderman, Acting Product Manager 33  
Regulatory Management Branch 1  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

Enclosure: stamped label

# OCTAVE FS

## SANITIZER AND DISINFECTANT

Acid Liquid Sanitizer for Food Processing Equipment in Dairies, Dairy Farms,  
Breweries, Wineries, Beverage and Food Processing Plants

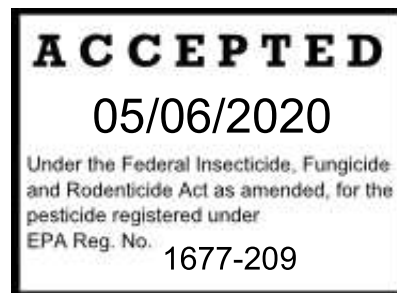
Disinfectant for Farms, Livestock Quarters, Poultry Premises, Poultry Hatcheries,  
Veterinary Clinics, Animal Life Science Laboratories, Animal Care Facilities and Industrial Facilities

### Active Ingredients:

Hydrogen Peroxide ..... 7.52%  
Peroxyoctanoic Acid ..... 1.00%  
Octanoic Acid ..... 2.85%

**Other Ingredients:** ..... 88.63%

**Total:** ..... 100.00%



**KEEP OUT OF REACH OF CHILDREN  
DANGER**

(See [back], [side], [inside], [inner], [other] [fold-out] [booklet] [product container] [label(s)] [panel(s)] [container] for [complete] [additional] [information] [directions for use] [precautionary statements] [and] [first aid] [and] [storage and disposal]).

(Refer to the (MSDS)(SDS) for additional product hazard information.)

(Please [refer to] [see] reference sheet for [additional] [directions for use] [information])

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), coveralls worn over long-sleeved shirt and long pants, socks, chemical resistant gloves, and chemical resistant footwear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash clothing before reuse. Prolonged or frequently repeated skin contact may cause an allergic reaction in some individuals.

#### 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 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**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, 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 going for treatment.

**FOR EMERGENCY MEDICAL INFORMATION, CALL TOLL FREE: 1-800-328-0026**

**OUTSIDE NORTH AMERICA, CALL 1-651-222-5352**

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**PHYSICAL AND CHEMICAL HAZARDS:** Strong oxidizing agent. Corrosive. Do not use in concentrated form. Mix only with water according to label instructions. Never bring concentrate in

contact with other sanitizers, cleaners or organic substances. This product is not to be used around electrical equipment.

**ENVIRONMENTAL HAZARDS (containers 5 gallons or greater):** This pesticide is toxic to birds, fish, and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and 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.

(Note to reviewer: Text appearing in parentheses / brackets is optional text)

## **DIRECTIONS FOR USE**

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

## **SANITIZATION**

**Octave FS** acid sanitizer is recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in dairies, dairy farms, breweries, wineries, beverage and food processing plants. This product is effective as a sanitizer when solution is prepared in water of up to 500 ppm hardness as CaCO<sub>3</sub>.

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 solution must be prepared at least daily or more often if the solution becomes diluted or soiled.

## SANITIZING FOOD CONTACT SURFACES

Prior to sanitizing, remove gross food particles, and then wash with a detergent solution, followed by a potable water rinse. Sanitize with a concentration of 1oz. **Octave FS** concentrate per 6 to 8 gals. of water (0.1% - 0.13% v/v concentration). At this dilution **Octave FS** is an effective food contact surface sanitizer against the following organisms: *Staphylococcus aureus* (ATCC 6538), *Escherichia coli* (ATCC 11229), *Escherichia coli* O157:H7 (ATCC 43895), *Pseudomonas aeruginosa* (ATCC 15442), *Listeria monocytogenes* (ATCC 7644), *Salmonella typhimurium* (ATCC 13311), *Enterobacter sakazakii* (ATCC 12868), *Campylobacter jejuni* (ATCC 33291) and *Candida albicans* (ATCC 18804). At the same dilution, **Octave FS** is also effective for sanitization against the common spoilage organisms *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305) and *Geotrichum candidum* (ATCC 34614). Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces must be exposed to the sanitizing solution for a period of not less than one minute unless a longer time is specified by the governing sanitary code. Drain thoroughly and allow to air dry. Do not rinse.

## FOAM SANITIZING FOOD CONTACT SURFACES

**Octave FS** is an effective foam sanitizer of pre-cleaned food contact surfaces. Foam sanitize with a concentration of 1 oz. **Octave FS** concentrate per 6 to 8 gals. of water (0.1% - 0.13% v/v concentration). At this dilution **Octave FS** is an effective foaming food contact surface sanitizer against the following organisms: *Staphylococcus aureus* (ATCC 6538) and *Escherichia coli* (ATCC 11229), *Escherichia coli* O157:H7 (ATCC 43895), *Listeria monocytogenes* (ATCC7644), *Salmonella typhimurium* (ATCC 13311), *Enterobacter sakazakii* (ATCC 12868). At the same dilution, **Octave FS** is also effective for foam sanitization against the common spoilage organisms *Pediococcus damnosus* (ATCC 25248) and *Lactobacillus malefermentans* (ATCC 11305). Use an appropriate device to generate foam intended to cover the food contact surfaces. Contact your Ecolab representative for information on a recommended foamer. All surfaces must be exposed to the sanitizing solution for a period of not less than one minute unless a longer time is specified by the governing sanitary code. Drain thoroughly and allow to air dry. Do not rinse.

### CONTINUOUS TREATMENT OF CONVEYORS

Wash, rinse and sanitize conveyor equipment. During processing, apply solution containing 1 oz. **Octave FS** concentrate per 6 to 8 gals. of water (0.1% - 0.13% v/v concentration) to a conveyor with Mikro Master or other suitable dispensing equipment. At this dilution **Octave FS** is effective against *Staphylococcus aureus* (ATCC 6538), *Escherichia coli* (ATCC 11229, *Escherichia coli* O157:H7 (ATCC 43895), *Pseudomonas aeruginosa* (ATCC 15442), *Listeria monocytogenes* (ATCC7644), *Salmonella typhimurium* (ATCC 13311), *Enterobacter sakazakii* (ATCC 12868), *Campylobacter jejuni* (ATCC 33291) and *Candida albicans* (ATCC 18804). At the same dilution **Octave FS** is effective at reducing the common spoilage microorganisms *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305) and *Geotrichum candidum* (ATCC 34614). Controlled volumes of **Octave FS** are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of **Octave FS** from equipment and to prevent puddles on top of belt. During interruptions in operations, coarse spray the processing equipment with **Octave FS** solution at not more than 0.13% v/v concentration. Conveyor equipment must be free of product when applying coarse spray. Conveyor surface must be exposed to the sanitizing solution for a period of not less than one minute.

### SANITIZING NON-FOOD CONTACT SURFACES

Pre-clean surfaces as directed above. Sanitize non-food contact surfaces such as floors, walls, tables, chairs, benches, troughs, and drip pans with 1 to 5 oz. **Octave FS** concentrate per 8 gals. of water (0.1% -0.5% v/v concentration). At this concentration the product is effective as a non-food contact surface sanitizer against the following organisms: *Staphylococcus aureus* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048), *Listeria monocytogenes* (ATCC7644), *Salmonella typhimurium* (ATCC 13311), *Pseudomonas aeruginosa* (ATCC 15442), *Enterobacter sakazakii* (ATCC 12868) and *Geotrichum candidum* (ATCC 34614). All surfaces must be exposed to the sanitizing solution for a period of not less than 5 minutes. Drain thoroughly and allow to air dry. No rinse necessary.

### FOAM SANITIZING NON-FOOD CONTACT SURFACES (This use not approved in the state of California)

**Octave FS** is an effective foam sanitizer of pre-cleaned non-food contact surfaces, such as boots, floors, walls and associated equipment. To foam sanitize, prepare a solution of 1 to 5 oz. **Octave FS** concentrate per 8 gals. of water (0.1% - 0.5% v/v concentration) and 1.4 oz. **Liquid K** per 8 gals. (0.13% v/v concentration). **Liquid K** is the only approved foam generator. At this concentration the product is effective as a non-food contact surface sanitizer against *Staphylococcus aureus* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048), *Listeria monocytogenes* (ATCC7644), *Salmonella typhimurium* (ATCC 13311), *Enterobacter sakazakii* (ATCC 12868) and *Campylobacter jejuni* (ATCC 33291). Use an appropriate device to generate foam intended to cover non-food contact surfaces. Wet surfaces thoroughly. Surfaces must be exposed to the sanitizing foam for a period of not less than 5 minutes. No rinse is necessary. Contact your Ecolab representative for information on a recommended foamer.

### FOAM SANITIZING NON-FOOD CONTACT SURFACES

**Octave FS** is an effective foam sanitizer of pre-cleaned non-food contact surfaces, such as boots, floors, walls and associated equipment. Sanitize with a concentration of 1 to 5 oz. **Octave FS** concentrate per 8 gallons of water (0.1% - 0.5% v/v concentration). At this concentration the product is effective as a non-food contact surface sanitizer against *Staphylococcus aureus* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048), *Listeria monocytogenes* (ATCC7644), *Salmonella typhimurium* (ATCC 13311), *Enterobacter sakazakii* (ATCC 12868) and *Campylobacter jejuni* (ATCC 33291). Use an appropriate device to generate foam intended to cover non-food contact surfaces. Wet surfaces thoroughly. Surfaces must be exposed to the sanitizing foam for a period of not less than 5 minutes. No rinse is necessary. Contact your Ecolab representative for information on a recommended foamer.

### ENTRYWAY FOAM SANITIZING SYSTEMS

To prevent cross-contamination from area to area, set the system to deliver sanitizing solution at 1 oz. **Octave FS** per 1 to 8 gals. of water (0.1% - 0.78% v/v).

The foam (or spray) must cover the entire path of the doorway. Set the system so that a continuous wet blanket of sanitizer solution is delivered to the floor.

### ENTRYWAY FOAM SANITIZING SYSTEMS (This use not approved in the state of California)

**Octave FS** can be used along with **Liquid K** to apply the foam by setting the system to deliver 1 oz. **Octave FS** per 1 to 8 gals. of water (0.1% - 0.78% v/v) and 1.4 oz. **Liquid K** per 8 gals. of water (0.13% v/v concentration).

The foam (or spray) must cover the entire path of the doorway. Set the system so that a continuous wet blanket of sanitizer solution is delivered to the floor.

### SHOE BATH SANITIZER DIRECTIONS:

To prevent tracking (into animal areas)(and the packaging and storage areas of food plants), shoe baths containing one inch of freshly made solution must be placed at all entrances to buildings and hatcheries. Scrape waterproof work boots (shoes) and place in solution of 1 oz. **Octave FS** per 6 to 8 gals. of water (0.1% - 0.13% v/v) for one minute prior to entering area. (If there is a heavy soil load or excessive traffic place work (boots) (shoes) in a use-solution of 1 oz. per 1 to 8 gals. of water (0.1 – 0.78% v/v) (or equivalent dilution) for one minute prior to entering area). Change the solution in the bath daily or more often if solution appears diluted or soiled.

### SHOE FOAM SANITIZER DIRECTIONS

**Octave FS** can be used to prevent tracking into processing, packaging and storage areas of food and beverage plants. Apply a foam layer approximately 0.5 to 2 inches thick made from a solution of 1 oz. per 1 to 8 gals. of water (0.1% - 0.78% v/v) at all entrances to buildings, hatcheries, production and packaging rooms by using a foam generating machine or aerator to apply foam layer. Follow the foaming directions as specified by the manufacturer of the foam generator/aerator. Scrape waterproof shoes.

Stand and/or walk through foamed area for one minute prior to entering area. Foam area must be washed and replaced daily or when it appears dirty.

### **DISINFECTION**

**Octave FS** disinfects as it cleans in one operation. **Octave FS** can be used to disinfect floors, walls and other hard non-porous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, shelves, racks, carts, exterior surfaces of refrigerators and coolers, tile, linoleum, vinyl, glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass. Areas of use include dairies, dairy farms, breweries, wineries, beverage and food processing plants, poultry farms, veterinary facilities, animal care facilities and industrial facilities.

Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging material must be removed from the room or carefully protected.

### COMBINATION DISINFECTION AND CLEANING

**Octave FS** is effective as a disinfectant at a concentration of 1 – 2 oz. **Octave FS** concentrate per 2 gals. (0.39% - 0.78% v/v concentration) of hard water (500 ppm as CaCO<sub>3</sub>), in the presence of 5% blood serum. At this dilution, **Octave FS** is effective against *Staphylococcus aureus* (ATCC 6538), *Salmonella enterica* (ATCC 10708), *Pseudomonas aeruginosa* (ATCC 15442) and *Candida albicans* (ATCC 18804). For heavily soiled areas a pre-cleaning step is required. Prepare a disinfecting and cleaning solution by diluting 1 – 2 oz. **Octave FS** concentrate per 2 gals. of water (0.39% - 0.78% v/v concentration). Apply use solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking or foaming so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, and then remove solution and entrapped soil with a clean wet mop, cloth, or wet vacuum pickup. Prepare a fresh solution daily or when it becomes soiled or diluted.

### FOAM DISINFECTION

**Octave FS** is an effective foam disinfectant and cleaner on hard, non-porous surfaces, such as boots, floors, walls, drains, and associated equipment. For this application, prepare a solution of 1 – 2 oz. **Octave FS** concentrate per 2 gals. of water (0.39% - 0.78% v/v concentration). Apply solution as a foam using recommended equipment. Wet surfaces thoroughly. At this concentration, the product is effective against the following: *Staphylococcus aureus* (ATCC 6538), *Salmonella enterica* (ATCC 10708), *Pseudomonas aeruginosa* (ATCC 15442). Surfaces must be exposed to the disinfecting foam for a period of not less than 10 minutes. No rinse is necessary. Contact your Ecolab representative for information on a recommended foamer.

### VIRUCIDAL

**Octave FS** is an effective virucide at a concentration of 1 - 2 oz. per 2 gals. (0.39%-0.78% v/v concentration) of hard water (500 ppm as CaCO<sub>3</sub>), in the presence of 5% blood serum. At this dilution, **Octave FS** is effective against Influenza A (H1N1), Influenza A (H3N2), Influenza B, Reovirus, Influenza A, Norovirus, Feline calicivirus and Avian Influenza when used at 20°C with a 10 minute contact time. Apply as directed under Disinfection.

### DISINFECTION OF POULTRY PREMISES, TRUCKS, COOPS AND CRATES

1. Remove all poultry and feed from premises, trucks, coops and crates.
2. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with a detergent and rinse with water.
5. Saturate surfaces with a 1 - 2 oz. per 2 gals. (0.39%-0.78% v/v concentration) solution of **Octave FS** for a period of 10 minutes.
6. Ventilate buildings, coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried.
7. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with a detergent and rinse with potable water before reuse.

See your Ecolab Representative for specific recommendations for all cleaning and rinsing requirements.

### POULTRY HATCHERY DISINFECTION

Clean out any remaining eggs and chicks. Remove gross soils, such as litter, down, shell fragments or other hatching related debris. Empty all racks and other equipment. Thoroughly wash all surfaces, including floors, walls, conveyors, trays and water systems with a recommended detergent. Rinse thoroughly with water. Apply a 1 - 2 oz. per 2 gals. (0.39%-0.78% v/v concentration) solution of **Octave FS** with a mop, cloth, brush, foam or coarse spray. Wet all surfaces and allow to remain wet for 10 minutes. Ventilate buildings and other closed spaces. Allow to dry before reintroducing eggs.

### DISINFECTION AND DEODORIZING OF ANIMAL HOUSING FACILITIES (BARN, KENNELS, HUTCHES)

Remove animals and feed from facilities. Remove litter, waste matter and gross soils from floors, walls and surfaces of facilities occupied or traversed by animals. Empty all troughs, rack and other feeding and watering equipment. Wash surfaces with a recommended alkaline detergent, by manual, foam, or spray application. Rinse with water. Apply a 1 - 2 oz. per 2 gals. (0.39%-0.78% v/v concentration) solution of **Octave FS** with a mop, cloth, brush, foam or coarse spray. Wet all surfaces and allow to remain wet for 10 minutes. Ventilate buildings and other closed spaces. Allow to air dry before reintroducing animals.

### (VETERINARY PRACTICE / ANIMAL CARE / ANIMAL LABORATORY / ZOOS / PET SHOP / KENNELS DISINFECTION DIRECTIONS:)

For disinfection and deodorizing of hard non-porous surfaces of equipment used in animal housing facilities including food or water containers, utensils, instruments, cages, crates kennels, stables and catteries.

OR

### (FARM PREMISE DISINFECTION DIRECTIONS:)

1. Remove all animals and feed from premises, vehicles, and enclosures.
2. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals.
3. [For "Veterinary Practice..." :Empty all feeding and watering appliances.] [For "Farm Premise Use" Empty all troughs, racks and other feeding and watering appliances.]
4. Thoroughly clean surfaces with soap or detergent by manual, foam, or spray application and rinse with water.
5. Saturate surfaces with a use-solution of 1 – 2 oz. **Octave FS** per 2 gals. of water (0.39% - 0.78% v/v concentration or 3900 – 7800 ppm product). (or equivalent dilution) and allow to remain wet for a period of 10 minutes.



6. Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels and scrapers used for removing litter and manure. Wipe or allow to air dry.
7. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.
8. [*For "Veterinary Practice..."* Thoroughly scrub all treated feeding and watering appliances with soap or detergent, and rinse with potable water before reuse. [*For "Farm Premise Use";* Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.]

## **CLEANING**

### **OCTAVE FS DIRECTIONS FOR USE AS A HARD SURFACE CLEANER**

For hard surface cleaning applications, use **Octave FS** at a concentration of 1.0 – 2.7 oz. per gal. of detergent use solution (0.8-2.1% v/v or 8000 ppm – 21,000 ppm product) in water in conjunction with an alkaline pH modifier, such as KOH or NaOH to adjust cleaning solution to a pH >8.8. All hard food contact surfaces treated with this cleaning system must be rinsed thoroughly with potable water followed by sanitizing with an approved food contact surface sanitizer.

For hard surface acid cleaning applications, remove gross food particles with a water rinse, then wash using **Octave FS** at a rate of 1.0 oz. **Octave FS** concentrate per 4.5-6.0 gallons of water (0.130 – 0.174% v/v or 1300 ppm – 1740 ppm product). All hard food contact surfaces treated with this cleaning system must be drained thoroughly, no rinse required.

NOTE: This product in its use solutions is compatible with stainless steel and aluminum 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 compatibility before proceeding with its use.

**STORAGE & DISPOSAL**

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL

PESTICIDE STORAGE: Product must be kept cool and in a vented container to avoid any explosion hazard.

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 HANDLING AND DISPOSAL:**

(For containers 5 gallons or less.) Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(For containers >5-55 gallons.) Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ 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 procedure two more times. Then offer for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(2.5 gl bladder in box) Do not reuse or refill bladder. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Offer box and bladder for recycling, if available, or discard in trash.

(Totes) Verify that the tote is empty. Do not rinse or clean. Seal tote and contact Ecolab for return.

FOR COMMERCIAL USE  
STRONG OXIDIZING AGENT

EPA Reg. No. 1677-209

EPA Est. 303-IN-1 (L), 1677-CA-2 (R),  
1677-GA-1 (M), 1677-IL-2 (J), 1677-MN-1 (P),  
1677-TX-1 (D), 1677-WV-1 (V), 5389-NC-1 (G), 60156-IL-1 (SI)

Net Contents:	1 U.S. Gal. (3.78 L)
	2.5 U.S. Gals. (9.45 L)
	5 U.S. Gals. (18.9 L)
	15 U.S. Gals. (56.8 L)
	50 U.S. Gals. (189 L)
	300 U.S. Gals. (tote)

Superscript refers to first letter of date code

Ecolab Inc.  
1 Ecolab Place  
St. Paul, MN 55102

[Made in USA] [Made in United States of America]

This product may be patented | Ce produit peut être breveté | Este producto puede ser patentado:  
[www.ecolab.com/patents](http://www.ecolab.com/patents)

## Optional Marketing Language:

- Respiratory illnesses attributable to Pandemic 2009 H1N1 are caused by influenza A virus.
- This product is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).
- This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus.
- This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).
- Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu).
- Kills Pandemic 2009 H1N1 influenza A virus.
- See side/back panel for First Aid...



Antimicrobial

## Emerging Viral Pathogens

This product qualifies for emerging viral pathogen claims per the EPA's "Guidance to Registrants: Process for Making Claims Against Emerging Viral Pathogens not on EPA-Registered Disinfectant Labels" when used in accordance with the appropriate use directions indicated below.

(Note to the reviewer: The statements shall be made only through the following communications outlets: technical literature distributed exclusively to long term care professionals, food safety professionals, environmental services professionals, health care facilities, physicians, nurses, veterinarians and public health officials, "1-800" consumer information services, social media sites and company websites (non-label related). *These statements shall not appear on marketed (final print) product labels.*)

This product meets the criteria to make claims against certain emerging viral pathogens from the following viral category(ies):

- Enveloped Viruses
- Large, Non-Enveloped Viruses

<i>For an emerging viral pathogen that is a/an...</i>	<i>...follow the directions for use for the following organisms on the label</i>
Enveloped virus	Norovirus (Feline calicivirus surrogate)
Large, non-enveloped virus	Norovirus (Feline calicivirus surrogate)

Octave FS has demonstrated effectiveness against viruses similar to (name of emerging virus) on hard, non-porous surfaces. Therefore, Octave FS can be used against (name of emerging virus) when used in accordance with the directions for use against Norovirus (Feline calicivirus surrogate) on hard, non-porous surfaces. Refer to the (CDC or OIE) website at (pathogen-specific website address) for additional information.

(Name of illness/outbreak) is caused by (name of emerging virus). Octave FS kills similar viruses and therefore can be used against (name of emerging virus) when used in accordance with the directions for use against Norovirus (Feline calicivirus surrogate) on hard, non-porous surfaces. Refer to the (CDC or OIE) website at (website address) for additional information.