

# **Cleaning And Disinfecting**

**Work**

**Time**

**Cost**

# Methods

Dry

- Brush or blow down walls
- Fans on full speed

# Methods

## Wet

- Foam on soap
- Rinse
- Let building dry

# **CLEANING IS ESSENTIAL TO DISINFECTION**

- The success of disinfectant sterilant efficacy is based on thorough cleaning
- 85-90% of microorganisms are removed in the pre-cleaning process
- The goal is microbial control/reduction

# CFU REDUCTIONS AT NORTH CAROLINA STATE UNIVERSITY

HOUSE STATUS	CFU/ sq inch	% reduction
dirty	3,000,000	
blown down (air)	2,900,000	3.4
air out	2,000,000	31
washed w. water	500,000	75
washed w. detergent	100,000	80
disinfected	< 1,000	> 99

**All** the Disinfectants in the world, including Formaldehyde, will not cover up the sin of improper cleaning!

**How can we measure  
Cleanliness?**



# How can we measure cleanliness?

Break it down into 2 parts –

**Visibly Clean:** a supervisor/manager must check constantly and have unsatisfactory results corrected

**INSPECT WHAT YOU EXPECT!**

**Microbiologically Clean:** monitor (direct contact swabs and air plates) to measure, maintain, and improve hygiene

# An Alternative Method

Bioluminescence Testing measures the presence of ATP. A higher ATP level indicates an unclean surface with organic matter present.

This testing method gives instant results.

# ATP Testing Results in a Hatchery

<u>Hatcher Wall</u>	<u>Hatcher A</u>	<u>Hatcher B</u>	<u>Hatcher C</u>
No cleaning-just pulled	1285	3878	10820
Rinsed only	337	516	800
Foamed & Rinsed	29	36	28
Foamed & <u>Hand Scrubbed</u> *		<u>Hatcher D</u>	<u>Hatcher E</u>
and Rinsed		17	12

\*ELBOW GREASE

A score **below 50 is considered clean** in food processing plants where ATP testing is widely and routinely used.







# HANDY FOAMER





Quote from:

INTERNATIONAL HATCHERY PRACTISE:

*“Too much emphasis is placed on disinfectants and sanitizers and not enough on the overall approach to hygiene.*

*The significance and importance of preparation and cleaning are often underestimated.”*



Some Facts and Definitions

About

DISINFECTANTS

And

The Correct Use

Of

Disinfectants

# DISINFECTANT

Definition:

DISINFECTANT – A CHEMICAL AGENT THAT KILLS MICROORGANISMS EXCEPT FOR RESISTANT BACTERIAL SPORES

- PROPER RESULTS IN 100% KILL OF LARGE BACTERIA, TARGET VIRUSES AND TARGET FUNGI

- MAY (Should Always) OR MAY NOT REQUIRE PRECLEANING

# Why do we use DISINFECTANTS?

Because,

Under optimal conditions (hatchery), a bacteria can divide every 20 minutes

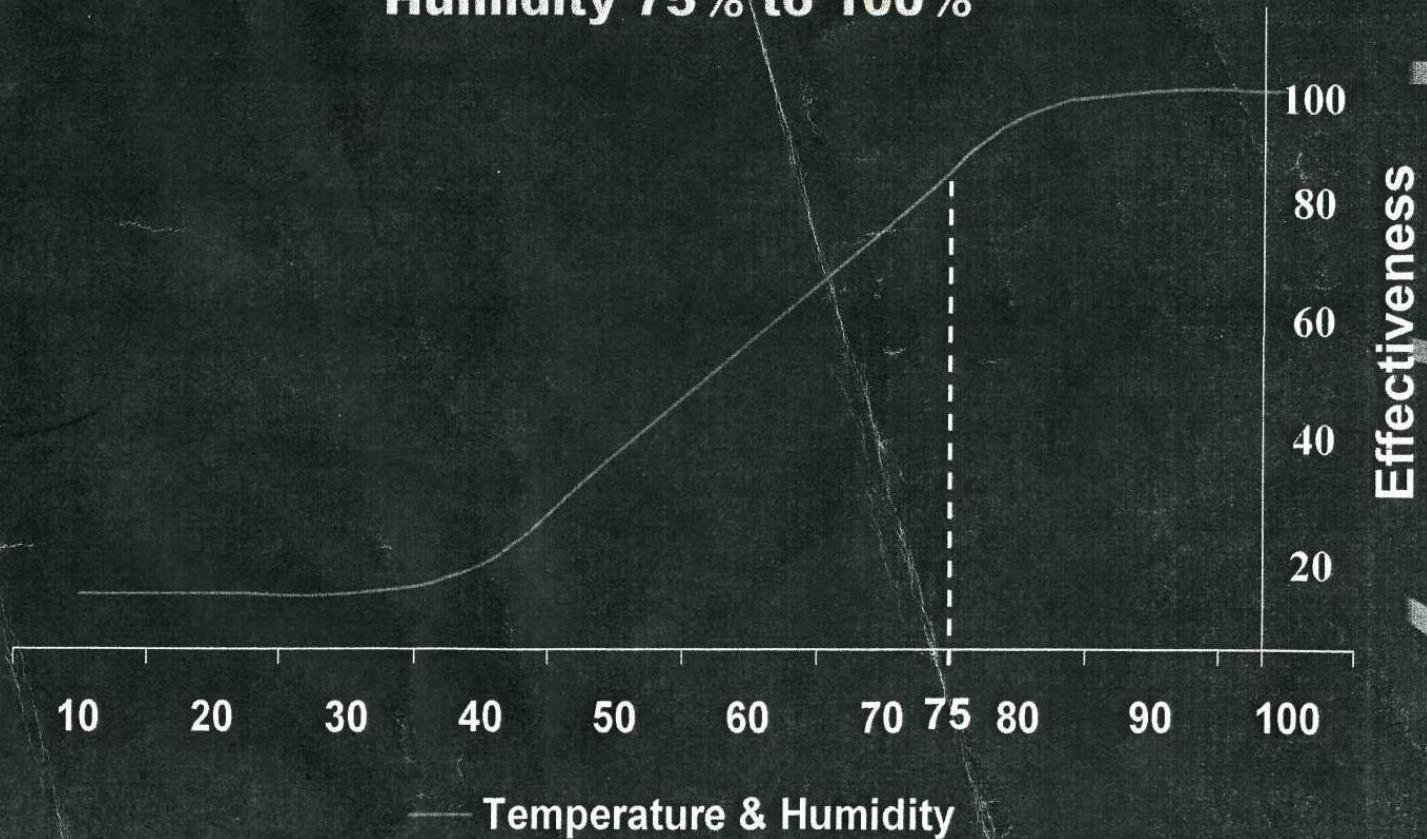
In 24 hours(72 divisions), one bacteria can theoretically become

4,700,000,000,000,000,000,000,000 cells

# The Wrong Disinfectant May Not Work as Planned



**Environmental Conditions for Formaldehyde Fumigation**  
**Temperature 75° F to 100° F**  
**Humidity 75% to 100%**



From Data Published by Dr. Joe Mauldin, UGA

# DISINFECTANT PROPERTIES

- Germicidal Activity
- Corrosive
- Worker Safety
- Volatility (Residual Properties)
- Environmental Issues
- Foam
- Application
- Cleaner Compatibility
- Suitable for Use

# DISINFECTANT SELECTION CRITERIA

- EPA Registered - documentation
- Broad Spectrum Activity – bacteria, viruses, fungi
- Speed of action
- Surface compatibility
- Quality and stability of manufacturer
- Application
- Personnel, safety in handling
- Environmental biodegradability

# Formaldehyde

has been classified as a human carcinogen  
by WHO Int'l agency for research on cancer

Gluteraldehyde not



# CHEMICAL DISINFECTANT TYPES

## Based on Active Ingredient(s)

- Phenolics
- Quats
- Iodine
- Chlorine dioxide
- Hydrogen peroxide
- Peracetic acid
- Hydrogen peroxide/Peracetic acid combo
- Glutaraldehyde
- Formaldehyde
- Quat/Glutaraldehyde combo
- Alcohol
- Sodium hypochlorite

# Phenols

- Tek Trol
- Pheno Tek
- Bio Phene
- Environ One Stroke

# Quats

- Quatamone
- Bio Quat 20
- Quatcide
- 904

# Quat/Glutaraldehyde

- Virocid
- Synergize

# Chlorine Dioxide

- Oxine 2%
- Pro Oxine 5%
- Anthium Dioxide

# Hydrogen Peroxide/Peracetic Acid

- Cid 2000
- Kickstart

# Glutaraldehyde

- Aldacide
- Glutex

# **THE IMPORTANCE OF INERT INGREDIENTS within a DISINFECTANT**

The proper combination of “inerts” (not actives) can greatly enhance the germicidal activity of a disinfectant.

For example:

Iodine needs a certain % of acid (12-14%) to keep the pH low for the iodine to remain active.

Phenol compounds are not water soluble so they must be saponified with a high grade soap within the formulation to make it usable.



Quats need surfactants and chelating agents in the formula to synergistically improve the microbial activity, especially against gram negatives such as *Pseudomonas aeruginosa*.

Hydrogen peroxide and Peracetic acid must be stabilized properly so that the hydroxyl radical is actively available.













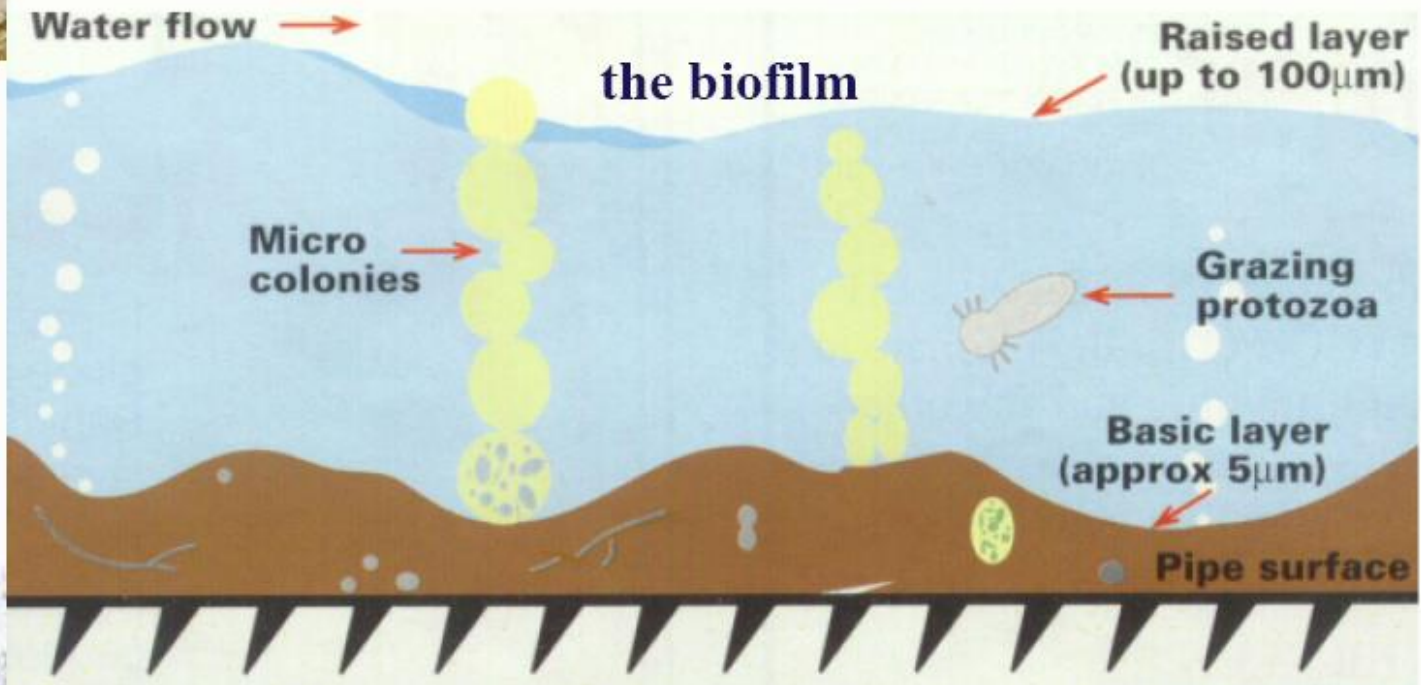


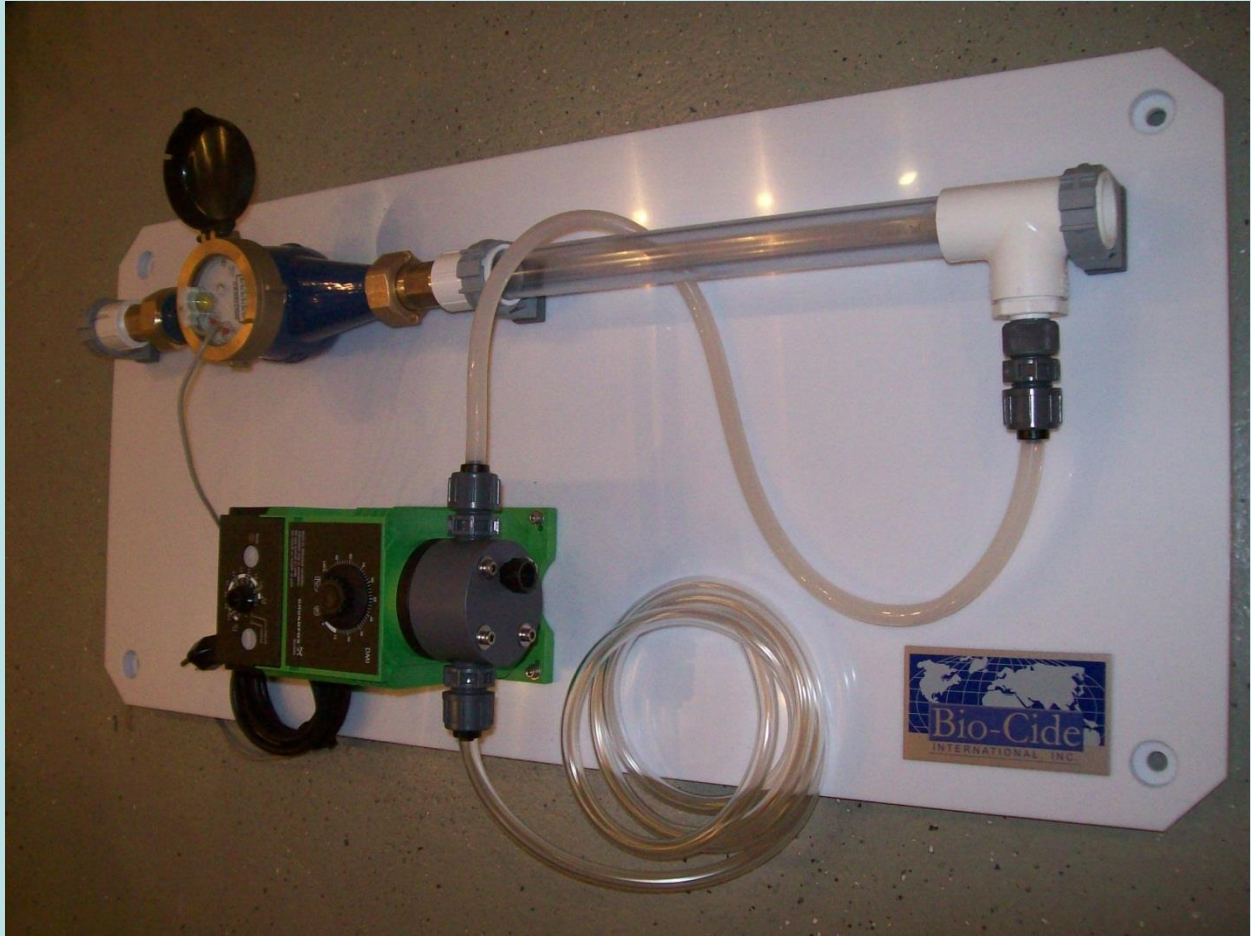
# WATER LINES

Drinking water hygiene :

*the last frontier*

**CID LINES®**  
INNOVATIVE HYGIENE SOLUTIONS







**Use disinfectants with precaution.**

**Before any use read the label and  
the information concerning the  
product.**







CONCENTRATED BROAD SPECTRUM DISINFECTANT

# KEEP OUT OF REACH OF CHILDREN DANGER

## Active ingredients :

ALKYL\* DIMETHYL BENZYL AMMONIUM CHLORIDE

\* (50% C14; 40% C12; 10% C16)

DIDECYL DIMETHYL AMMONIUM CHLORIDE

GLUTARALDEHYDE

## Inert ingredients

17.060 % (by wt)

7.800 %

10.725 %

64.415 %

100.000 %

## PRECAUTIONARY STATEMENTS :

Hazards to Humans and Domestic Animals.

**DANGER. CORROSIVE.**

Causes irreversible eye damage and skin burns. May be fatal if absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear protective eyewear, protective clothing, and rubber gloves. Harmful if inhaled. Avoid breathing vapor. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

## ENVIRONMENTAL HAZARDS :

This pesticide 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.

EPA Reg. No.: 71355-1  
EPA Est. No.: 150-MN-1  
BATCH No.: see top / bottom  
EXPIRY DATE: see top / bottom  
Net contents: 1.3 GAL (5 liters)

UN 1760 CORROSIVE LIQUID, N.O.S. (Alkyl dimethylbenzyl ammonium chloride, Glutaraldehyde), 8, III

## FIRST AID STATEMENTS

Have product container with you when calling the poison control center, doctor, or going for medical treatment.

IF IN EYES	-Hold eyelids open and rinse slowly and gently with water for 15-20 minutes. -Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. -Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	-Take off contaminated clothing. -Rinse skin immediately with plenty of water for 15-20 minutes. -Call a poison control center or doctor for treatment advice.
IF SWALLOWED	-Call a poison control center or doctor immediately for treatment advice. -Have person sip a glass of water if able to swallow. -Do not induce vomiting unless told to do so by the poison control center or doctor. -Do not give anything by mouth to an unconscious person.
IF INHALED	-Move person to fresh air. -If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. -Call a poison control center or doctor for further treatment advice.

## NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

## VIROCID® is effective against:

Bacteria	Dilution	Virus (on environmental surfaces) :	Dilution
<i>Salmonella choleraesuis</i> (ATCC 14028)*	1:400	Porcine circovirus, type II (PCV, PT-1 cell)*	1:200
<i>Staphylococcus aureus</i> (ATCC 6538)*	1:400	Infectious Bursal Disease of Chickens (IBD/Strain 2512)*	1:400
<i>Pseudomonas aeruginosa</i> (ATCC 15442)*	1:400	Newcastle Disease Virus (Spafas Strain)*	1:400
<i>Streptococcus suis</i> (ATCC 43765)*	1:400	Avian Influenza (Turkey/Wis/66 strain - H5N2)*	1:400
<i>Escherichia coli</i> (ATCC 11229)*	1:400	Avian Rotavirus (Spafas strain)*	1:256
<i>Mycoplasma hyopneumoniae</i> (ATCC 25934)***	1:400	Pseudorabies Virus (American Bio Research strain)*	1:400
<i>Salmonella choleraesuis</i> subsp. <i>Choleraesuis</i> , serotype <i>typhimurium</i> (ATCC 8321)*	1:400	Marburg Disease Virus (Spafas strain)*	1:400
Fungus (on environmental surfaces) :		Avian Infectious Laryngotracheitis (Charles River laboratories)*	1:400
<i>Trichophyton mentagrophytes</i> (ATCC 9533)*	1:400	Porcine Respiratory and Reproductive Syndrome Virus (Arko Laboratories)*	1:400
Algae and slime forming bacteria in recirculating water cooling systems and evaporative condensers	25-50 ppm		

\*in the presence of 400 ppm ACAC synthetic hard water and 5% soil load / \*\*\* in the presence of 400 ppm ACAC synthetic hard water and 25% soil load

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**CID LINES®**  
INNOVATIVE HYGIENE SOLUTIONS

Internet:  
www.cidlines.com  
www.virocid.com



#### APPLICATION :

Disinfection of non-food surfaces, farm, animal, and poultry housing facilities and equipment :

1. Farm Equipment and animal housing buildings (poultry & turkey grow-out houses, laying houses, swine production and housing, barns and large animal buildings)
2. Hatcheries, Setters, and chick processing facilities
3. Food processing plants (slaughterhouses)
4. Trucks and other vehicles
5. Veterinary hospitals.

Sanitizing hatchery rooms, incubators and hatchers, poultry houses and livestock buildings by fogging. Control of algae and slime forming bacteria in recirculating water cooling water systems and evaporative condensers.

#### DIRECTIONS FOR USE :

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

##### Disinfection of non-food surfaces,

##### farm, animal, and poultry housing facilities and equipment :

1. Farm equipment and animal housing buildings (poultry & turkey grow-out houses, laying houses, swine production and housing, barns and large animal buildings) :

For disinfection of hard, non-porous surfaces : stainless, galvanized and painted steel, copper, aluminum, finished wood, vinyl, plastics, sealed brick walls, aluminum sandwich panels and feeding/drinking equipment:

- A. Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks, and other feeding and watering appliances.
- B. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate all surfaces with the appropriate disinfection solution\* by using a coarse spray, mop, or sponge. Surfaces must remain wet for 10 minutes.
- C. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed or dried.
- D. Thoroughly scrub treated feed racks, troughs, and other feeding and water appliances with soap or detergent and rinse with potable water before reuse.
- E. Disinfection of equipment : Immerse all halters, ropes, and other types of restraining equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure in the appropriate disinfection solution\* for 10 minutes. Allow to air dry.
- F. Fresh disinfection solution should be made daily or if visibly soiled.

2. Hatcheries: Remove all animals from the area. Thoroughly clean all surfaces (hatchers, setters, trays, racks, carts, sexing tables, chick boxes, cages) with soap or detergent, then rinse with water. Saturate all surfaces with the appropriate disinfection solution\* by using a coarse spray, mop, or sponge. Surfaces must remain wet for 10 minutes. Do not house animals or employ equipment until surfaces have been absorbed or dried. Fresh disinfection solution should be made daily or if visibly soiled.

3. Food processing plants (including Chicken Processing Facilities): Before using this product, all food products and packaging materials must be removed from the room or carefully protected. Thoroughly clean all surfaces with soap or detergent, then rinse with water. Disinfect hard, non-porous surfaces by applying the appropriate disinfection solution\* with a coarse spray, mop, or sponge. All surfaces must remain thoroughly wet for 10 minutes. Allow to air dry. A potable water rinse is required for all surfaces that come into contact with food.

4. Trucks and other vehicles: Clean all vehicles including mats, crates, cabs, and wheels with high pressure water. Use the appropriate disinfection solution\* to treat all vehicles. Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes. Allow to air dry.

5. Veterinary hospitals: For disinfection of the following hard non-porous surfaces : floors, walls, ceilings, counters, cages, feeding/drinking equipment, and handling/restraining equipment. Remove animals and feed from the premises. Thoroughly clean all surfaces with soap or detergent, then rinse with water. Saturate surfaces with the appropriate disinfection solution\* by using a coarse spray, mop, or sponge. Surfaces must remain wet for 10 minutes. Immerse all leashes, muzzles, ropes or other types of equipment used to restrain or handle animals as well as shovels, scrapers, and forks used to remove manure and litter. Do not house livestock or employ equipment until surfaces have been absorbed or dried. Thoroughly scrub treated feeding and watering equipment with soap or detergent and rinse with potable water before reuse. Fresh disinfection solution should be made daily or if visibly soiled.

#### Sanitizing hatchery rooms, incubators and hatchers, poultry houses and livestock buildings by fogging

- A. Hatchery rooms: Close room off so fog is confined to room to be treated. Prepare a stock solution of one (1) part VIROCID to four (4) parts water (25 fluid ounce VIROCID to 100 fluid ounce water). Insert the nozzle of the fogging device through a suitable opening in the room. With the setting on maximum output, fog 125 fluid ounces for each 1000 cubic yard. Do not allow people to breathe or contact the fog or to enter the room until the fog has completely settled or exhausted. Normally this is 1-4 hours in this environment. Note : The generated fog is very irritating to eyes, skin and mucous membranes. Under no circumstances should a room or building be entered by anyone until the fog has completely settled, normally 1-4 hours after the actual fogging. If the building or room must be entered, then the individuals entering the building or room must wear a self contained respirator approved by NIOSH/MSHA, goggles, long shirt, sleeves and pants.
- B. Incubators and hatchers: Prepare a stock solution of one (1) part VIROCID to four (4) parts water. Fog 3 ounces for 100 cubic feet of this into setters and hatchers immediately after transfer. Repeat daily. Discontinue hatcher treatments approximately 24 hours before pulling the hatch. Do not allow people to contact or breathe this fog and do not enter machines until the fog has settled (30-60 minutes after fogging is completed). To do this, install permanent fogging nozzles in setters and hatchers and use an air compressor to disperse the sanitizing solution as a fog. It is also satisfactory to fog setters and hatchers with a 1:1000 solution of VIROCID. If this is done, fog for 30-90 seconds once per hour or once every two hours.
- C. Poultry houses and livestock buildings: After the house has been depopulated and cleaned as in 1. A to F under "Disinfection of non-food surfaces, farm, animal, and poultry housing facilities and equipment", double check to be sure all people, poultry, livestock and pets have vacated the building. Close all windows, doors, curtains, etc. making the house as closed as tight as possible. Prepare a stock solution of one (1) part VIROCID to four (4) parts water (25 fluid ounce VIROCID to 100 fluid ounce water). Insert the nozzle of the fogging device through a suitable opening in the room. With the setting on maximum output, fog 125 fluid ounces for each 1000 cubic yard. The fogger itself may be placed just inside the door of the building to be treated, or the nozzle of the fogger may be inserted through a suitable opening in the door or building. The opening should be just large enough to accommodate the nozzle. After fogging, the building should be kept closed for twenty-four hours. After twenty-four hours, the fog should have settled and the house can now be opened and aired. The house should be opened for a minimum of twenty-four hours before it is repopulated with poultry or livestock. Note : The generated fog is very irritating to eyes, skin and mucous membranes. Under no circumstances should a room or building be entered by anyone until the fog has completely settled, normally 1-4 hours after the actual fogging. If the building or room must be entered, then the individuals entering the building or room must wear a self contained respirator approved by NIOSH/MSHA, goggles, long shirt, sleeves and pants. If feeders and waterers were not removed from the premise during treatment, or were not adequately covered to prevent contact with treatment, they should be washed with detergent and water before use for poultry or livestock.

#### Control of algae and slime forming bacteria in recirculating cooling water systems and evaporative condensers

- A. VIROCID should be added in the system directly and not mixed with any other chemicals or additives ; It should be added at a point where uniform mixing and even distribution will occur.
- B. Severely fouled systems should be chemically and/or manually cleaned before adding VIROCID treatment. If Algae/slime growth is absent or minimal, proceed with the initial dose.
- C. Initial Dose: 2.5 fluid ounces of VIROCID per 100 gallons of water (50ppm) in the system. Repeat treatment until algae/slime growth is controlled. Maintenance Dose: After algae control is evident/achieved, apply 1.25 fluid ounces of VIROCID per 100 gallons of water (25ppm) in the system every 7 days (weekly). Repeat treatment as needed to maintain algae/slime control.

#### STORAGE AND DISPOSAL:

Do not contaminate water, food, or feed by storage and disposal. Storage: Store in a cool, dry place in tightly closed container away from children. Avoid temperatures below 23°F and above 113°F. Disposal of pesticide: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or residue 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 representatives at the nearest EPA Regional Office for guidance. Disposal of container: Triple rinse. Then offer for recycling or puncture and dispose in a sanitary landfill. Dispose by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### Preparation table :

dilution	Preparation method
1:400	1/3 fluid ounce per gallon of water
1:250	1/2 fluid ounce per gallon of water
1:200	2/3 fluid ounce per gallon of water

#### LIMITED WARRANTY AND DISCLAIMER :

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is a reasonable fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings and other statements on this label are based upon responsible expert's evaluation of reasonable tests of effectiveness and of toxicity to laboratory animals. Tests have not been made on all varieties or in all states or under all conditions. The manufacturer neither makes nor intends, nor does it authorize any agent or representative to make, any other warranties, expressed or implied, and it expressly excludes and disclaims all implied warranties or merchantability and fitness for particular purpose. This warranty does not extend to, and the buyer shall be solely responsible for, any and all loss or damage which results from the use of this product in any manner which is inconsistent with the label directions, warnings or cautions. Buyer's exclusive remedy and manufacturer's or seller's exclusive liability for any and all claims, losses, damages, or injuries resulting from the use or handling of this product, whether or not such liability is based in the contract, negligence, strict liability in tort or otherwise, shall be limited, at the manufacturer's option, to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed. In no event shall manufacturer or seller be liable for special, indirect or consequential damages resulting from the use or handling of this product.

\*see table to determine the appropriate disinfection solution

# SAFETY DATA SHEET

Page : 1

Revised edition no : 7

Date : 19 / 1 / 2006

Supersedes : 1 / 9 / 2005

## VIROCID

### D004C5.3



C : Corrosive

<b>Health : 3</b>	WARNING : Corrosive or toxic. Avoid skin contact or inhalation.
<b>Flammability : 0</b>	Not combustible.
<b>Reactivity : 0</b>	Stable : Not reactive when mixed with water.
<b>Special Notice Key : --</b>	--

### Producer

CID LINES NV/SA  
Waterpoortstraat, 2  
B-8900 Ieper Belgique-Belgie  
Tel. + 32 57 21 78 77  
Fax +32 57 21 78 79  
In case of emergency : + 32 70 245 245

### Responsible for distribution

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In case of emergency : + 32 70 245 245

## 1. PRODUCT IDENTIFICATION

<b>Company identification</b>	: See producer.
<b>Trade name</b>	: VIROCID
<b>Use</b>	: Industrial. See product bulletin for detailed information.

## 2. HAZARD INGREDIENTS / IDENTITY INFORMATION

Substance name	Contents	CAS No	EC No	Index No	Classification
Water :	ca 47 %	7732-18-5	231-791-2	----	
Alkyldimethylbenzylammoniumchloride :	17.06 %	8001-54-5	231-635-3	----	Xn; R21/22 C; R34
Isopropanol :	146.3 g/l	67-63-0	200-661-7	603-117-00-0	F; R11 R67 Xi; R36
Glutaraldehyde :	10.725 %	111-30-8	203-856-5	605-022-00-X	T; R23/25 C; R34 R42/43 N; R50
Didecyldimethylammonium chloride :	7.8 %	7173-51-5	230-525-2	612-131-00-6	Xn; R22 C; R34
Non ionic surfactant :		----	----	----	Xn; R22 Xi; R41
Glyoxal :		107-22-2	203-474-9	605-016-00-7	Muta. Cat. 3; R68 Xn; R20 Xi; R36/38 R43
Complexing agent :		----	----	----	

## 3. PHYSICAL / CHEMICAL CHARACTERISTICS

Initial boiling point	: 200°F
Specific gravity	: 1.005
Vapour pressure mm/Hg	: No data available.
Relative vapour density (air=1)	: No data available.
Evaporation rate (ether=1)	: No data available.
pH value	: 3 - 5
Solubility in water	: Complete.
Odour	: Aldehyde.

**CID LINES NV/SA**

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## VIROCID

**D004C5.3**

### 3. PHYSICAL / CHEMICAL CHARACTERISTICS (continued)

Colour	: Colourless to light yellow.
Freezing point [°C]	: 15°F
Density	: ca. 1.005
Physical state	: Liquid.

### 4. FIRE AND EXPLOSION HAZARD DATA

Flammable class	: Not combustible.
Extinguishing media	: All extinguishing media can be used.
Special procedures	: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Special exposure hazards	: High temperature may liberate dangerous gases.
Explosion limits - lower [%]	: Not applicable.
Explosion limits - upper [%]	: Not applicable.

### 5. REACTIVITY DATA

Conditions to avoid	: Extremely high or low temperatures.
Materials to avoid	: None under normal conditions.
Hazardous decomposition products	: No data available.
Hazardous reactions	: Avoid contact with : strong acids. strong oxidizing agents.
Hazardous properties	: None under normal conditions.
Hazardous Polymerization	: Will not occur.



## 6. HEALTH HAZARD DATA

Identification of the product	: Liquid.
Primary route of exposure	: Vapours inhalation. Skin and eyes contact.
Symptoms relating to use	
- Inhalation	: Cough. Sore throat. Inhalation of vapours may cause respiratory irritation.
- Skin contact	: Redness, pain. Causes burns.
- Eye contact	: Redness, pain. Blurred vision. Burning sensation. Risk of damage to eyes.
- Ingestion	: Abdominal pain, nausea. Burning sensation.
First aid	
- Inhalation	: Assure fresh air breathing. Obtain medical attention if breathing difficulty persists.
- Skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical attention if irritation develops.
- Eye contact	: Rinse immediately with plenty of water. Contact ophthalmologist immediately.
- Ingestion	: Rinse mouth. Do not induce vomiting because of corrosive effects. Call a physician immediately.

## 7. PRECAUTIONS FOR SAFE HANDLING AND USE

After spillage and/or leakage	: Clean up any spills as soon as possible, using an absorbent material to collect it. Dilute residues and flush. Recover the cleaning water for disposal.
Disposal	: Hazardous waste. Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
Precautions in handling and storage	: Handle in accordance with good industrial hygiene and safety procedures.

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### CID LINES NV/SA

Waterpoortstraat, 2 B-8900 Ieper Belgique-Belgie  
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In case of emergency : + 32 70 245 245


## VIROCID

D004C5.3

### 8. CONTROL MEASURES

- |                             |  |
|-----------------------------|--|
| <b>Personal precautions</b> | : Equip cleanup crew with proper protection. Wear recommended personal protective equipment.                           |
| <b>Personal protection</b>  |  |
| - Respiratory protection    | : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. |
| - Hand protection           | : Gloves.  |
| - Skin protection           | : If skin contact or contamination of clothing is likely, protective clothing should be worn.                          |
| - Eye protection            | : Eye protection should only be necessary where liquid could be splashed or sprayed.                                   |
| - Ingestion                 | : When using, do not eat, drink or smoke.  |

### 9. TRANSPORTATION

- |                        |   |
|------------------------|---|
| <b>NFPA Label</b>      | : Health hazard : 2<br>Fire hazard : 0<br>Hazardous reaction : 0                                |
| - Proper shipping name | : UN1760 CORROSIVE LIQUID, N.O.S. (Alkyldimethylbenzylammoniumchloride, Glutaraldehyde), 8, III |
| - UN No.               | : 1760  |
| UN Packing group       | : III   |
| Hazard Label(s)        |              |
|                        | : Corrosive.  |
| - IMO-IMDG code        | : Class 8   |

**Whatever you do,  
Make sure you all have the same goal.**

