



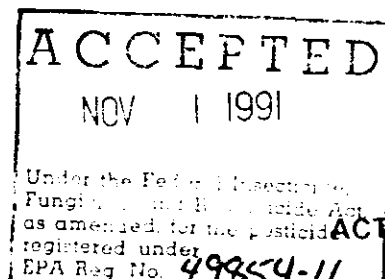
READ ALL PARTS OF THIS LABEL

# CYTOX<sup>®</sup> 2050

## Industrial Microbiocide

(For use in recirculating water cooling towers, and sewage disposal lagoons)

**DANGER! KEEP OUT OF REACH OF CHILDREN**  
**FLAMMABLE LIQUID AND VAPOR**  
**CORROSIVE; CAUSES EYE AND SKIN DAMAGE**  
**HARMFUL IF SWALLOWED OR INHALED**



See side panel for additional precautions

**ACTIVE INGREDIENT:**

Dodecylguanidine hydrochloride ..... 33%

**INERT INGREDIENTS** ..... 67%

EPA Reg. No. 49854-11

EPA Est. No. 1730-WV-1

**NET CONTENTS: 53 Gallons**

**(2.64 pounds active ingredient per gallon)**

**CONDITIONS OF SALE**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patent, nor constitute permission, inducement or recommendation to practice any invention covered by any patent owned or controlled by American Cyanamid or by others, without authorization from the owner or party controlling the patent. The patents owned or controlled by American Cyanamid which are not licensed include, but are not limited to, U.S. Patent Numbers, 2,906,595, and 3,436,461 and such named patents are available for licensing upon written request.

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**American Cyanamid Company**  
**WAYNE, NEW JERSEY 07470 Emergency Phone: 201-835-3100**

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**HAZARDS TO HUMANS  
AND DOMESTIC ANIMALS  
DANGER**

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**DO NOT GET IN EYES**

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Wear goggles or face shield when handling. Do not put your fingers to your eyes.

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**DO NOT GET ON SKIN**

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Wear rubber gloves when handling and wash thoroughly afterward.

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**DO NOT GET ON CLOTHING**

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If you spill some of this product on your clothing or shoes, remove the contaminated clothing and shoes at once and wash them before reuse.

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**DO NOT BREATHE VAPORS**

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Use only with adequate ventilation or wear appropriate respiratory protection to avoid breathing aerosols, mists or vapor of this product.

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**STATEMENTS OF PRACTICAL TREATMENT**

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**IN CASE OF CONTACT**, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

**IF SWALLOWED**, drink promptly a large quantity of milk, gelatin solution or if these are not immediately available, drink large quantities of water. Avoid alcohol. Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

**IF INHALED**, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.

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**NOTE TO PHYSICIAN**

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Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

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**IN CASE OF ACCIDENT**

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**SPILL OR LEAK:** Prevent eye and skin contact. Wear protective equipment such as chemical splash-proof goggles or face shield and rubber gloves. For large spills, a NIOSH-approved, positive pressure, self-contained respirator and rainsuit is recommended. Cover spills with some inert absorbent material. Sweep up absorbed spill and place in a waste disposal container for proper disposal. Flush spill area with water.

**FIRE:** On small fire use dry chemical or carbon dioxide. On large fire use water spray or alcohol foam. Wear self-contained, positive-pressure breathing apparatus and full firefighting protective clothing.

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**STORAGE AND DISPOSAL**

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**STORAGE:** Keep away from heat, sparks, and open flame. Do not puncture or incinerate container. Store this product between 60° F and 110° F. Keep drum tightly closed when not in use.

**DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration, if allowed by state and local authorities. If burned, stay out of smoke.

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**ENVIRONMENTAL HAZARDS**

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This pesticide is toxic to fish. Do not discharge effluent containing this active ingredient into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

ACCEPTED

NOV 1 1991

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
labeled under  
EPA Reg. No. 49954-11

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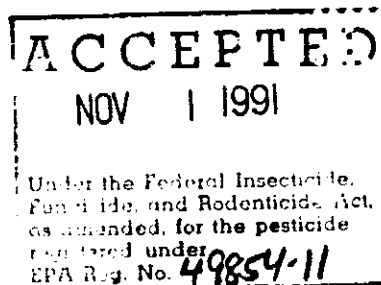
## DIRECTIONS FOR USE

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

**INDUSTRIAL RECIRCULATING WATER COOLING TOWERS.** This product reduces the growth of algae, bacteria and fungi in industrial recirculating water cooling towers. Reduction of microbial growth is obtained by the addition of CYTOX 2050 as a slug dosage one to three times per week at a dosage of 5.3 to 8.0 ounces (by weight) per one thousand gallons of water in the system (40 to 60 parts of product per million parts of water by weight). Once the reduction is accomplished, the addition of CYTOX 2050 can be reduced to a periodic dosage of 2.7 to 5.3 ounces (by weight) per one thousand gallons of water, once per week, or as needed. For application by proportioning pump, these dosages should be calculated on the basis of each one thousand gallons of bleed-off. The basin of the tower or a line from a hot well are suitable addition points. Application should be made to systems when the presence of microbial contamination is first noticed. Water cooling towers which are heavily contaminated should be cleaned manually before treatment with this product. Do not use in potable water systems.

**SEWAGE DISPOSAL LAGOONS.** This product reduces the growth of algae on the surface of sewage disposal lagoons which, if unchecked, can cause the lagoon to become totally anaerobic and emit odors. Dilute CYTOX 2050 with water to accommodate the delivery characteristics of the pump and spray rig, and apply evenly to the surface of the lagoon. Dosage should be 1.0 to 1.5 ounces (by weight) of CYTOX 2050 per 100 square feet of surface, depending on the population density of the algal blooms. The interval between treatments will be determined by the reappearance of floating algal blooms and subsequent treatments should be made as spot treatments at the same dosage as the initial treatment. A small outboard motorboat equipped with a tank-pump-spray boom assembly can be used to traverse the lagoon between flagmen on opposite shores in order to lay down an even spray pattern.

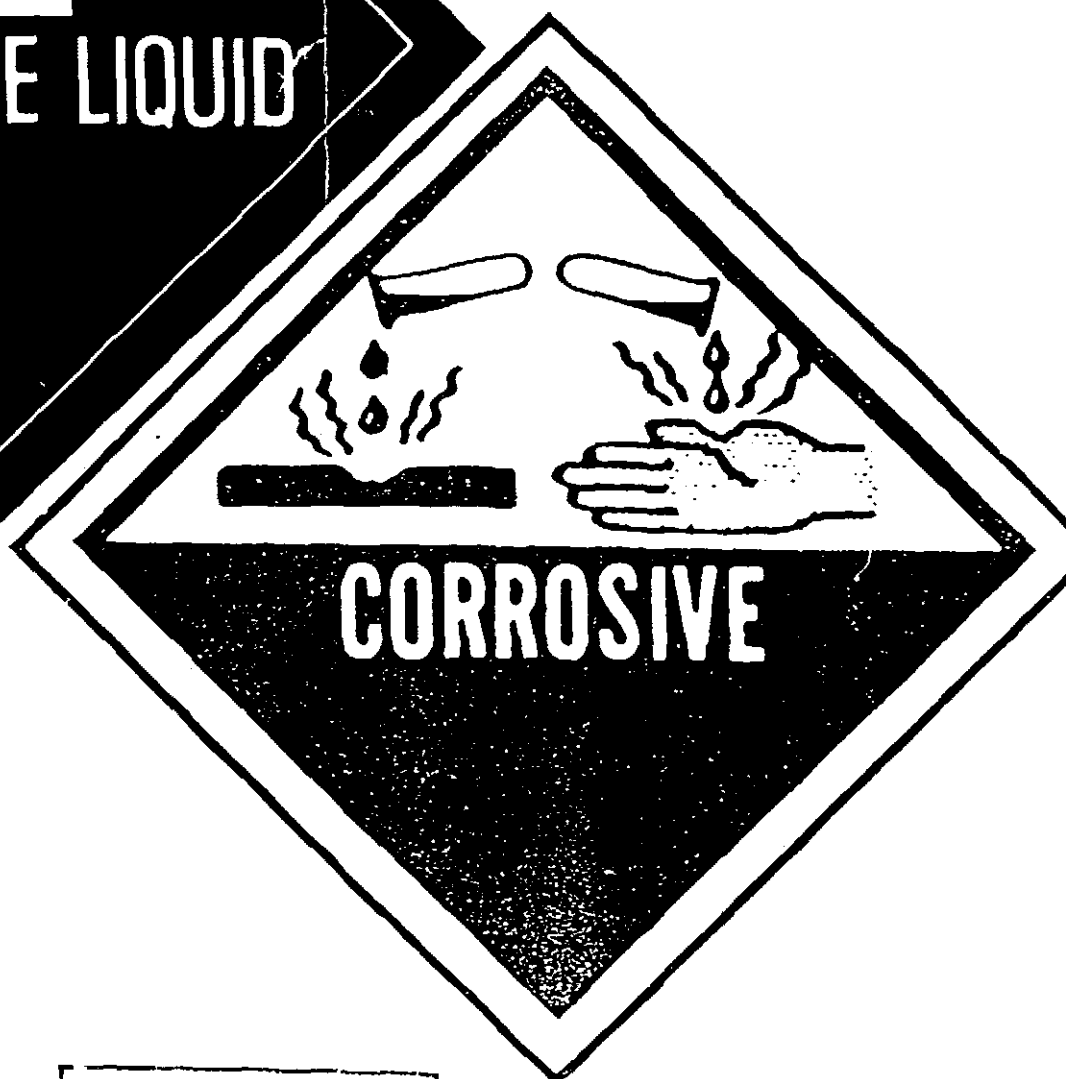
LBL 2762 R6 12/90



FLAMMABLE LIQUID, CORROSIVE, N.O.S.  
(Contains isopropanol and dodecylguanidine  
hydrochloride)

UN 2924

Flash Point 95°F



Before handling this material, read  
American Cyanamid Material Safety  
Data Sheet for more detailed  
safety, health and environmental  
data.

The following components of this  
product are listed in accordance  
with right-to-know laws.

| CAS No.     | Component                         |
|-------------|-----------------------------------|
| 000067-63-0 | Isopropanol                       |
| 000461-58-5 | Dicyandiamide                     |
| 000229-73-7 | Dodecylamine<br>hydrochloride     |
| 007732-18-5 | Water                             |
| 013590-97-1 | Dodecylguanidine<br>hydrochloride |

ACCEPTED

NOV 1 1991

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registration under  
EPA Reg. No. 49854-11

