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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON D C 20460

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OFFICE OF
PREVENTION PESTICIDES
AND TOXIC SUBSTANCES

Mr Theodore Head
Senior Product Registration Manager for,
Ecolab Inc
370 Wahasha Street N
EUC 9
Saint Paul, MN 55102-1390

Subject Enviro San
EPA Registration Number 1677- 185
Your Amendment Dated April 3rd, 2012
EPA Received Date April 6th, 2012


The amendment referred to above, submitted in connection with under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act, FIFRA, as amended, to include the use of the adjuvant EC6822A to the directions for use in subterranean oilfield and gas-field well operations such as well drilling, formation fracturing, productivity enhancement and secondary recovery, is acceptable

The Agency notes that the adjuvant, ES-2000, used in Aseptic Food Packaging section, is the same adjuvant with the same chemical formulation as the adjuvant, EC6822A that appears in the directions for use in subterranean oilfield and gas field operations

A stamped copy of the labeling is enclosed

If you have questions concerning this letter, please contact Karen M Leavy at (703)-308-6237

Sincerely,


Marshall Swindell
Product Manager 33
Regulatory Management Branch I
Antimicrobials Division(7510P)

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Enviro San Label

ENVIRO SAN

COMMERCIAL STERILANT FOR ASEPTIC PACKAGING OF FOODS

COMMERCIAL STERILANT FOR ASEPTIC MANUFACTURING AND PACKAGING
EQUIPMENT FOR FOOD PROCESSING

SANITIZER FOR PRECLEANED SURFACES

Active Ingredients

Hydrogen Peroxide	11.2%
Peroxyacetic Acid	15.2%

Inert Ingredients

73.6%

Total

100.0%

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER CORROSIVE Causes irreversible eye damage and skin burns. May be fatal if inhaled or absorbed through the skin. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Do not breathe vapor or spray mist. Wear protective eyewear (goggles, face shield or safety glasses), protective clothing and rubber gloves. Wash thoroughly after handling with soap and water and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse. Wear a mask or pesticide respirator jointly approved by Mine Safety and Health Administration and the National Institute for Occupational Safety and Health.

FIRST AID

IF IN EYES Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF SWALLOWED Call a poison control center or doctor for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

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

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

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

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.

ENVIRONMENTAL HAZARDS 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.

Enviro San Label

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

COMMERCIAL STERILIZATION

ENVIRO SAN can be used in food processing aseptic packaging systems as a commercial sterilant to treat clean non-porous food packaging materials and equipment This product is effective as a commercial sterilant alone or in conjunction with **ES-1000** or **ES-2000** when the solution is prepared in water of up to 500 ppm hardness Refer to Directions for Use to determine the suitable application with alternative concentrations and contact times Where a minimum concentration is specified in the use instructions a test kit or titration method is recommended for verifying that the appropriate concentration is maintained

COMMERCIAL STERILIZATION OF FOOD PACKAGING MATERIALS

Enviro San with ES-1000 at 60°C

Commercially sterilize clean non-porous food packaging materials with a concentration of 5 0 ounces of **ENVIRO SAN** concentrate per 1 0 gallon of water (6597 ppm peroxyacetic acid by weight) and 0 2 ounces of **ES-1000** concentrate per 1 0 gallon of water (1500 ppm by weight) at a temperature of 60 - 70°C Sterilization solution must be maintained at a minimum of 4100 ppm peroxyacetic acid and 1000 ppm ES-1000 For example in one gallon of water add 5 0 ounces of **Enviro San** and 0 2 ounces of **ES-1000** Use immersion coarse spray or circulation techniques as appropriate to sterilize the food packaging material Surfaces should be exposed to the solution for a period of not less than 19 seconds unless a longer time is specified by the governing food processing authority After thorough draining rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus cereus* *Bacillus subtilis*, and *Clostridium sporogenes* in water up to 500 ppm hardness

Enviro San with ES-1000 at 50°C

Commercially sterilize clean non-porous food packaging materials with a concentration of 3 7 ounces of **ENVIRO SAN** concentrate per 1 0 gallon of water (4838 ppm peroxyacetic acid by weight) and 0 2 ounces of **ES-1000** concentrate per 1 0 gallon of water (1500 ppm by weight) at a temperature of 50 - 60°C Sterilization solution must be maintained at a minimum of 3000 ppm peroxyacetic acid and 1000 ppm ES-1000 For example in one gallon of water add 3 7 ounces of **Enviro San** and 0 2 ounces of **ES-1000** Use immersion coarse spray or circulation techniques as appropriate to sterilize the food packaging material Surfaces should be exposed to the solution for a period of not less than 40 seconds unless a longer time is specified by the governing food processing authority After thorough draining rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus cereus* *Bacillus subtilis* and *Clostridium sporogenes* in water up to 500 ppm hardness

Enviro San alone at 60°C

Commercially sterilize clean non-porous food packaging materials with a concentration of 5 0 ounces of **ENVIRO SAN** concentrate per 1 0 gallon of water (6597 ppm peroxyacetic acid by weight) at a temperature of 60°C - 70°C Sterilization solution must be maintained at a minimum of 4100 ppm peroxyacetic acid Use immersion coarse spray or circulation techniques as appropriate to sterilize the food packaging material Surfaces should be exposed

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to the solution for a period of not less than 19 seconds unless a longer time is specified by the governing food processing authority After thorough draining, rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus subtilis*, and *Clostridium sporogenes* in water up to 500 ppm hardness

Enviro San alone at 50°C

Commercially sterile clean non-porous food packaging materials with a concentration of 3.7 ounces of Enviro San concentrate per 1.0 gallon of water (4838 ppm peroxyacetic acid by weight) at a temperature of 50 - 60°C Sterilization solution must be maintained at a minimum of 3000 ppm peroxyacetic acid Use immersion coarse spray or circulation techniques as appropriate to sterilize the food packaging material Surfaces should be exposed to the solution for a period of not less than 40 seconds unless a longer time is specified by the governing food processing authority After thorough draining, rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus subtilis* and *Clostridium sporogenes*

Enviro San with ES-2000 at 50°C (4000 ppm POAA)

Commercially sterilize clean non-porous food packaging materials with a concentration of 5.0 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (6597 ppm peroxyacetic acid by weight) and 0.01 ounces of ES-2000 concentrate per 1.0 gallon of water (100 ppm by weight) at a minimum temperature of 50°C Sterilization solution must be maintained at a minimum of 4000 ppm peroxyacetic acid and a maximum of 500 ppm H₂O₂ ES-2000 should be added to the recirculating system to achieve 500 ppm H₂O₂ or less and not to exceed 650 ppm ES-2000 For example in one gallon of water add 5.0 ounces of **Enviro San** and 0.01 ounces of ES-2000 Use immersion coarse spray or circulation techniques as appropriate to sterilize the food packaging material Surfaces should be exposed to the solution for a period of not less than 15 seconds unless a longer time is specified by the governing food processing authority After thorough draining, rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus cereus*, *Bacillus subtilis* and *Clostridium sporogenes* in water up to 500 ppm hardness

Enviro San with ES-2000 at 50°C (3000 ppm POAA)

Commercially sterilize clean non-porous food packaging materials with a concentration of 3.7 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (4838 ppm peroxyacetic acid by weight) and 0.01 ounces of ES-2000 concentrate per 1.0 gallon of water (100 ppm by weight) at a minimum temperature of 50°C Sterilization solution must be maintained at a minimum of 3000 ppm peroxyacetic acid and a maximum of 500 ppm H₂O₂ ES-2000 should be added to the recirculating system to achieve 500 ppm H₂O₂ or less and not to exceed 650 ppm ES-2000 For example in one gallon of water add 3.7 ounces of **Enviro San** and 0.01 ounces of ES-2000 Use immersion coarse spray or circulation techniques as appropriate to sterilize the food packaging material Surfaces should be exposed to the solution for a period of not less than 35 seconds unless a longer time is specified by the governing food processing authority After thorough draining, rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus cereus*, *Bacillus subtilis* and *Clostridium sporogenes* in water up to 500 ppm hardness

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Enviro San Label

The alternative concentrations and conditions for commercial sterilization of food packaging materials described above are summarized in the following table

	Enviro San + ES-1000 at 60°C	Enviro San + ES-1000 at 50°C	Enviro San alone at 60°C	Enviro San alone at 50°C	Enviro San + ES-2000 at 50°C	Enviro San + ES-2000 at 50°C
Prepare solution						
Enviro San (oz/gallon)	5.0	3.7	5.0	3.7	5.0	3.7
Enviro San (POAA by weight)	6597	4838	6597	4838	6597	4838
ES-1000 (oz/gallon)	0.2	0.2	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)
ES-1000 (ppm by weight)	1500	1500	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)
ES-2000 (oz/gallon)	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)	0.01	0.01
ES-2000 (ppm by weight)	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)	100	100
Temperature (°C)	60-70	50-60	60-70	50-60	>50	>50
Sterilizing solution must be maintained at						
POAA concentration (ppm)	4100	3000	4100	3000	4000	3000
ES-1000 concentration (ppm)	1000	1000	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)
H ₂ O ₂ concentration (ppm)	>3000	>2200	>3000	>2200	<500	<500
ES-2000 concentration (ppm)	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)	As needed to achieve <500 ppm H ₂ O ₂ not to exceed 650 ppm ES-2000	As needed to achieve <500 ppm H ₂ O ₂ not to exceed 650 ppm ES-2000
Contact time (seconds)	19	40	19	40	15	35
Effective against the following organisms	Bacillus cereus Bacillus subtilis Clostridium sporogenes	Bacillus cereus Bacillus subtilis Clostridium sporogenes	Bacillus subtilis Clostridium sporogenes	Bacillus subtilis Clostridium sporogenes	Bacillus cereus Bacillus subtilis Clostridium sporogenes	Bacillus cereus Bacillus subtilis Clostridium sporogenes

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Enviro San Label

This product may be used to sterilize food packaging materials for aseptic packaging of low acid foods that has a schedule process accepted by FDA. The aseptic food processing operation must comply with all applicable FDA regulations including but not limited to 21 CFR parts 108, 110, 113, and/or 114. Use in an aseptic food processing operation includes testing required for the process validation.

COMMERCIAL STERILIZATION OF MANUFACTURING, FILLING, AND PACKAGING EQUIPMENT FOR FOOD PROCESSING

ENVIRO SAN can be used to sterilize manufacturing equipment such as pipelines, pumps, tanks, vats, fillers, evaporators, and pasteurizers. Refer to the equipment manufacturer's instructions to determine how to sterilize the equipment in place or to disassemble the equipment for sterilization by immersion. It is suitable for use on equipment or surfaces composed of glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass.

Enviro San with ES-1000 at 60°C

Prior to use of this product, remove gross soil particles from equipment surfaces, thoroughly clean surfaces, and follow with a potable water rinse. Commercially sterilize clean manufacturing, filling, and packaging equipment with a concentration of 5.0 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (6597 ppm peroxyacetic acid by weight) and 0.2 ounces of **ES-1000** concentrate per 1.0 gallon of water (1500 ppm by weight) at a temperature of 60 - 70°C. Sterilization solution must be maintained at a minimum of 4100 ppm peroxyacetic acid and 1000 ppm ES-1000. For example, in one gallon of water, add 5.0 ounces of **Enviro San** and 0.2 ounces of **ES-1000**. Use immersion, coarse spray, or circulation techniques as appropriate to sterilize the equipment. Surfaces should be exposed to the solution for a period of not less than 19 seconds unless a longer time is specified by the governing food processing authority. After thorough draining, rinse surfaces with a disinfected water, rinse free of pathogenic bacteria or sterile water. This product when used per label directions is effective against *Bacillus cereus*, *Bacillus subtilis*, and *Clostridium sporogenes* in water up to 500 ppm hardness.

Enviro San with ES-1000 at 50°C

Prior to use of this product, remove gross soil particles from equipment surfaces, thoroughly clean surfaces, and follow with a potable water rinse. Commercially sterilize clean manufacturing, filling, and packaging equipment with a concentration of 3.7 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (4838 ppm peroxyacetic acid by weight) and 0.2 ounces of **ES-1000** concentrate per 1.0 gallon of water (1500 ppm by weight) at a temperature of 50 - 60°C. Sterilization solution must be maintained at a minimum of 3000 ppm peroxyacetic acid and 1000 ppm ES-1000. For example, in one gallon of water, add 3.7 ounces of **Enviro San** and 0.2 ounces of **ES-1000**. Use immersion, coarse spray, or circulation techniques as appropriate to sterilize the equipment. Surfaces should be exposed to the solution for a period of not less than 40 seconds unless a longer time is specified by the governing food processing authority. After thorough draining, rinse surfaces with a disinfected water, rinse free of pathogenic bacteria or sterile water. This product when used per label directions is effective against *Bacillus cereus*, *Bacillus subtilis*, and *Clostridium sporogenes* in water up to 500 ppm hardness.

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Enviro San Label

Enviro San alone at 60°C

Prior to use of this product remove gross soil particles from equipment surfaces thoroughly clean surfaces and follow with a potable water rinse Commercially sterilize clean manufacturing filling and packaging equipment with a concentration of 5.0 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (6597 ppm peroxyacetic acid by weight) at a temperature of 60 - 70°C Sterilization solution must be maintained at a minimum of 4100 ppm peroxyacetic acid Use immersion coarse spray or circulation techniques as appropriate to sterilize the equipment Surfaces should be exposed to the solution for a period of not less than 19 seconds unless a longer time is specified by the governing food processing authority After thorough draining rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus subtilis* and *Clostridium sporogenes* in water up to 500 ppm hardness

Enviro San alone at 50°C

Prior to use of this product remove gross soil particles from equipment surfaces thoroughly clean surfaces and follow with a potable water rinse Commercially sterilize clean manufacturing filling and packaging equipment with a concentration of 3.7 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (4838 ppm peroxyacetic acid by weight) at a temperature of 50 - 60°C Sterilization solution must be maintained at a minimum of 3000 ppm Use immersion coarse spray or circulation techniques as appropriate to sterilize the equipment Surfaces should be exposed to the solution for a period of not less than 40 seconds unless a longer time is specified by the governing food processing authority After thorough draining rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus subtilis* and *Clostridium sporogenes* in water up to 500 ppm hardness

Enviro San with ES-2000 at 50°C (4000 ppm POAA)

Prior to use of this product, remove gross soil particles from equipment surfaces thoroughly clean surfaces and follow with a potable water rinse Commercially sterilize clean manufacturing filling and packaging equipment with a concentration of 5.0 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (6597 ppm peroxyacetic acid by weight) and 0.01 ounces of ES-2000 concentrate per 1.0 gallon of water (100 ppm by weight) at a minimum temperature of 50°C Sterilization solution must be maintained at a minimum of 4000 ppm peroxyacetic acid and a maximum of 500 ppm H₂O₂ ES-2000 should be added to the recirculating system to achieve 500 ppm H₂O₂ or less and not to exceed 650 ppm ES-2000 For example in one gallon of water add 5.0 ounces of **Enviro San** and 0.01 ounces of ES-2000 Use immersion coarse spray or circulation techniques as appropriate to sterilize the equipment Surfaces should be exposed to the solution for a period of not less than 15 seconds unless a longer time is specified by the governing food processing authority After thorough draining rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus cereus* *Bacillus subtilis* and *Clostridium sporogenes* in water up to 500 ppm hardness

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Enviro San Label

Enviro San with ES-2000 at 50°C (3000 ppm POAA)

Prior to use of this product remove gross soil particles from equipment surfaces thoroughly clean surfaces and follow with a potable water rinse Commercially sterilize clean manufacturing filling and packaging equipment with a concentration of 3.7 ounces of **ENVIRO SAN** concentrate per 1.0 gallon of water (4838 ppm peroxyacetic acid by weight) and 0.01 ounces of ES-2000 concentrate per 1.0 gallon of water (100 ppm by weight) at a temperature of 50°C Sterilization solution must be maintained at a minimum of 3000 ppm peroxyacetic acid and a maximum of 500 ppm H₂O₂ ES-2000 should be added to the recirculating system to achieve 500 ppm H₂O₂ or less and not to exceed 650 ppm ES-2000 For example in one gallon of water add 3.7 ounces of **Enviro San** and 0.01 ounces of ES-2000 Use immersion coarse spray or circulation techniques as appropriate to sterilize the equipment Surfaces should be exposed to the solution for a period of not less than 35 seconds unless a longer time is specified by the governing food processing authority After thorough draining rinse surfaces with a disinfected water rinse free of pathogenic bacteria or sterile water This product when used per label directions is effective against *Bacillus cereus* *Bacillus subtilis* and *Clostridium sporogenes* in water up to 500 ppm hardness

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The alternative concentrations and conditions for commercial sterilization of manufacturing filling and packaging equipment for food processing described above are summarized in the following table

	Enviro San + ES-1000 at 60°C	Enviro San + ES-1000 at 50°C	Enviro San alone at 60°C	Enviro San alone at 50°C	Enviro San + ES-2000 at 50°C	Enviro San + ES-2000 at 50°C
Prepare solution						
Enviro San (oz/gallon)	50	37	50	37	50	37
Enviro San (POAA by weight)	6597	4838	6597	4838	6597	4838
ES-1000 (oz/gallon)	0.2	0.2	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)
ES-1000 (ppm by weight)	1500	1500	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)
ES-2000 (oz/gallon)	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)	0.01	0.01
ES-2000 (ppm by weight)	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)	100	100
Temperature (°C)	60-70	50-60	60-70	50-60	>50	>50
Sterilizing solution must be maintained at						
POAA concentration (ppm)	4100	3000	4100	3000	4000	3000
ES-1000 concentration (ppm)	1000	1000	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)
H ₂ O ₂ concentration (ppm)	>3000	>2200	>3000	>2200	<500	<500
ES-2000 concentration (ppm)	N/A (zero)	N/A (zero)	N/A (zero)	N/A (zero)	As needed to achieve <500 ppm H ₂ O ₂ not to exceed 650 ppm ES-2000	As needed to achieve <500 ppm H ₂ O ₂ not to exceed 650 ppm ES-2000
Contact time (seconds)	19	40	19	40	15	35
Effective against the following organisms	Bacillus cereus Bacillus subtilis Clostridium sporogenes	Bacillus cereus Bacillus subtilis Clostridium sporogenes	Bacillus subtilis Clostridium sporogenes	Bacillus subtilis Clostridium sporogenes	Bacillus cereus Bacillus subtilis Clostridium sporogenes	Bacillus cereus Bacillus subtilis Clostridium sporogenes

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Enviro San Label

This product may be used for Aseptic Packaging of Low Acid Foods that has a scheduled process by FDA. The aseptic food processing operation must comply with all applicable FDA regulations including but not limited to 21 CFR parts 108, 110, 113 and/or 114. Use in an aseptic food processing operation includes testing required for the process validation.

This product is not for use as a sterilant or high level disinfectant on medical devices

SANITIZATION

ENVIRO SAN acid sanitizer is recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment, dairies, 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.

SANITIZING FOOD CONTACT SURFACES

Prior to use of this product, remove gross soil particles from surfaces, thoroughly clean surfaces, and follow with a potable water rinse. Sanitize clean surfaces with a concentration of 0.10 - 0.18% v/v (1000 to 1800 ppm v/v or 1 to 1.8 ounces per 8 gallons of water) at room temperature. Use immersion, coarse spray or circulation techniques as appropriate to sanitize the surfaces. All surfaces should be exposed to the sanitizing solution for a period of not less than one minute unless otherwise specified by governing sanitary code. Allow surfaces to drain thoroughly and air dry. Do not rinse. This product when used per label directions is effective against *Staphylococcus aureus* and *Escherichia coli*.

SANITIZING NON-FOOD CONTACT SURFACES

Prior to use of this product, remove gross soil particles from surfaces, thoroughly clean surfaces, and follow with a potable water rinse. Sanitize clean surfaces with a concentration of 0.2 - 1.5% v/v (2000 to 15,000 ppm v/v or 2 oz. to 15 oz. per 8 gallons of water) at a temperature of 25 to 45 °C. Use immersion, coarse spray or circulation techniques as appropriate to sanitize the surfaces. All surfaces should be exposed to the sanitizing solution for a period of not less than five minutes unless otherwise specified by governing sanitary code. Allow surfaces to drain thoroughly before resuming operations. Drainage may be followed by a potable or sterile water rinse. This product when used per label directions is effective against *Enterobacter aerogenes*, *Escherichia coli*, *Listeria monocytogenes*, *Pseudomonas aeruginosa*, *Salmonella typhimurium*, *Staphylococcus aureus*, *Pediococcus damnosus* and *Lactobacillus malefermentans*.

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Enviro San Label

ANTIMICROBIAL RINSE OF PRECLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS

To reduce the numbers of beverage spoilage organisms apply Enviro San at a concentration of 2 to 15 ounces concentrate per 3 gallons of water (0.58% to 4.4% by weight) at a temperature of 40 to 65 °C for at least 7 seconds. After thorough draining, rinse surfaces with a disinfected water, rinse free of pathogenic bacteria or sterile water.

To reduce the number of beverage spoilage organisms apply Enviro San at a concentration of 6 to 25 ounces concentrate per 5 gallons of water (1.0% to 4.4% by weight) at ambient temperature for at least 10 seconds. After thorough draining, rinse surfaces with a disinfected water, rinse free of pathogenic bacteria or sterile water.

To reduce the number of beverage spoilage organisms apply Enviro San at a concentration of 0.8 ounces of concentrate per 1.0 gallon of water (1000 ppm peroxyacetic acid by weight) and ES-2000 at a concentration of 0.01 ounces of concentrate per 1.0 gallon of water (100 ppm by weight) at a minimum temperature of 30°C for at least 3 seconds. After thorough draining, rinse surfaces with a disinfected water, rinse free of pathogenic bacteria or sterile water.

BOOSTER FOR ALKALINE AND ACIDIC DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Enviro San is an effective oxygen bleach cleaning booster for use with alkaline and acidic detergents. For cleaning applications as a detergent booster, use 2 to 8 ounces concentrate per 3 gallons of water (0.58% to 2.3% by weight) to aid in the removal of organic soils. All hard non-porous food contact surfaces treated with this boosted detergent must be rinsed thoroughly with a potable water, rinse followed by sanitizing with an approved food contact surface sanitizer.

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.

For antimicrobial use with aqueous treatment fluids in subterranean oilfield and gas-field well operations such as well drilling, formation fracturing, productivity enhancement and secondary recovery

Enviro San can be used for control of microorganisms commonly found in oilfield systems which can lead to reservoir souring, localized corrosion of metals, and/or biofouling. This product must be introduced through a closed mixed/loading and delivery transfer system equipped with a metering device that is appropriate for its intended uses.

DRILLING MUDS, FRACTURING FLUIDS, WELL SQUEEZED FLUIDS (Not for use in California)

EnviroSan Alone

For the preservation of drilling muds, workover and completion fluids and other product susceptible to contamination, pre-mix EnviroSan with the fluid or add directly at the point of use at 3.75 fluid ounces per 1000 gallons of water (5 ppm peroxyacetic acid by weight) to 75.5 fluid ounces per 1000 gallons of water (100 ppm peroxyacetic acid by weight) as required. Depending on the severity of the contamination, initial application may be added up to 75.5 fluid ounces per 1000 gallons of water (1000 ppm peroxyacetic acid by weight).

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EnviroSan with ES-2000 adjuvant

For the preservation of drilling muds workover completion fluids and other products susceptible to contamination pre-mix EnviroSan with the fluid or add directly at the point of use 3.75 to 7.55 fluid ounces of EnviroSan per 1000 gallons of water (5 - 1000 ppm peroxyacetic acid by weight) and 0.036 to 1.10 ounces of ES-2000 concentrate per 1000 gallons of water (0.34 - 10.05 ppm by weight)

FLOODING, INJECTION AND PRODUCED WATER (Not for use in California)

EnviroSan Alone

For Water Flooding operations add EnviroSan initially at 3.75 fluid ounces per 1000 gallons of water (5ppm peroxyacetic acid by weight) to 7.55 fluid ounces per 1000 gallons of water (100 ppm peroxyacetic acid by weight) and repeat until control is achieved. Subsequent treatment may be continued on a weekly basis or as required. Injection wells associated with gas storage systems may be treated up to 100 ppm (peroxyacetic acid by weight) when diluted in the formation water. Any additional top-up water should be treated as required. For hydrostatic systems apply 3.75 fluid ounces per 1000 gallons of water (5 ppm peroxyacetic acid by weight) to 7.55 fluid ounces per 1000 gallons of water (100 ppm peroxyacetic acid by weight) depending on the water quality and the duration of the shut-in. Depending on the severity of the contamination initial application may be added up to 7.55 fluid ounces per 1000 gallons of water (1000 ppm peroxyacetic acid by weight)

EnviroSan with ES 2000 adjuvant

For water flooding operations pre-mix EnviroSan with the fluid or add directly at the point of use 3.75 to 7.55 fluid ounces per 1000 gallons of water (5 - 1000 ppm peroxyacetic acid by weight) and 0.036 to 1.10 ounces of ES-2000 concentrate per 1000 gallons of water (0.34 - 10.05 ppm by weight)

PIPELINE AND TANK MAINTENACE (Not for use in California)

EnviroSan Alone

For microbial control in water-bottoms in crude and refined hydrocarbon storage tanks piping and transportation systems Apply 3.75 fluid ounces of EnviroSan per 1000 gallons of water (5 ppm peroxyacetic acid by weight) to 7.55 fluid ounces per 1000 gallons of water (100 ppm peroxyacetic acid by weight) in the aqueous phase directly injected into the water-bottom pipeline or may be added to the hydrocarbon phase. Treatment may be applied daily or monthly for both storage and transportation systems as needed. Depending on the severity of the contamination initial application may be added up to 7.55 fluid ounces per 1000 gallons of water (1000 ppm peroxyacetic acid by weight)

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Enviro San Label

EnviroSan with ES-2000 adjuvant

For microbial control in water-bottoms in crude and refined hydrocarbon storage tanks piping and transportation systems pre-mix EnviroSan with the fluid or add directly at the point of use 3 75 to 755 fluid ounces per 1000 gallons of water (5 - 1000 ppm peroxyacetic acid by weight) and 0 036 to 110 ounces of ES-2000 concentrate per 1000 gallons of water (0 34 - 1005 ppm by weight)

In all oilfield and gas-field well operation applications always prepare a new solution daily to ensure effectiveness Do not re-use solutions Dispose of unused solution

STORAGE & DISPOSAL

DO NOT CONTAMINATE WATER FOOD OR FEED BY STORAGE OR DISPOSAL

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

NEVER RETURN PRODUCT 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 decomposition isolate container douse container with cool water and dilute with large volumes of water

PESTICIDE DISPOSAL Pesticide wastes are acutely hazardous Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance

CONTAINER DISPOSAL

FOR USE ON NON-REFILLABLE CONTAINERS WITH INDUSTRIAL/COMMERCIAL/INSTITUTIONAL - PUBLIC HEALTH USES

Non-refillable container Do not reuse this container to hold materials other than pesticides or diluted pesticide rinsate Offer for recycling if available or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities

RESIDUE REMOVAL INSTRUCTIONS For containers less than 5 gallons Triple rinse container (or equivalent) promptly after emptying Triple rinse as follows Fill container ¼ full with water and recap Shake 10 seconds Follow Pesticide Disposal instructions for rinsate disposal Drain for 10 seconds after the flow begins to drip Repeat procedure two more times

RESIDUAL REMOVAL INSTRUCTIONS For containers greater than 5 gallons Triple rinse container (or equivalent) promptly after emptying Triple rinse as follows Fill container ¼ full with water Tip container on its side and roll back and forth ensuring at least one complete revolution for 30 seconds Stand the container on its end and tip back and forth several times Turn the container over its other end and tip back and forth several times Follow Pesticide Disposal instructions for rinsate disposal Repeat procedure two more times

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Enviro San Label

FOR USE ON REFILLABLE CONTAINERS WITH INDUSTRIAL/COMMERCIAL/INSTITUTIONAL
- PUBLIC HEALTH USES

Refillable container Refill this container with pesticide only Do not reuse this container for any
other purpose Cleaning the container before final disposal is the responsibility of the person
disposing of the container Cleaning before refilling is the responsibility of the refiller

RESIDUE REMOVAL INSTRUCTIONS For refillable containers To clean the container before
final disposal empty the remaining contents from this container into application equipment or
mix tank Fill the container about 10 percent full with water Agitate vigorously or recirculate
water with the pump for 2 minutes Pour or pump rinsate into application equipment or rinsate
collection system Repeat this rinsing procedure two more times

FOR COMMERCIAL USE ONLY
STRONG OXIDIZING AGENT

Net Contents	
	96 ounces
	1 U S Gal (3.78 L)
	4 U S Gals (15.1 L)
	30 U S Gals (189 L)
	50 U S Gals (1135 L)
	265 U S Gals (10031 L)

Manufactured by
Ecolab Inc
370 N Wabasha Street
St Paul MN 55102

EPA Reg No 1677-185
EPA Est No 1677-MN-1 (P) 60156-IL-1 (SI) 1677 CA-2 (R)
1677 TX 1 (D) 1677 IL-2 (J)
1677-CA-1 (S) 1677 GA 1 (M) 1677 WV-1 (V)
Superscript refers to first letter of date code

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 C [unclear]
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Enviro San Label

SECONDARY CONTAINER LABEL

(Note to reviewer This secondary container label will be used only when the product is diluted according to label directions)

ENVIRO SAN

(EPA Reg No 1677-185)

Active Ingredients	
Hydrogen Peroxide	11.2%
Peroxyacetic Acid	15.2%
Inert Ingredients	<u>73.6%</u>
Total	100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

After product is diluted in accordance with the directions for use protective gloves mask and respirator are not required Use of protective eyewear is still required after the product is diluted in accordance with the directions for use Harmful if swallowed Wash thoroughly after handling with soap and water before eating drinking or using tobacco

Refer to the product label for complete First Aid instructions

Always refer to concentrate label for use directions

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