

21 DEC 1992

Robert R. Stewart, Ph.D., Agent
Joe F. Ball Company, Inc.
2055 Pinehurst Street
Glendora, CA 91740

Subject: Liquid Chlorine
EPA Registration No. 10941-1
Your Amendment Dated August 13, 1992

Dear Dr. Stewart:

This is in response to your labeling amendment to add certain raw agricultural commodities to the use directions, and to delete specific trade names of process equipment.

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 comments listed below. A stamped copy is enclosed for your records.

1. The word POISON (next to the skull and crossbones) must appear in red.
2. Next to the Directions for Use heading, delete the term "General Classification." It is no longer permitted on labels.
3. In the directions for use, the sentence, "Handle only in accordance...", should be preceded by the sentence, "Have available gas masks approved for chlorine service by the U.S. Bureau of Mines or the National Institute for Occupational Safety and Health."
4. Some text was inadvertently left off the end of the Container Disposal paragraph. The last two sentences should be, "All valves must be closed tightly and all closures or caps secured. It is illegal to ship a leaking chlorine container."
5. Submit five copies of the finished labeling before the product is released for shipment bearing the amended labeling.

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

2076

If you have any questions about these comments, you may call
Wallace Powell at 703-305-6938.

Sincerely,



Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H-7504C)

Enclosure

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PH 32 10941-1

LIQUID CHLORINE
JFB PROCESS CHEMICAL NO.1

ACCEPTED
with COMMENTS
in EPA Letter Dated:

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Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide
registered under EPA Reg. No.
10941-1

3 of 6

For use by trained personnel under the supervision of the JOE F. BALL COMPANY, INC. from large stationary containers such as 1-ton and 150 pound cylinders. To be used only in the JFB Process as a sanitizer in wash water treatment for the post harvest cleaning of raw agricultural commodities.

ACTIVE INGREDIENTS

Compressed Chlorine Gas	100.0%w/w
INERT INGREDIENTS	<u>NONE</u>
TOTAL	100.0%w/w

KEEP OUT OF REACH OF CHILDREN
DANGER (skull and crossbones) **POISON**
COMPRESSED GAS
FATAL IF INHALED
LIQUID CAUSES SEVERE BURNS

STATEMENT OF PRACTICAL TREATMENT

FIRST AID - *If Inhaled*, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, preferably with a physician's advice. Keep warm by covering with a blanket and keep quiet.

In Case of Skin or Eye Contact, immediately flush all affected areas with large amounts of running water for at least 15 minutes while removing contaminated clothing and shoes. For eyes, hold eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Call a physician immediately.

SEE S'DE PANEL FOR ADDITIONAL PRECAUTIONARY

Must appear in red

Manufactured for : JOE F. BALL COMPANY, INC.
2055 PINEHURST STREET
GLEN DORA, CALIFORNIA 91740

EPA Establishment No. 37982-CA-1
NET CONTENTS: POUNDS
EPA Registration No. 10941-1

1 of 6

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**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
(And Domestic Animals)**

DANGER

Fatal if inhaled. Do not breathe vapor. Corrosive to eyes, skin and mucous membranes in the presence of moisture. Do not heat containers.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge into lakes, streams, ponds or public waters, unless in accordance with an NPDES permit. For guidance contact the regional office of Environmental Protection Agency.

CHEMICAL-PHYSICAL HAZARDS

Chlorine is a non-flammable gas, liquified, under pressure. Do not drop container. Keep away from intense heat or open sunlight. Corrosive to most metals in the presence of moisture

DIRECTIONS FOR USE - General Classification

delete

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

LIQUID CHLORINE is to be used only in the JFB Process under the supervision of the JOE F. BALL COMPANY, INC. The JFB Process produces treated wash water for the post-harvest control of decay causing organisms in apples, artichokes, asparagus, carrots, cauliflower, celery, cherries, citrus fruits, corn, cucumbers, garlic, melons, nectarines, onions, peaches, peppers, plums, potatoes, radishes and tomatoes.

LIQUID CHLORINE may be used only in equipment supplied by the JOE F. BALL COMPANY, INC. as part of the JFB Process and only under the supervision of the company. Written operation instructions for the JFB Process in a booklet titled, JFB Process Operating Manual are provided with this product.

Handle only in accordance with practices recommended in the *Chlorine Manual* published by the Chlorine Institute, Inc., New York. Use only in well ventilated areas. Keep container closed. Keep up wind of leaks and evacuate enclosed places until gas has dispersed. Make daily or more frequent inspections for leaks. Stop leaks at once. Chronic leaks become greater with time.

should be preceded by, "Have available gas masks approved for chlorine service by the U.S. Bureau of Mines or the National Institute for Occupational Safety and Health."

BEST AVAILABLE COPY

METHOD OF APPLICATION

5 of 6

Process Equipment

1. Vacuum operated chlorinator supplied by **JOE F. BALL COMPANY, INC.**
2. Calcium Carbonate Reaction Tank, supplied by **JOE F. BALL COMPANY, INC.**
3. Solution Distribution system supplied by the user of the **JFB Process.**
4. Operating Log Book.
5. **JFB Process Operating Manual.**

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Process Chemicals

LIQUID CHLORINE, JFB Process Chemical No. 1, EPA Registration No. 10941-1.

CALCIUM CARBONATE, JFB Process Chemical No. 2.

Water.

Operating Procedures

See detailed operating instructions in the booklet **JFB Process Operating Manual.**

All chlorine containers, including those on line, in reserve and empty, must be installed in a firmly secured manner outside of the packaging plants where the **JFB Process** is used. All cylinders must be handled in accordance with the instructions found in the **JFB Process Operating Manual** booklet provided with the label.

LIQUID CHLORINE, JFB Process Chemical No. 1 is metered into the chlorinator to prepare a water solution. The resulting chlorine solution passes into the Calcium Carbonate Reaction Tank containing **CALCIUM CARBONATE, JFB Process Chemical No. 2** which is consumed at the rate 1.41 lb. of calcium carbonate per 1 pound of chlorine. Wash water is drawn off the reaction tank and metered to wash tanks, brush washer sprays, flumes, rinses, and coolers.

Chlorine concentration tests are made at each point of application at the start of each operation to assure that application rate is at the desired level within the range from 50 to 200 ppm chlorine. Analyses are repeated several times each day as needed. All calibration tests and equipment adjustments are recorded in the log book provided.

BEST AVAILABLE COPY

6 of 6

STORAGE AND DISPOSAL

STORAGE - Cylinders and 1-ton containers of chlorine should be stored in a dry area away from sources of heat and protected from direct sunlight and precipitation. They should be segregated from other compressed gases and never stored near hydrocarbons, finely divided metals, turpentine, ether, anhydrous ammonia or other flammable materials. All storage containers must have a weather resistant label attached near the outlet valve and must not be accessible to the general public.

CONTAINER DISPOSAL - All chlorine containers are returnable and should be properly identified with return tags and returned as promptly as possible to supplier according to prescribed instructions and practices recommended by the Chlorine Institute. All valves must be closed tightly and closures or caps...

"...secured. It is illegal to ship a leaking chlorine container."

WARRANTY AND LIMITATION OF DAMAGES

JOE F. BALL COMPANY, INC. warrants that this material conforms to the chemical description and guaranteed limits of active ingredients as stated on this label.

JOE F. BALL COMPANY, INC. makes no other expressed or implied warranty, including any other expressed or implied warranty of **FITNESS** or **MERCHANTABILITY** of any kind.

JOE F. BALL COMPANY, INC.'s maximum liability for breach of this warranty shall not exceed the purchase price of this product. In no event shall **JOE F. BALL COMPANY, INC.** be liable for indirect or consequential damages. This warranty shall not be changed by oral or written agreement unless signed by a duly authorized officer of **JOE F. BALL COMPANY, INC.**

Buyer assumes all risk of use or handling, whether in accordance with directions or not.

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