

81456-1

01-03-2011

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ENVIRONMENTAL PROTECTION AGENCY  
 Office of Pesticide Programs  
 Antimicrobials Division (7510-P)  
 1200 Pennsylvania Avenue N.W.  
 Washington, D.C. 20460

EPA Reg. Number: 81456-1  
 Date of Issuance: Jan. 3, 2011

Term of Issuance: Conditional

Name of Pesticide Product: HSI Sodium Hypochlorite Solution (12.5%)

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Heritage Systems Inc.  
 2471 Solano Ave. Suite 141  
 Napa, CA. 94558

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/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.  
 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 (OPP Decision No. 440528) is conditionally registered in accordance with FIFRA sec 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and, submit acceptable responses required for re-registration of your product under FIFRA section 4.
2. Change EPA File Symbol 81456-R to EPA Registration Number 81456-1.
3. Under Hazards to Humans and Domestic Animals revise "Wash hands after handling" to "Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet". After that sentence add: "Remove and wash contaminated clothing before reuse".
4. Change Pesticide Disposal Instructions to: "Pesticide wastes may acutely be 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".
5. Delete the subheading under Disinfection of Drinking Water since you only have the one use.

Submit one copy of the finished final printed label prior to releasing this product for sale. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e).

Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the conditionally approved label is enclosed for your records.

Signature of Approving Official:  
  
 Wanda Y. Henson  
 Acting Product Manager 32  
 Regulatory Management Branch II  
 Antimicrobials Division (7510-P)

Date:  
 January 3, 2011

**MASTER LABEL**

**HSI SODIUM HYPOCHLORITE SOLUTION (12.5%)**

COMMENTS  
in EPA Letter Dated:

ACTIVE INGREDIENT: SODIUM HYPOCHLORITE..... 12.5%  
OTHER INGREDIENTS ..... 87.5%  
TOTAL ..... 100.0%

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Under the Federal Insecticide, Fungicide, and Rodenticide Act

**KEEP OUT OF REACH OF CHILDREN**

**DANGER - PELIGRO**

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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.)

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. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for further 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.</li> <li>Do not induce vomiting unless told to do so by a 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 by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.  
For emergency information, please contact: 800.535.5053 (InfoTrac)

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER: Corrosive. May cause severe skin or chemical burns to broken skin. Causes eye damage. May be fatal if swallowed. Avoid breathing vapors. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling this product. Wash hands after handling. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

revise per letter

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish 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 (NDPES) 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.

**PHYSICAL OR CHEMICAL HAZARDS**

STRONG OXIDIZING AGENT: Mix only with water according to label directions. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) will release chlorine gas which is irritating to eyes, lungs and mucous membranes.

**STORAGE AND DISPOSAL**

Do not contaminate food or feed by storage, disposal or cleaning of equipment.  
**PESTICIDE STORAGE:** Store in a cool dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large amounts of water.  
**PESTICIDE DISPOSAL:** Product or rinsate that cannot be used should be diluted with water before disposal in a sanitary sewer or other approved disposal facility.  
**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. For 5 gallon containers: allow to drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Allow to drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. For containers over 5 gallons: Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store for later use or disposal. Repeat this procedure two more times. **For onsite refillable tanks:** Refillable container. This tank is the property of Heritage Systems, Inc. Heritage Systems is responsible for refilling and maintaining this container. Refill this container with sodium hypochlorite 12.5% ONLY. Do not reuse this container for any other purpose. Cleaning this container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

revise per letter

**DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling.  
**NOTE:** This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

**{HYDROTHERAPY TANKS}** - Add 1 oz. HSI Solution per 1000 gallons of water to obtain a chlorine residual of 1 part per million (ppm), as determined by a suitable chlorine test kit. Tank should not be entered until the chlorine residual is below 3 ppm. Adjust and maintain the water pH to between 7.2 and 7.6. Operate tank filter continuously. Drain tank weekly, and clean before refilling.)

**SANITATION OF NONPOROUS FOOD CONTACT SURFACES**

**{RINSE METHOD}** - A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to ensure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 1 oz. HSI Solution with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 2 oz. HSI Solution with 10 gallons of water to provide approximately 200 ppm available chlorine by weight.

Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to re-establish a 200 ppm residual. Do not rinse equipment with water after treatment and do not soak equipment overnight.

Sanitizers used in automated systems may be used for general cleaning but may not be re-used for sanitizing purposes.)

**{IMMERSION METHOD}** - A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to ensure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 1 oz. HSI Solution with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 2 oz. HSI Solution with 10 gallons of water to provide approximately 200 ppm available chlorine by weight.)

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# MASTER LABEL

{Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to re-establish a 200 ppm residual. Do not rinse equipment with water after treatment. Sanitizers used in automated systems may be used for general cleaning but may not be re-used for sanitizing purposes.}

**{FLOW/PRESSURE METHOD}** - Disassemble equipment and thoroughly clean after use. Assemble equipment in operating position prior to use. Prepare a volume of a 200 ppm available chlorine sanitizing solution, equal to 110% of volume capacity of the equipment, by mixing **HSI Solution** in a ratio of 2 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 2 minutes to ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.}

**{CLEAN-IN-PLACE METHOD}** - Thoroughly clean equipment after use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing **HSI Solution** in a ratio of 2 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.}

**{SPRAY/FOG METHOD}** - Preclean all surfaces after use. Use a 200 ppm available chlorine solution to control bacteria, mold or fungi and a 600 ppm solution to control bacteriophage. Prepare a 200 ppm sanitizing solution of sufficient size by thoroughly mixing **HSI Solution** in a ratio of 2 oz. product with 10 gallons of water. Prepare a 600 ppm solution by thoroughly mixing **HSI Solution** in a ratio of 6 oz. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces treated with a 600 ppm solution with a 200 ppm solution.}

## SANITATION OF POROUS FOOD CONTACT SURFACES

**{RINSE METHOD}** - Prepare a sanitizing solution by thoroughly mixing 6 oz. **HSI Solution** with 10 gallons of water to provide 600 ppm available chlorine by weight. Clean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes and allow the sanitizer to drain. Following this, prepare a 200 ppm sanitizing solution by thoroughly mixing 2 oz. **HSI Solution** with 10 gallons of water and rinse all surfaces with this 200 ppm solution. Do not rinse with water and do not soak equipment overnight.}

**{IMMERSION METHOD}** - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 6 oz. **HSI Solution** with 10 gallons of water to provide 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution, maintaining contact for at least 2 minutes and allow the sanitizer to drain. Following this, prepare a 200 ppm sanitizing solution by thoroughly mixing 2 oz. **HSI Solution** with 10 gallons of water and rinse all surfaces with this 200 ppm solution. Do not rinse with water and do not soak equipment overnight.}

**{SPRAY/FOG METHOD}** - Preclean all surfaces after use. Prepare a 600 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing **HSI Solution** in a ratio of 6 oz. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 2 oz. **HSI Solution** with 10 gallons of water.}

## AGRICULTURAL USES

**{POST-HARVEST PROTECTION}** - Potatoes can be sanitized after cleaning and prior to storage by spraying with a sanitizing solution at a level of 1 gallon of sanitizing solution per ton of potatoes. Thoroughly mix 1 oz. **HSI Solution** to 2 gallons of water to obtain 500 ppm available chlorine. }

**{FOOD EGG SANITIZATION}** - Thoroughly clean all eggs. Thoroughly mix 2 oz. **HSI Solution** with 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130 degrees F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs. }

**{FRUIT & VEGETABLE WASHING}** - Thoroughly clean all fruits and vegetables in a wash tank. In a second wash tank, thoroughly mix 5 oz. **HSI Solution** in 200 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the first wash tank, submerge fruit or vegetables for 2 minutes in the second wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging. }

**{MEAT AND POULTRY PLANTS}** - Authorized by USDA for use in Federally inspected meat and poultry plants. Chlorine may be present in meat and poultry plant processing water at concentrations up to 5 ppm calculated as available chlorine. Also, chlorine may be present in poultry chiller intake water, and in carcass wash water at concentrations up to 50 ppm calculated as available chlorine. Chlorine must be dispensed at a constant and uniform level and the method or system must be such that a controlled rate is maintained. Thoroughly mix 1.15 oz. **HSI Solution** in 200 gallons of water to make a sanitizing solution of 5 ppm available chlorine, or 11.5 oz. in 200 gallons of water for 50 ppm available chlorine. }

## DISINFECTION OF DRINKING WATER

~~(EMERGENCY/PUBLIC/INDIVIDUAL SYSTEMS)~~ *delete*

**{PUBLIC SYSTEMS}** - Mix 1 oz. **HSI Solution** per 100 gallons of water. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Primary Drinking Water Regulations. Contact your local Health Department for further details.}

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

JAN 08 2010

Manufactured by:  
Heritage Systems, Inc.  
2471 Solano Ave., Suite 141  
Napa, CA 94558

For more information, please call: 707.258.0553

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, and as authorized by  
pesticide, and  
EPA Reg. No.

81456-1

EPA Reg. No.: 81456-R

EPA Est. No.: 87736-CA-001

**NET CONTENTS:**

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