

AUG 10 1994

Mr. Gene Turner
Harcros Chemicals Inc.
P. O. Box 2930
Kansas City, KS 66110-2930

Dear Mr. Turner:

Subject: Sodium Hypochlorite 12.5%
EPA Registration No. 148-1288
Your Amendment Dated March 22, 1994

This is in response to your amendment of revised label per PR Notice 93-10.

The labeling referred to above submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable, subject to the following comment.

1. The first statement in the "Environmental Hazard" section should read:

"This pesticide is toxic to fish and aquatic organisms.

A stamped copy is enclosed for your records. Submit five copies of final printed label.

According to our records, you have not submitted a revised Confidential Statement of Formula as requested in the Notice of Reregistration issued June 30, 1993. The revised Confidential Statement of Formula must be submitted within 30 days from receipt of this letter.

If you any questions, please call Marianne Clark at (703) 305-7879.

Sincerely yours,



Ruth Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (7505C)

CONCURRENCES

		CONCURRENCES						
SYMBOL	▶							
SURNAME	▶							
DATE	▶							

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER CORROSIVE

EYE CONTACT can cause severe irritation, eye damage, even blindness. **SKIN CONTACT** can cause severe irritation, burns. **INHALATION** can cause severe irritation, pneumonia, lung damage, even death. **INGESTION** can cause severe irritation, ulceration, coma, even death.

PRECAUTIONS

Wear safety glasses or goggles or face mask and rubber gloves. Do not get in eyes, on face, or clothing. Do not breathe vapor, mist, or gas. Use only with adequate ventilation. Evacuate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated. Wash thoroughly after handling.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. 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.

**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 result in the release of potentially poisonous vapor which may be harmful and may even cause death.

STORAGE AND DISPOSAL

Storage: Do not contaminate food or feed by storage, disposal or cleaning of equipment. 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.

Disposal: Product or residues that cannot be used should be diluted with water before disposal in a sanitary sewer.

Container: Do not reuse empty container but place in trash collection. (If containers are to be recycled for refilling with Sodium Hypochlorite 12.5%, return to distributor for refilling.)

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Degrades with age. Use test kit and increase dosage as necessary to obtain required level of available chlorine.

SODIUM HYPOCHLORITE

(12.5% Available Chlorine)

ACTIVE INGREDIENTS:

SODIUM HYPOCHLORITE

INERT INGREDIENTS

KEEP OUT OF REACH OF CHILDREN

DANGER: CONSULT MSDS FOR FURTHER

STATEMENT OF PRACTICAL TREATMENT-FIRST AID

FOR EYE CONTACT, flush eyes with water for at least 15 minutes. Get prompt medical attention with soap and water. **IF INHALED,** go to fresh air. If breathing is difficult, use oxygen. If breathing has stopped, use mouth to mouth. Get prompt medical attention. **IF SWALLOWED,** drink large amounts of water or milk. Get prompt medical attention or poison control center immediately.

EPA Reg. No. 148-1288

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NET CONTENTS:



Harcros Chemicals

P.O. Box 209, Kansas City, KS 64101

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DIRECTIONS FOR USE

SWIMMING POOLS

Directions: This product should be used in conjunction with a chlorine test kit and added to the pool in sufficient quantity to insure that the residual chlorine in the pool water is maintained at a minimum concentration of 0.6 ppm at all times and the pool pH maintained at 6.2 to 7.6.

To maintain the pool, add manually or by a feeder device 11 oz (1 1/2 cup) of this product for each 10,000 gallons of water to yield an available chlorine residual between 0.6 to 1.0 ppm by weight. Stabilized pools should maintain a residual of 1.0 to 1.5 ppm available chlorine. Test the pH, available chlorine residual and alkalinity of the water frequently with appropriate test kits. Frequency of water treatment will depend upon temperature and number of swimmers.

Use the table below for addition of this product to maintain an available chlorine residual between 0.6 to 1.0 ppm by weight:

Gallons of Water	Sodium Hypochlorite Solution Required
500	1/2 oz (3 teaspoons)
1,000	1 oz (6 teaspoons)
5,000	5 1/2 oz (3/4 cup)
10,000	11 oz (1 1/2 cups)
25,000	27 oz (3 3/4 cups)

Every 7 days or as necessary, to combat the growth of algae, superchlorinate the pool with 52 to 104 oz of product for each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Do not reenter pool until the chlorine residual is between 1.0 to 3.0 ppm. Dilute the required amount of sodium hypochlorite solution with at least 10 additional volumes of water. This diluted solution can be spread over the surface of the pool from the edges with a plastic sprinkler can.

COMMERCIAL LAUNDRY BLEACH SANITIZER

Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix 2 oz of this product with 10 gallons of water to yield 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with 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.

MILK PLANT AND DAIRY EQUIPMENT

Bottles, bottlefilters, coolers, pasteurizers, churns, separators, utensils and other equipment may be sanitized by using sodium hypochlorite. Surfaces or articles to be sanitized must be thoroughly pre-cleaned. Rinse all surfaces with the sanitizing solution prepared by adding 2 oz of this product with 10 gallons of water to provide 200 ppm available chlorine by weight. Maintain contact for at least 2 minutes after sanitizing, do not rinse equipment with water after treatment and do not soak equipment overnight.

MEAT AND POULTRY PROCESSING PLANTS

Surfaces or articles to be sanitized must be thoroughly pre-cleaned. Solutions containing 600 ppm available chlorine by weight (6 oz (3/4 cup) sodium hypochlorite solution per 10 gallons water) may be used for sanitizing walls, floors, ceilings and similar areas. Maintain contact with sanitizer for at least 2 minutes. Do not rinse after sanitizing. Solutions containing 200 ppm available chlorine (2 oz (1/4 cup) sodium hypochlorite solution per 10 gallons water) may be used on edible product equipment. Maintain contact time with sanitizer for at least

2 minutes. Do not rinse after sanitizing. Do not allow the solution to come directly in contact with meat or poultry.

DRINKING WATER DISINFECTION

Sodium hypochlorite solution may be used to disinfect water supplies. Mix a ratio of 1.5 oz of this product to 100 gallons 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 not less than that prescribed by the National Interim Primary Drinking Water Regulations. Contact your local Health Department for further details.

FOOD EGG SANITIZATION

Thoroughly clean all eggs. Thoroughly mix 2 oz (1/4 cup) of this product with 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130°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.

RESTAURANTS AND TAVERNS

After washing with dishwashing detergent and rinsing with clean water, immerse utensils in sanitizing solution prepared by adding 2 oz of this product with 10 gallons of water to provide 200 ppm available chlorine by weight. Maintain contact with sanitizer for at least 2 minutes and allow sanitizer to drain. Do not rinse utensils with water after treatment.

MACHINE DISHWASHING TERMINAL RINSE SANITATION

As a terminal sanitizing rinse for pre-cleaned food utensils, adjust automatic dispensing equipment to provide a sanitizing use solution of 100 to 200 ppm available chlorine by weight according to requirements of Public Health Authorities. Use solution should be tested frequently with a suitable chlorine test kit to ascertain that the rinse strength does not fall below 50 ppm. In absence of a test kit a starting concentration of 200 ppm should be used. Do not rinse utensils with water after treatment.

DISINFECTION OF COOLING TOWER WATER

For the control of bacteria, algae and fungi, add sodium hypochlorite solution to the tower basin, distribution box or some other point to insure uniform mixing.

INITIAL DOSE: When the system is noticeably fouled, application of 1/2 pint - 1 pint (8-16 oz) of sodium hypochlorite solution per 1,000 gallons of water in the system will achieve 7.5-15.0 ppm available chlorine by weight. If necessary, repeat procedure until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, application of 1/4 pint to 1/2 pint (4-8 oz) of sodium hypochlorite solution per 1,000 gallons of water in the system will achieve 3.75-7.5 ppm available chlorine by weight. Apply treatment weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun. This sodium hypochlorite solution weighs 10.3 lbs per gallon.



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DIRECTIONS FOR USE

POOLS
In conjunction with a chlorine test kit to insure that the residual chlorine concentration of 0.6 ppm at all times.

Feeder device 1 1/2 oz (1 1/4 cup) of this product will yield an available chlorine residual of 0.6 ppm. Pools should maintain a residual of 0.6 ppm available chlorine residual and a pH of 7.2-7.6. Frequency of water changes depends on number of swimmers.

Use to maintain an available chlorine

**Hypochlorite
Required
Spoons
Cups**

Prevents the growth of algae. Superchlorinate each 10,000 gallons of water to yield a residual chlorine level of 1.0 to 1.5 ppm. Hypochlorite solution with at least 1.0 ppm available chlorine can be spread over the pool with a sprayer.

BLEACH SANITIZER

Use prior to sanitization. Thoroughly mix to yield 200 ppm available chlorine. Add solution into the prewash prior to cycle with good detergent. Test the sanitizer allowed to stand. Add more if it is dropped below 200 ppm.

WASH EQUIPMENT

Wash funnels, separators, utensils and other equipment with hypochlorite. Surfaces or articles to be sanitized. Rinse all surfaces with the sanitizer product with 10 gallons of water to dilute. Maintain contact for at least 2 minutes with water after treatment and

WASHING PLANTS

Use on thoroughly pre-cleaned. Solutions of 1.5 oz (1 1/4 cup) sodium hypochlorite may be used for sanitizing walls, floors and equipment for at least 2 minutes. Maintaining 200 ppm available chlorine per 10 gallons water may be used. Contact time with sanitizer for at least

2 minutes. Do not rinse after sanitizing. Do not allow the solution to come directly in contact with meat or poultry.

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D.O.T.
SHIPPING NAME:
HYPOCHLORITE
SOLUTIONS
UN 1791



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