**ACTIVE INGREDIENT:**
Sodium Hypochlorite ............................................ 8.4%

**OTHER INGREDIENTS:** ........................................ 91.6%

**TOTAL:** ................................................................ 100.0%

(provides a minimum available chlorine of 8%)

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

**FOR INDUSTRIAL USE**

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER:** CORROSIVE: Causes severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Wear rubber gloves, chemical goggles and protective clothing. Wash after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

**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 public 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.

**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 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 IN USA OR CANADA,**
CALL: 1-800-328-0026.

**FOR EMERGENCY MEDICAL INFORMATION WORLDWIDE,**
CALL: 1-651-222-5352 (IN THE USA).

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: 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.

**EPA Reg. No. 1677-52**

**EPA Est. No. 1677-IL-2 (J), 1677-TX-1 (D), 1677-CA-1 (M), 1677-CA-1 (S), 1677-MN-1 (I), 70211-CA-2 (A), 1677-CA-2 (R), 1677-WV-1 (W), 66595-PA-1 (F), 55852-L-1 (BC).**

Superscript refers to first letter of date code.

See back label for Storage & Disposal and complete Directions for Use.
See front label for Precautionary Statements and First Aid instructions.

**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.

**SANITIZING NONPOROUS FOOD CONTACT EQUIPMENT RINSE METHOD:** A solution of 50 ppm available chlorine by weight in 13 gallons of water. If no test kit is available, prepare a sanitizing solution by mixing 4 oz. of XY-12 with 13 gallons of water to provide approximately 200 ppm available chlorine by weight.

At 100 ppm available chlorine, this product is an effective sanitizer against *Vibrio cholerae, Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella typhi* and *Staphylococcus aureus*. Clean all surfaces with proper detergent and rinse with water. Just prior to use, rinse all surfaces thoroughly with the sanitizing solution maintaining contact with the sanitizer for at least 5 minutes. If solution contains less than 50 ppm available chlorine, desorption is determined by a suitable test kit, either discard the solution or add sufficient product to re-establish a 200 ppm residual. Allow equipment to drain thoroughly. Do not rinse and do not soak overnight.

**SANITIZING POREOUS FOOD CONTACT EQUIPMENT-RINSE METHOD:** Prepare a 600 ppm solution by thoroughly mixing 3 oz. of this product in 3 gal. water. Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution (4 oz./13 gallons). Do not rinse and do not soak overnight.

**BACTERIOPHAGE CONTROL:** XY-12 will significantly reduce the incidence of Bacillus cereus and Clostridium botulinum spores in dairy products and bactériophages in cheese manufacturing establishments by fogging at concentrations of 600 ppm available chlorine. Fogging should be used as a supplement to acceptable manual cleaning and sanitizing of room surfaces as described below.

**Directions for fogging:** Prior to fogging, clean all surfaces and remove or carefully protect all food products and packaging materials. Fog desired areas using one quart per 1000 cu. ft. of room area with an XY-12 solution containing 600 ppm of available chlorine, since the area of all poultry processing areas and the minimum of 2 hours after fogging. All food contact surfaces must then be thorougly rinsed with an XY-12 solution at 200 ppm of available chlorine. Allow surfaces to drain thoroughly before operations are resumed.

**Continuous treatment of meat and poultry or fruit and vegetable conveyors:** Wash, rinse and sanitize conveyor equipment. During processing, apply XY-12 at a 200 ppm available chlorine level to conveyors with MIKRO MASTER or other suitable feeding equipment. Controlled volumes of sanitizer are applied to the return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of belt. During interruptions in operations, apply a coarse spray to equipment perimeters, collars, sizers and conveyors, using XY-12 solution of 200 ppm available chlorine. Conveyor equipment must be free of product when applying this coarse spray.

**NOTE:** For mechanical operations, prepared solutions may not be reused for sanitizing but may be re-used for other purposes such as cleaning.

For manual operations, fresh sanitizing solutions must be prepared as soon as they become cloudy or discolored.

**BOOSTER FOR ALKALINE DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT:** XY-12 is an effective bleach cleaning booster for use with alkaline detergents. For cleaning applications as a detergent booster, use 2 - 12 oz. in 13 gal. water (100 - 1000 ppm active chlorine) 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.

**GLOVE SANITIZER APPLICATIONS:**

- **Food Sanitization:** A 200 ppm available chlorine solution (1 oz./product/13 gal. water) for meat and poultry products and a 200 ppm solution (2 oz./product/6.5 gal. water) for fruits and vegetables. The solution must be thoroughly mixed into the packaging material before the packagiing material leaves the processing equipment.
- **Rinse Method:** Prepare a 200 ppm solution (4 oz./13 gal. water) for meat and poultry products and a 200 ppm solution (2 oz./product/6.5 gal. water) for fruits and vegetables. The solution must be thoroughly mixed into the packaging material before it leaves the processing equipment.
- **Continuous Feed:** Using an automatic metering device, continuously feed this product into the water to obtain and maintain a level of 5-20 ppm available chlorine (1 oz product/130 gal. water, 2 oz product/65 gal. water). Confirm target chlorine level with an automatic water monitoring device. Pad to approximately 600 ppm available chlorine by weight. When the available chlorine level reaches 20 ppm, notify the USDA plant inspector.

**INTERMITTENT FEED METHOD:**

- **Initial Preparation:** Thoroughly mix 16 oz. of this product with 13 gallons of water to yield 200 ppm available chlorine to the bleach step in the wash process. Thoroughly mix all eggs in 13 gal. water/2 oz. in 6.5 gal. water. Thoroughly clean all fruits and vegetables in a wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse all fruits and vegetables in 13 gal. water/2 oz. in 6.5 gal. water.

**COMMERCIAL LAUNDRY SANITIZATION:** Using the appropriate Ecolab dispenser, inject 4 oz. XY-12 to 13 gallons of water to yield 200 ppm available chlorine to the bleach step of the wash process. Test the level of available chlorine if solution has been allowed to stand. Add more XY-12 as necessary to maintain 200 ppm available chlorine.

**FOOD EGG SANITIZATION:** Thoroughly clean all eggs before processing. To sanitize clean shell eggs intended for food or food items, apply solution with a coarse spray using 2 oz of product in 6.5 gal. water (providing 200 ppm available chlorine). The solution must be used to either or both of the following: A. Eggs contained in high density or high volume containers shall be, before or after washing, immersed in a 100 ppm solution of available chlorine. B. Eggs shall be immersed in a 100 ppm solution of available chlorine.

**FRUIT AND VEGETABLE WASHING:** Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 2 oz of product in 250 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank, submerge fruits or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Coarse spray rinse vegetables with the sanitizing solution prior to packaging. Rinse all fruits and vegetables in 13 gal. water/2 oz. in 6.5 gal. water.

**STORAGE & DISPOSAL**

Do not contaminate water, food, feed or storage by storage or disposal. PESTICIDE STORAGE: Store unmixed concentrates in a cool, dry, dark place in the original containers. Always replace covers. In case of spill, flood the area with large quantities of water.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticides, spray mixture, or residue is a violation of Federal Law. If these wastes cannot be disposed of as ordinary trash, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Noncomminuted container. Do not refil or return this container. Triple rinse container (or equivalent) promptly after Vempting. Offer for Recycling, if available, or discard in trash.