# VERTEX
## CSS-10®

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

**ACTIVE INGREDIENT:**

| | |
|---|---|
| SODIUM HYPOCHLORITE | 10% |
| OTHER INGREDIENTS | 90% |
| TOTAL | 100% |

**UN1791, Hypochlorite Solution, 8 Corrosive Material, PG III**

## KEEP OUT OF REACH OF CHILDREN

# DANGER

## FIRST AID STATEMENT

**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 further 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 further treatment advice.

**IF INHALED:**
- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

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

**HOT LINE NUMBER:**
Have the product container or label with you when calling a poison center or doctor, or going for treatment.
Contact 1-800-222-1222 for emergency medical treatment information.

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

**See Back Panel for Additional Precautionary Statements.**
**Transport upright never in passenger area. Protect rugs or upholstery.**

## CONTENTS: ONE GALLON (3.78L)

## PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS: DANGER:** Corrosive, may cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin or clothing. Wear safety glasses or goggles and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.
**PHYSICAL AND 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.
**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 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.

## STORAGE & DISPOSAL:

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.
**VERTEX CSS-10 STORAGE:** Store this product 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, in accordance with state & local regulations. **VERTEX CSS-10 DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry). Do not dump into any sewer, on the ground or into any body of water.
**CONTAINER HANDLING: NONREFILLABLE CONTAINER – DO NOT reuse or refill this container.** Clean container promptly after emptying. To clean container: fill container 1/4 full with water. Replace the closure or plug the opening of the container. Rotate the container, making sure to rinse all surfaces. Turn the container upside down. Add the rinsate to the application equipment or mix tank or store rinsate for later use or disposal. Allow 30 seconds for rinsate to drain. Repeat this procedure two more times. Offer container for recycling if available or dispose of in a sanitary landfill, or by other procedure allowed by state & local authorities.

**FOOD AND DAIRY –** After cleaning & potable water rinse, and before use, sanitize all nonporous surfaces with 200 ppm VERTEX CSS-10 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 wo minutes. Prepare a 200 ppm sanitizing solution. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Do not rinse. 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.
**SANITIZING RINSE: FOOD AND DAIRY PROCESSORS –** VERTEX CSS-10 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. Use 200 ppm solution for two minutes for nonporous surfaces. 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 fresh solution for each application.
**RESTAURANTS AND TAVERNS –** After washing with dishwashing detergent and rinsing with potable water, immerse utensils in 200 ppm solution of VERTEX CSS-10 for at least 2 minutes. Allow utensils to air dry. 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 potable water rinse prior to sanitization. Use 200 ppm solution for two minutes.
**MACHINE DISHWASHING TERMINAL RINSE SANITATION –** As a terminal sanitizing rinse for precleaned food utensils, adjust automatic dispensing equipment to provide a use solution of 100 to 200 ppm available chlorine according to requirements of Public Health Authorities. Use solution should be tested frequently with a suitable chlorine test kit to ascertain that the rinsate strength does not fall below 50 ppm. In the absence of a test kit a starting concentration of 200 ppm should be used. See Table of Proportions.
**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. 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 throughout 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.
**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.
**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.
**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.
**FRUIT & VEGETABLE WASHING –** Pre-rinse fruits and vegetables with water to remove soil materials and then thoroughly clean in a wash tank. Soak or spray fruits and vegetables with a 25 ppm chlorine solution. See Table of Proportions. 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 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.
**LAUNDRY SANITIZERS:** HOUSEHOLD LAUNDRY SANITIZERS – IN SOAKING SUDS – See table of proportions and provide 200 ppm available chlorine solution. Wait 5 minutes, then add soap or detergent. Immerse laundry for at least 11 minutes prior to starting the wash/rinse cycle. IN WASHING SUDS – See table of proportions and add sufficient product to wash water containing clothes to provide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent and start the wash/rinse cycle. COMMERCIAL LAUNDRY SANITIZERS – Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix sufficient proportion of this product with 10 gallons of water to yield 200 ppm available chlorine (see table of proportions). Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine, if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm.
**WATER TREATMENT COMPOUNDS:** FOOD PROCESSING PLANTS – CHLORINE POTABLE WATER TREATMENT COMPOUND – PROCESS WATER OR DRINKING WATER: Systems in establishments operating under the Federal Meat, Poultry, Shell Egg Grading and Egg Product Inspections Program. See table of proportions and treat poultry process water to a dosage of 5 ppm calculated as available chlorine. Chlorine may be used in poultry chiller intake water and in carcass wash water in poultry plants at levels 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. Chlorine may be present in process water of meat plants at concentrations up to 5 parts per million calculated as available chlorine. Under reliable controls, the chlorine level may be increased in water used on meat carcasses up to 50 ppm. GENERAL POTABLE WATER TREATMENT COMPOUNDS – Compounds used in such treatment should not remain the water in concentrations greater than required by good practice. Compounds containing substances which may subsequently result in the adulteration or contamination of meat or poultry products may not be introduced into the system.
**FARM PREMISES –** Remove all animals, poultry, and feed from premises, vehicles, and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities occupied or transverse by animals or poultry. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. To disinfect, saturate all surfaces with a solution of at least 1000 ppm available chlorine for a period of 10 minutes (see table of proportions). Immerse all halters, ropes and other types of equipment used in handling and restraining animals or poultry, as well as the cleaned forks, shovels and scrapers used for removing litter and manure. Ventilate buildings, cars, boats and other closed spaces. Do not house livestock or poultry or employ equipment until chlorine has been dissipated. All treated feed racks, mangers, troughs, automatic feeders, fountains and waterers must be rinsed with potable water before reuse.
**EGG SANITIZING:** I. INSTRUCTION FOR EGG SANITIZING WITH VERTEX CSS-10. The sanitizing solution recommended for use for shell egg sanitizing is a 200 ppm solution of VERTEX CSS-10. (See Table of Proportions.) VERTEX CSS-10 is not deleterious to shell eggs or egg-products. II. RECOMMENDED PROCEDURES FOR WASHING & SANITIZING FOOD 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. The sanitizing solution must be at least 20°F warmer than the shell eggs with a minimum solution temperature of 90°F. 3. Spray rinse washed eggs with warm sanitizer so that the eggs are thoroughly wetted. The sanitizer temperature should not exceed 130°F. 4. Allow the eggs to thoroughly dry before casing or breaking. 5. Never reuse sanitizing/washing solution.
**EGG DESTAINING:** I. INSTRUCTIONS FOR EGG DESTAINING WITH VERTEX CSS-10. The destaining solution recommended for use for shell egg destaining is 250 ppm solution of VERTEX CSS-10 (See Table of Proportions.) VERTEX CSS-10 is not deleterious to shell eggs or egg-products. II. 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 5 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.

**VERTEX CSS-10 – TABLE OF PROPORTIONS**

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|---|---|
| .2- .6 ppm | 1 fluid ounce per 2000 gallons water |
| 1 ppm | 3 fluid ounces per 1000 gallons water |
| 1.5 ppm | 5 fluid ounces per 2500 gallons water |
| 3 ppm | 4 fluid ounces per 1000 gallons water |
| 5 ppm | 6 fluid ounces per 1000 gallons water |
| 10 ppm | 29 fluid ounces per 2500 gallons water |

Do not apply this product through any type of irrigation system.
**EPA REG. NO. 9616-8** **EPA EST. 9616-IL-1**

**TABLE OF PROPORTIONS – AVAILABLE CHLORINE**

| | |
|---|---|
| 25 ppm | 29 fluid ounces per 1000 gallons water |
| 50 ppm | 58 fluid ounce per 1000 gallons water |
| 100 ppm | 1 fluid ounce per 10 gallons water |
| 100 ppm | 115 fluid ounces per 1000 gallons water |
| 200 ppm | 1 fluid ounce per 5 gallons water |
| 200 ppm | 230 fluid ounces per 1000 gallons water |

**TABLE OF PROPORTIONS – AVAILABLE CHLORINE**

| | |
|---|---|
| 240 ppm | 276 fluid ounces per 1000 gallons water |
| 250 ppm | 287 fluid ounces per 1000 gallons water |
| 600 ppm | 4 fluid ounces per 5 gallons water |
| 1000 ppm | 6 fluid ounces per 5 gallons water |

**STATE AND LOCAL REGULATIONS** - consult your dealer, state or local health authorities for additional information.
**Manufactured By VERTEX CHEMICAL CORPORATION, St. Louis, MO 63131** **1003**