

464-99

10-14-2003

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October 14, 2003

Rhonda Vance-Moeser  
The Dow Chemical Company  
2020 Dow Center  
1803 Building  
Midland, MI 48674

Subject: Chlorine Liquid  
EPA Registration No. 464-99  
Application Date: July 30, 2003  
Receipt Date: August 1, 2003

Dear Ms. Rhonda Vance-Moeser:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below:

Conditions

- 1. Revise the Ingredient statement as follows:

Active Ingredient:

Chlorine .....	99.5%
Other Ingredients .....	<u>0.5%</u>
Total .....	100%

- 2. The Precautionary Statement should read:

HAZARDS TO HUMAN 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.

CONCURRENCES

SYMBOL	7510C						
SURNAME	Mitchell						
DATE	10-14-03						

**General Comments**

*A stamped copy of the labeling accepted with conditions is enclosed. Submit a 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 Wanda Mitchell at (703) 308-6345.*

*Sincerely,*



*Robert S. Brennis  
Product Manager - Team 32  
Regulatory Management Branch II  
Antimicrobials Division (7510C)*

FOR USE ONLY BY TRAINED PERSONNEL

BULK

# Chlorine, Liquid

## Liquefied Gas Under Pressure

Active Ingredient: Chlorine . . . . . 99.5%  
Inert Ingredients . . . . . 0.5%  
100%

KEEP OUT OF REACH OF CHILDREN

**DANGER** ☠ **POISON**

**FATAL IF INHALED.**  
**LIQUID CAUSES SEVERE BURNS.**

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Fatal if inhaled. Corrosive. Causes irreversible eye damage and skin burns. Do not breathe vapors or get in eyes, on skin or clothing. Wear appropriate personal protective equipment.

**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.

EPA Reg. No. 464-99  
EPA Est. No. 464-TX-1 \_\_\_\_\_  
464-LA-1 \_\_\_\_\_



THE DOW CHEMICAL COMPANY  
Midland, Michigan 48674 U.S.A.  
(989)636-4400

\* Trademark of THE DOW CHEMICAL COMPANY

FIRST AID	
<b>If inhaled</b> •••••	<ul style="list-style-type: none"> <li>• If inhaled, remove to fresh air and get medical attention immediately.</li> <li>• If not breathing, give artificial respiration.</li> <li>• If breathing is difficult, oxygen should be administered by qualified personnel.</li> </ul>
<b>If on skin or clothing</b> (Contact with liquid chlorine) •••••	<ul style="list-style-type: none"> <li>• In case of skin contact, immediately flush skin with plenty of water for at least 30 minutes while removing contaminated clothing and shoes.</li> <li>• Get medical attention immediately.</li> <li>• Wash clothing before reuse. Destroy contaminated shoes.</li> </ul>
<b>If on skin</b> (Contact with gaseous chlorine) •••••	<ul style="list-style-type: none"> <li>• In case of skin contact, immediately flush skin with plenty of water for at least 30 minutes while removing contaminated clothing and shoes.</li> <li>• Get medical attention immediately.</li> <li>• Wash clothing before reuse. Destroy contaminated shoes.</li> </ul>
<b>If in eyes</b> •••••	<ul style="list-style-type: none"> <li>• In case of eye contact, immediately flush eyes with plenty of water for at least 30 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes then continue rinsing eyes.</li> <li>• Get medical attention immediately.</li> </ul>
NOTE TO PHYSICIAN	
Symptoms may become more severe up to 36 hours after exposure including pulmonary edema.	
HOT LINE NUMBER	
<b>IN CASE OF AN EMERGENCY</b> endangering life or property involving this product, call collect (989)636-4400. Have the product container of EPA with you when calling a poison control center or doctor or going for treatment.	

ACCEPTED

WHOLE COMMENTS

EPA Letter Dated:

OCT 14 2003

NET WT:  
16295-6/25/2003-2049

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 464-99

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# Chlorine, Liquid

## Liquefied Gas Under Pressure

**In Case of Spill or Leak:** Handlers must wear chemical-resistant gloves (such as nitrile or butyl) and a respirator (NIOSH approved) or SCBA if the chlorine concentration is unknown or exceeds IDLH (Immediately Dangerous to Life or Health) concentration, as recommended by NIOSH. Gloves, eye wear, appropriate protective clothing and a SCBA are required for anyone entering into an affected area in the event of a leak.

### PHYSICAL AND CHEMICAL HAZARDS

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

### ENVIRONMENTAL HAZARDS

This chemical is highly toxic to fish and aquatic invertebrates. Do not discharge effluents containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with National Pollutant Discharge Elimination System (NPDES) Permits. Do not discharge this product to sewer systems without first notifying the local wastewater plant that will receive the discharge.

### STORAGE AND DISPOSAL

**STORAGE:** Do not store in excessive heat. Make daily inspections for leaks. Stop leak at once, referring to procedures in the Chlorine Manual and the appropriate Chlorine Emergency Kit Manual and/or notify the supplier immediately.

**CONTENTS:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods pertain only to the product as shipped and must be in compliance with all federal, state/provincial and local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

**DISPOSAL OF CONTAINER:** Container is returnable and must be properly identified with return tag and returned as promptly as possible to supplier according to DOT regulations. All valves must be closed tight and closures or caps secured. It is illegal to ship a leaking chlorine container. Prescribed instructions for returning empty chlorine containers may be found in CI Pamphlet #66 for tank cars.

### 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 appropriately trained. Use only in well ventilated areas.

Refer to the appropriate Chlorine Institute Pamphlet for instructions on the required product use and safety procedures. This product, including dispensing equipment, must be handled and used in accordance with the practices specified by all applicable product labeling and the appropriate CI Pamphlet. To contact the Chlorine Institute call (703)741-5760 or visit its website [www.Cl2.com](http://www.Cl2.com)

### Applications:

• Chlorine Manual	CI Pamphlet #1
• Piping Systems	CI Pamphlet #6
• Chlorine Packaging Plants	CI Pamphlet #17
• Cargo Tank Handling	CI Pamphlet #49
• Emergency Response	CI Pamphlet #64
• Personal Protective Equipment	CI Pamphlet #65
• Railcar Handling	CI Pamphlet #66

Only for formulation into an algaecide, simicide, disinfectant or sanitizer and for the following uses:

- As a disinfectant in potable and wastewater treatment,
- As a disinfectant and algaecide in residential and 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, or
- For manufacture of sodium hypochlorite.

For Non-Pesticide Use as a chemical intermediate in manufacturing a wide range of chemical products.

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

ACCEPTED  
WITH COMMENTS  
EPA Letter Dated:

OCT 14 2003

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Federal Insecticide,  
Fungicide and  
Rodenticide Act  
464-99  
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