



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Antimicrobials Division (7510C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
21164-25

Date of Issuance:
NOV 17 1998

NOTICE OF PESTICIDE:
 Registration
 Reregistration

Term of Issuance:
Conditional

Name of Pesticide Product:
Super Chlor

(under FIFPA, as amended)

Name and Address of Registrant (include ZIP Code):
Vulcan Chemical Technologies, Inc.
1902 Channel Drive
West Sacramento, CA 95691

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 the use of the label in commerce. In any correspondence on this product always refer to the above EPA regulation 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 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/reregistration 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 reregistration of your product under FIFRA section 4.
2. Revise the EPA Registration Number to read, "EPA Reg. No. 21164-25".
4. Submit two copies of the revised final printed label CSF for the record.

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 label is enclosed for your records.

Signature of Approving Official:

Kathryn Scanlon
Kathryn Scanlon
Product Reviewer Team 32

Date:

NOV 17 1998

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SUPER CHLOR

A SODIUM HYPOCHLORITE SOLUTION FOR SANITATION IN THE DAIRY, FOOD PROCESSING, FOOD SERVICE, AND WATER TREATMENT INDUSTRIES.

ACTIVE INGREDIENTS:

| | |
|--------------------------|-------|
| Sodium Hypochlorite..... | 12.5% |
| Inert Ingredients..... | 87.5% |

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Flush with water for at least 15 minutes. Get medical attention.

IF SWALLOWED: Drink large quantities of water. DO NOT induce vomiting. Call a physician or poison control center immediately.

See Side Panel for Additional Precautionary Statements

EPA REG. NO.: 21164-*EL*

EPA EST. NO.: 21164-CA-1; 21164-MO-1

MANUFACTURED BY:

Vulcan

Chemical Technologies, Inc.

1902 Channel Drive, West Sacramento, CA 95691

(916) 375-0167

**CONTENTS: 55 GALLONS (208.17 L)
1 GALLON**

Hypochlorite solution containing more than 5% but less than 16% available chlorine. (RQ-100/45.4)

**ACCEPTED
with COMMENTS
in EPA Letter Dated:**

NOV 17 1998

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

21164-25

PRECAUTIONARY STATEMENTS

HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive, may cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Wear safety glasses or goggles and rubber gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

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 irritating to eyes, lungs, and mucous membranes.

ENVIRONMENTAL HAZARDS

This product 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 (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

It is in 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.

STORAGE AND DISPOSAL

Store in a cool, dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not reuse empty container but place in trash collection. Do not contaminate food or feed by storage, disposal, or cleaning of equipment.

FOOD AND DAIRY: After cleaning and potable water rinse, and before use, sanitize all non-porous surfaces with 200 ppm SUPER CHLOR for two minutes. For all porous surfaces, clean all surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution maintaining contact for at least two minutes. Prepare a 200 ppm sanitizing solution. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Do not rinse with water after treatment. See Table of Proportions. Surfaces must be adequately drained prior to contact with food. Allow to air dry.

For mold control of nonporous surfaces, a spray rinse of 200 ppm is recommended. See Table of Proportions.

SUPER CHLOR may be used to sanitize all equipment, utensils, pipes, pans, tanks, or flat surfaces which are hard (nonporous) and will not absorb sanitizer solution but which do come in contact with food products. For effective sanitization, all surfaces must be wet thoroughly. Depending on equipment setup, immersion or flooding is best. A heavy spray is acceptable if properly applied to stationary equipment. Gross food particles and soil must be removed by a pre-flush or pre-scrape as necessary prior to sanitizing.

SANITIZERS FOR ALL SURFACES NOT ALWAYS REQUIRING A RINSE: Before using these compounds, food products and packaging materials must be removed from the room or carefully protected. A potable water rinse is not required following use of these compounds for sanitizing previously cleaned hard surfaces provided that the surfaces are adequately drained before contact with food so that little or no residue remains which can adulterate or have a deleterious effect on edible products. These compounds may be used for microbial control on ceilings, floors, and walls at concentrations considerably higher than those allowed for sanitizing food contact surfaces without a potable water rinse unless, in the opinion of the Inspector-In-Charge, such use may result in contamination of food products. A potable water rinse is required following

use of these compounds under conditions other than those stated above. The compounds must always be used at dilutions (see Table of Proportions) and according to applicable directions provided on the EPA registered label. Do not re-use solution. Provide a fresh solution for each application.

DAIRY FARMS: All equipment, utensils, etc. to be sanitized must first be pre-scraped or pre-flushed, or if necessary pre-soaked in order to remove gross food particles, soil, or other organic substances. A thorough washing with a compatible detergent is recommended, followed by a potable water rinse prior to sanitization.

SANITIZATION 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 insure that the available chlorine does not drop below 50 ppm. See Table of Proportions and prepare a 100 ppm solution. If no test kit is available, see Table of Proportions and prepare a sanitizing solution 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 reestablish 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 (see Table of Proportions) 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 insure the available chlorine does not drop below 50 ppm. See Table of Proportions and prepare a 100 ppm sanitizing solution. If no test kit is available, see Table of Proportions and prepare 200 ppm available chlorine by weight.

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 reestablish 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. See Table of Proportions. 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 insure 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. See Table of Proportions to prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment. 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 insure 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. 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. (See Table of Proportions.)

BOTTLES: After cleaning with potable water and immediately before filling, sanitize precleaned bottles with a 100 ppm available chlorine solution for two minutes (see Table of Proportions). In the absence of a test kit to measure available chlorine to determine if rinsate has fallen below 50 ppm during use, a starting concentration of 200 ppm should be used. Allow thorough draining, and air dry. See "SANITIZATION OF NONPOROUS FOOD CONTACT LOCATIONS" for further instructions.

SANITIZATION OF POROUS FOOD CONTACT SURFACES

RINSE METHOD: See Table of Proportions and prepare a 600 ppm solution. Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes. Prepare a 200 ppm sanitizing solution. (See Table of Proportions.) Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Do not rinse and do not soak equipment overnight.

IMMERSION METHOD: See Table of Proportions and prepare a 600 ppm solution. Clean equipment in the normal manner. Immerse equipment in the 600 ppm solution for at least 2 minutes. Prepare a 200 ppm sanitizing solution (see Table of Proportions). Prior to using equipment, immerse all surfaces in a 200 ppm available chlorine solution. Do not rinse and do not soak equipment overnight.

SPRAY/FOG METHOD: Preclean all surfaces after use. See Table of Proportions and prepare a 600 ppm available chlorine sanitizing solution of sufficient size. 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. (see Table of Proportions)

SANITIZATION OF NONPOROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: See Table of Proportions and prepare a sanitizing solution 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. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD: See Table of Proportions and prepare a sanitizing solution to provide approximately 200 ppm available chlorine by weight. 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. Do not rinse equipment with water after treatment.

SPRAY/FOG METHOD: Preclean all surfaces after use. See Table of Proportions and prepare a 200 ppm available chlorine sanitizing solution of sufficient size. Use spray or fogging equipment which can resist hypochlorite solutions. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

DISINFECTION OF NONPOROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: See Table of Proportions and prepare a disinfecting solution to provide approximately 600 ppm available chlorine by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the disinfecting solution, maintaining contact with the solution for at least 10 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD: See Table of Proportions and prepare a disinfecting solution in an immersion tank to provide approximately 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the disinfecting solution for at least 10 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

SANITIZATION OF POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD: See Table of Proportions and prepare a sanitizing solution to provide approximately 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. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD: See Table of Proportions and prepare a sanitizing solution to provide approximately 600 ppm available chlorine by weight. 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. Do not rinse equipment with water after treatment.

SPRAY/FOG METHOD: After cleaning, sanitize non-food contact surfaces with 600 ppm available chlorine, see Table of Proportions. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

EGG SANITIZING: Instructions for Egg Sanitizing with SUPER CHLOR. The sanitizing solution recommended for use for shell egg sanitizing is a 200 ppm solution of SUPER CHLOR. (See Table of Proportions.) SUPER CHLOR is not deleterious to shell eggs or egg-products.

RECOMMENDED PROCEDURES FOR WASHING AND SANITIZING SHELL EGGS:

1. Wash eggs promptly after gathering.
2. Water with an iron content in excess of 2 parts per million shall not be used unless equipment capable of removing the excess iron is installed on the water system.
3. Wash water temperature should be 90°F or higher.
4. Maintain the wash water at a temperature which is at least 20°F warmer than the temperature of the eggs to be washed.
5. Spray rinse washed eggs with warm sanitizer so that the eggs are thoroughly wetted. The sanitizer temperature should not exceed 130°F.
6. Eggs should be reasonably dry before casing or breaking.
7. Never reuse sanitizing/washing solution.

EGG DESTAINING: Instructions for Egg Destaining with SUPER CHLOR. The destaining solution recommended for use for shell egg destaining is a 250 ppm solution of SUPER CHLOR (see Table of Proportions.) SUPER CHLOR is not deleterious to shell eggs or egg-products.

RECOMMENDED PROCEDURES FOR DESTAINING SHELL EGGS:

1. The destainer solution must be at least 20°F warmer than the shell eggs with a minimum solution temperature of 90°F.
2. Total elapsed time in the destainer solution may not exceed five minutes.
3. Eggs are to be rewashed and spray rinsed after destaining.
4. Destainer solution should be replaced daily or whenever it becomes dirty.
5. Destaining is to be done after the initial washing has been completed.
6. It is recommended that all eggs be shell protected after they have been destained.
7. Never reuse sanitizing/washing solution.

FRUIT AND VEGETABLE WASHING: Thoroughly clean all fruits and vegetables in a wash tank. See Table of Proportions and prepare a solution with 25 ppm available chlorine. After draining the tank, submerge fruit or vegetables for two minutes in a second wash tank containing the recirculating sanitizing solution with 25 ppm sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

COOLING TOWER/EVAPORATIVE CONDENSER WATER

SLUG FEED METHOD: Initial Dose: When system is noticeably fouled, see Table of Proportions and apply this product to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add SUPER CHLOR as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD: Initial Dose: When system is noticeably fouled, see Table of Proportions and apply this product to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add SUPER CHLOR as needed to water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD: Initial Dose: When system is noticeably fouled, see Table of Proportions and apply this product to obtain 5 to 10 ppm available chlorine in system water.

Subsequent Dose: See Table of Proportions and maintain this treatment level by starting a continuous feed of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.

CHLORINE DIOXIDE GENERATION

SUPER CHLOR may be used as a reactant in the generation of chlorine dioxide from sodium chlorite.

STATE AND LOCAL REGULATIONS: Consult your dealer, state, or local health authorities for additional information.

TABLE OF PROPORTIONS - AVAILABLE CHLORINE

| | |
|-----------|---|
| 200 ppm | - 1 fluid ounce per 5 gallons water |
| 800 ppm | - 4 fluid ounces per 5 gallons water |
| 1000 ppm | - 5 fluid ounces per 5 gallons water |
| 5000 ppm | - 22 fluid ounces per 5 gallons water |
| 10000 ppm | - 45 fluid ounces per 5 gallons water |
| | |
| 1 ppm | - 1 fluid ounce per 1000 gallons water |
| 10 ppm | - 9 fluid ounces per 1000 gallons water |
| 16 ppm | - 14 fluid ounces per 1000 gallons water |
| 100 ppm | - 89 fluid ounces per 1000 gallons water |
| 200 ppm | - 178 fluid ounces per 1000 gallons water |
| 800 ppm | - 710 fluid ounces per 1000 gallons water |
| 1000 ppm | - 888 fluid ounces per 1000 gallons water |

Do not apply this product through any type of irrigation system.