

# FORMULA NO. 32

TO AID IN THE CONTROL OF ALGAL AND BACTERIAL SLIMES IN RECIRCULATING COOLING WATER SYSTEMS

ACTIVE INGREDIENTS
Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)
ethylene dichloride]
INERT INGREDIENTS
Weight per gallon
Weight of active ingredients per gallon

#### **APPLICATION**

Formula 32 is used to control algae, bacteria, and fungi in recirculat industrial water cooling towers. Prior to its use, systems must be clear growth, microbiological slime and other deposits. An initial slug additic ounces of Formula 32 per 1000 gallons of water, to provide a concentrat per million of Formula 32 based on the total weight of water in the syst Subsequent slug additions of 0.82 to 8.2 fluid ounces of Formula 32 water (6.6 to 66 parts per million of Formula 32) should be employed e as needed. The frequency of addition depends upon the relative amount severity of the microbiological problem. Slug additions should be made it cooling iowers.

# CAUTION

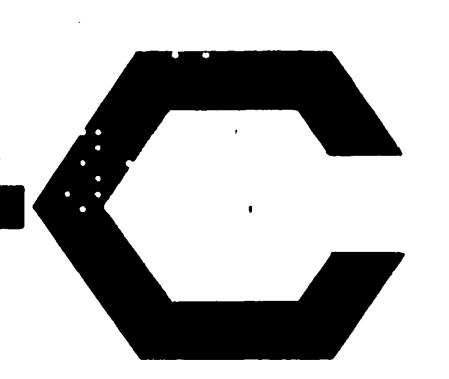
### **KEEP OUT OF THE REACH OF CHILDREN**

Harmful if swallowed. Avoid contact with skin and eyes. In case of cont of water for at least 15 minutes. If eye irritation persists get medical a tamination of food.

This product is toxic to fish. Do not add treated effluent to lakes, stream contaminate water by cleaning of equipment or disposal of waste. Use label.

#### EPA REG. NO. 8540-8

# FORMULA NO. 32



LLAHAN CO. GINEERS SINCE 1904

PRINCIPAL AND STRATEGIC DUSTRIAL AREAS

HOME OFFICE 111 ROLLINS RD. MILLBRAE CALIFORNIA 94030

### TO AID IN THE CONTROL OF ALGAL AND BACTERIAL SLIMES IN INDUSTRIAL **RECIRCULATING COOLING WATER SYSTEMS**

ACTIVE INGREDIENTS	
Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)—	
ethylene dichloride]	18.0 percent
INERT INGREDIENTS	
Weight per gallon	
Weight of active ingredients per gallon	

## **APPLICATION**

Formula 32 is used to control algae, bacteria, and fungi in recirculating commercial and industrial water cooling towers. Prior to its use, systems must be cleaned to remove algal growth, microbiological slime and other deposits. An initial slug addition of 3.3 to 8.2 fluid ounces of Formula 32 per 1000 gallons of water, to provide a concentration of 27 to 66 parts per million of Formula 32 based on the total weight of water in the system is recommended. Subsequent slug additions of 0.82 to 8.2 fluid ounces of Formula 32 per 1000 gallons of water (6.6 to 66 parts per million of Formula 32) should be employed every 2 to 5 days or as needed. The frequency of addition depends upon the relative amount of bleedoff and the severity of the microbiological problem. Slug additions should be made in the sump of water cooling towers.

# CAUTION

## **KEEP OUT OF THE REACH OF CHILDREN**

Harmful if swallowed. Avoid contact with skin and eyes. In case of contact flush with plenty of water for at least 15 minutes. If eye irritation persists get medical attention. Avoid contamination of food.

This product is toxic to fish. Do not add treated effluent to lakes, streams or ponds. Do not contaminate water by cleaning of equipment or disposal of waste. Use only as directed on label.

#### EPA REG. NO. 8540-8



GARRATT-CALLAHAN FORMULA 36 is a dry organic chlorine donor d signed to aid in the control of algae and bacterial simes found in recirculating cooling tower waters. It is chemically designed to allow the slow release of chlorine and to stabilize the chlorine and retard its escape from the water.

#### **DANGER**: KEEP OUT OF REACH OF CHILDREN

**POISON** - Strong oxidizing agent - May be fatal or harmful if swallowed. May produce severe chemical burns. Do not allow contact with eyes, skin, mucous membranes, or clothing. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes; for eyes, obtain prompt medical attention.

**ANTIDOTE** - If swallowed, drink raw egg white, milk or cooked cereal. Follow with emetic (tablespoon of mustard in a glass of warm water or cooking oil). Call a physician.

Mix only with water. Do not mix with any other chemicals or concentrated chemical solutions. Contact with oxidizable material such as paper, rags, paint products, vinegar, kerosene, cleaners, soap products, etc., or with acids or alkalies or combustible materials may cause fire or decomposition which in turn can release toxic gases. In case of fire, douse liberally with water.

Keep in cool, dry place. Open container only where adequate ventilation is available. Do not breathe in or inhale container vapors. After each use, re-close container to protect remaining material. Keep away from fire, heat or open flame.

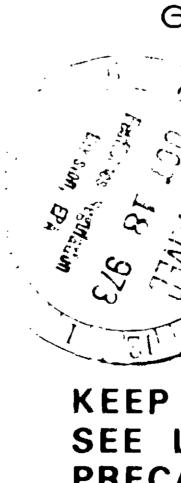


# **GARRATT-CALLAHAN** FORMULA 36 WATER TREATMENT MICROBIOCIDE

Sod

Inert Ing

Contains approximately 16% by weight available chlorine.



**Oxidizing Microbiocide for Building** and Industrial Cooling Towers EPA Reg. No. 8540-14

## **Active Ingredients:**

lium dichloro-S- triazinetrione	25%
gredients:	75%
	100%

## GARRATT-CALLAHAN CO.

WATER TREATMENT ENGINEERS SINCE 19.4



HOME OFFICE 111 ROLLINS RD. MILLBRAE CALIFORNIA 94030

## DANGER **KEEP OUT OF REACH OF CHILDREN.** SEE LEFT PANEL FOR ADDITIONAL

PRECAUTIONARY STATEMENTS.

To control alga **CALLAHAN FOI** slug feed. The needed depend use of GARRA this procedure FORMULA 36 s until a residua is in the water the addition of water will resu the amount nee sity of overcon It is suggested 1,000 gallons b of the tower. I less until satis When this treatm of 4 oz. per 1,00 Should slime d 1,000 gallons. Should tower b quired. For maximum ( this product b non-oxidizing

drop below 0.5 biocide. At oth maintain residu by frequent us This product is not be discha streams, ponds fied on this la Do not reuse e er of tinse se not contaminat