

70529-1

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

JAN 11 2011

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Robin E. Bolte
Chemical Formulators, Inc.
3901 N.W. 115th Avenue
Miami, FL 33178

FILE COPY

Subject: CHLORINE GAS
EPA Reg. No.: 70529-1
Application Dated: October 6, 2010
Receipt Dated: October 14, 2010

Dear Ms. Bolte:

The labeling for the product referred to above submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (FIFRA) is accepted subject to the comments/conditions listed below.

Conditions:

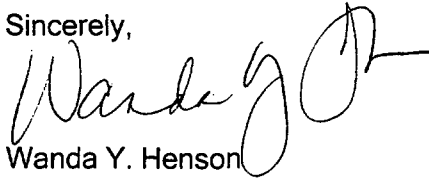
1. The routes of exposure under the First Aid section must appear in the following order: If Inhaled, If On Skin Or Clothing, If In Eyes, If Swallowed.
2. Revise the "Hazards to Humans and Domestic Animals" statement as follows:
DANGER. Fatal if inhaled or absorbed through the skin. Corrosive. Cause irreversible eye damage and skin burns. Do not breathe vapors or get in eyes, on skin or clothing. Wear goggles, protective clothing 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. Prolonged frequently repeated skin contact may cause allergic reactions in some individuals.
3. Add the "First Aid" heading above the routes of exposure on the label.
4. This product is classified as toxicity category 1, which requires the First Aid statement to appear on the Front Panel.

General Comment:

A stamped copy of the labeling accepted with conditions is enclosed. Submit one copy of your final printed labeling before distributing or selling the product bearing the revised labeling.

Should you have any questions or comments concerning this letter, please contact me at Henson.Wanda@epa.gov or on (703) 308-6345.

Sincerely,



Wanda Y. Henson
Acting Product Manager - Team 32
Regulatory Management Branch II
Antimicrobials Division (7510P)



ACCEPTED
with COMMENTS
in EPA Letter Dated:

JAN 11 2011

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

70529-1

CHLORINE GAS

(CHLORINE LIQUEFIED GAS UNDER PRESSURE)

Chlorine, Hazard Class 2.3, UN1017, Poison-Inhalation Hazard Zone B, RQ

Chemical Formulators, Inc.

5215 W. Tyson Ave. Tampa, FL 33611 (813) 832-4868

DO NOT REMOVE THIS TAG

Net Contents: 150 lbs. 2000 lbs.

KEEP OUT OF REACH OF CHILDREN

DANGER  **POISON**

SEE BACK PANEL FOR ADDITIONAL PRECAUTIONS

***FOR USE AS A DISINFECTANT, SANITIZER AND/OR ALGAEICIDE**, by experienced personnel only,
in municipal water supplies, sewage and waste management plants, industrial water, water cooling
systems, pulp and paper mills, in sanitizing food handling premises and equipment, wash water for
agricultural commodities, repackaging into portable containers, and industrial, residential,
or commercial swimming pools.

Certified to NSF/ANSI Standard 60. Maximum use in potable water is 30mg/L.

ACTIVE INGREDIENT:

- Chlorine: 99.5%
- Other: .5%
- Total: 100%

FATAL IF INHALED - LIQUID CAUSES SEVERE BURNS
HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS

Danger: Fatal if inhaled or absorbed through the skin. Corrosive. Causes irreversible eye damage and skin burns. Do not breathe vapors or get in eyes, on skin or clothing. Wear goggles, protective clothing and rubber gloves as discussed below. Wash hands thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash clothing before reuse. Prolonged frequently repeated skin contact may cause allergic reactions in some individuals.

EPA REG. NO. 70529-1, EPA EST. 70529-FL-001

PRECAUTIONARY STATEMENTS

Inhalation: If inhaled, move person to fresh air and get medical attention immediately. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. If breathing is difficult, oxygen should be administered by qualified personnel. Call poison center or medical physician for treatment advice.

Skin Irritation (Skin or Clothing Contact with Liquid Chlorine): In case of skin contact, immediately flush skin with plenty of water for at least 30 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Destroy contaminated shoes.

Skin Irritation (Contact with Gaseous Chlorine): In case of skin contact, immediately flush skin with plenty of water for at least 30 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: If swallowed, call poison control center or medical physician immediately for treatment advice. Have the product label with you when calling or going for medical treatment. Have exposed person sip a glass of water if able to swallow. DO NOT INDUCE VOMITING unless told to by a poison control center or medical physician. DO NOT give anything by mouth to an unconscious person.

Eye: In case of eye contact, immediately flush eyes with plenty of water for at least 30 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eyes. Get medical attention immediately.

Note to Physician: Symptoms may become more severe up to 36 hours after exposure including pulmonary edema. Probable mucosal damage may contraindicate the use of gastric lavage.

HAVE THE PRODUCT LABEL WITH YOU WHEN CALLING A POISON CONTROL CENTER OR MEDICAL PHYSICIAN, OR GOING FOR TREATMENT.

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment requirements will vary depending on how the chlorine is being used. Refer to Chlorine Institute Pamphlet #65 for specific recommendations. Applicators and other handlers must wear long-sleeved shirts, pants, shoes, and socks.

In case of spill or leakage: Under normal conditions, no protective eyewear, respirator, or gloves are required. However, in case of a leak, handlers must wear chemical-resistant gloves (such as any waterproof material) and a full-face canister-style (gas-mask) respirator with a canister approved for chlorine (MSHA/NIOSH approved number prefix TC-14G). Since there is always the possibility of a leak, gloves and a respirator of a type specified above must be available. Gloves and respirator are required for anyone entering into an affected area in the event of a leak.

ENVIRONMENTAL HAZARDS

This pesticide is toxic or highly toxic to fish and aquatic invertebrates. 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 plant authority. For guidance contact your State Water Board or regional Office of the EPA.

PHYSICAL AND CHEMICAL HAZARDS

Chlorine is a non-flammable gas stored and shipped as a liquefied gas under pressure. Do not drop or heat the container. Keep away from heat. Chlorine is corrosive to most metals in the presence of moisture.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Before working with this product, handlers must be trained how to appropriately handle and use chlorine. Use only in well ventilated areas. Refer to the appropriate Chlorine Institute Pamphlet for instructions on the required product use and safety procedures. NEVER TAMPER WITH FUSIBLE PLUGS OR ATTEMPT TO ALTER OR REPAIR CYLINDERS, TONS OR VALVES. This product, including dispensing equipment, must be handled and used in accordance with the practices specified by all applicable product labeling and the appropriate Chlorine Institute Pamphlet. To contact the Chlorine Institute, call (703) 741-5760 or visit its website at www.CI2.com.

Chlorine Manual	CI Pamphlet #1	Railcar Handling	CI Pamphlet #66
Piping Systems	CI Pamphlet #6	Cylinders at Swimming Pools	CI Pamphlet #82
Chlorine Packaging Plants	CI Pamphlet #17	Potable Water Treatment	CI Pamphlet #155
Cargo Tank Handling	CI Pamphlet #49	Wastewater Treatment	CI Pamphlet #155
Emergency Response	CI Pamphlet #64		
Personal Protective Equipment	CI Pamphlet #65		

Applications

- As a disinfectant in potable water and wastewater treatment.
- As a disinfectant and algaecide in non-residential swimming pools.
- As a disinfectant and algaecide in pulp and paper process water systems, and
- For cooling tower water treatment,
- As a sanitizer for wash water treatment of food handling premises and equipment.
- For wash water for raw agricultural commodities and certain other food commodities.
- For repackaging into smaller containers.

The registrant is solely responsible for the safety of the servicing equipment used with this pesticide, and for the repackaging of this gas from the larger containers into portable cylinders and ton containers. Each repackager must obtain its own EPA Registration Number for this pesticide for the use, and its own EPA Establishment Number from the EPA. Repackagers may only dispense its product to portable containers that are approved for chlorine and are appropriately labeled.

STORAGE AND DISPOSAL

Storage: Store cylinders and ton containers in a dry area away from sources of heat and protected from intense sunlight. Do not store in excessive heat. Segregate chlorine containers from other compressed gases and never store near hydrocarbons, finely divided metals such as filings or granules, turpentine, ether, anhydrous ammonia, or other flammable materials. All storage containers and cylinders must have a weather resistant label and must not be accessible to the general public. Do not drop container. If container is damaged or leaking, refer to procedures in the Chlorine Manual and the appropriate Chlorine Emergency Kit Manual and/or notify supplier immediately.

Leak Procedures: Make daily inspections for leaks. Stop a leak at once since it will become worse with time. In case of leak, evacuate everyone from the immediate area. For entry into the affected area to correct problem, wear personal protective equipment (including prescribed respirators) specified in the Hazards to Humans section of this labeling. When possible, move leaking or damaged cylinders outdoors or to an isolated location. Observe strict safety precautions. Work upwind, if possible. Allow any liquid chlorine to evaporate. Only correctly trained and Personal Protective Equipment (PPE)-equipped handlers are to perform such cleanup. Do not permit entry into the leak area by any other person until the chlorine has completely dispersed.

Disposal of Container:

Refillable container. Refill container with Chlorine Gas only. Do not reuse this container for any other purpose. Container is returnable and must be properly identified with return tag and returned as promptly as possible to supplier according to prescribed instructions and practices in CI Pamphlet #76 for cylinders and ton containers, CI Pamphlet #49 for chlorine cargo tanks and CI Pamphlet #66 for tank cars. All valves must be closed tight and closures or caps secured. It is illegal to ship a leaking chlorine container. Follow U.S. DOT regulations for returning empty containers, including proper installation of valve protective housing for all storage and shipments.

DANGER: Empty package contains chlorine residue.

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