

**Controls bacteria, fungi, and yeasts in paper mills, metalworking fluids containing water, and enhanced oil recovery systems;
controls bacteria and algae in industrial recirculating water cooling towers**

DANGER

**CAUSES SEVERE BURNS OF EYES
MAY BURN THE SKIN • MAY BE HARMFUL
OR FATAL IF SWALLOWED**

**Do Not get in Eyes, on Skin, or on Clothing
Wear Chemical Workers' Goggles when
Handling.**

FIRST AID: In case of eye contact, flush eyes immediately with plenty of water for at least 15 minutes and get medical attention. In case of skin contact, wash with soap and plenty of water. Wash contaminated clothing before reuse.

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Repeat until vomit is clear. Call a physician. Never give anything by mouth to an unconscious person.

WASH THOROUGHLY AFTER HANDLING

**TO MAINTAIN PRODUCT QUALITY, STORE
AT TEMPERATURES BELOW 60° C.
KEEP CONTAINER TIGHTLY CLOSED
WHEN NOT IN USE**

See side panel for other Important
Precautionary Statements

Product is toxic to fish. Do not contaminate water by
leakage of equipment, or disposal of wastes. Apply this
product only as specified on this label.

Do not discharge into lakes, streams, ponds or public water-
ways unless in accordance with a NPDES permit. For guid-
ance contact your local regional office of the EPA.

 **NOTICE** Do Not Ship or Store with Food,
Feeds, Drugs, or Clothing

DIRECTIONS FOR USE

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

NOTE: ADD FORMULA 300 SEPARATELY TO THE SYSTEM. DO NOT MIX IT WITH OTHER ADDITIVES. IN ORDER TO AVOID DECOMPOSITION OF FORMULA 300 DUE TO THE HIGH pH OF MANY ADDITIVE FORMULATIONS.

PAPER MILLS

For the control of bacterial, fungal, and yeast growths in pulp, paper, and paperboard mills, add Formula 300 at the rate of 0.15-0.50 lb/ton of pulp or paper (dry basis). Addition may be continuous or intermittent, depending upon the type of system and the severity of contamination. It should be made with a metering pump at a location that will insure uniform distribution of Formula 300 in the mass of fiber and water, such as the beaters, Jordan inlet or discharge, broke chests, furnish chests, save-alls and white water tanks.

Heavily fouled systems should be boiled out, then treated with 0.15-0.50 lb Formula 300/ton of paper (dry basis), as necessary for control.

Moderately fouled systems should be treated continuously with 0.35-0.50 lb Formula 300/ton of paper (dry basis) until the slime accumulation is controlled. Addition rates can then be reduced to 0.15-0.35 lb Formula 300/ton of paper on a continuous or intermittent basis, as needed for control. Dislodged slime may cause breaks in the paper and a clean-up of the paper machine may be advisable. Slightly fouled systems should be treated continuously with 0.15-0.35 lb Formula 300/ton of paper (dry basis) until the slime is controlled, then added on an intermittent basis to maintain control.

**INDUSTRIAL RECIRCULATING WATER
COOLING TOWERS.**

Add Formula 300 to the basin (or any other point of uniform mixing). Addition should be made with a metering pump, it may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the retention time in the system.

Optimum performance with this product is attained by continuous or intermittent treatment. If "shock" treatment is used, the blowdown should be discontinued for 24-48 hr.

FOR CONTROL OF BACTERIA

Add 0.00095-0.0095 gal. Formula 300/1,000 gal. of water in the system, depending on the severity of contamination.

Intermittent or Slug Method

Initial Dose: When the system is noticeably fouled, add 0.0048-0.0095 gal. Formula 300/1,000 gal. of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident add 0.0024-0.0095 gal. Formula 300/1,000 gal. of water in the system every 4 days or as needed to maintain control.

Badly fouled systems must be cleaned before treatment is begun.

Continuous Feed Method

Initial Dose: When the system is noticeably fouled, add 0.0048-0.0095 gal. Formula 300/1,000 gal. of water to the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.00048-0.0048 gal. Formula 300/1,000 gal. of water lost by bleed and windage.

Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF ALGAE

Add 0.029-0.095 gal. Formula 300/1,000 gal. of water in the system, depending on the severity of contamination.

Intermittent or Slug Method

Initial Dose: When the system is noticeably fouled add 0.048-0.095 gal. Formula 300/1,000 gal. of water in the system. Repeat until control is achieved.

Subsequent Dose: When algae control is evident add 0.029-0.095 gal. Formula 300/1,000 gal. of water in the system daily, or as needed to maintain control.

Badly fouled systems must be cleaned before treatment is begun.

Continuous Feed Method

Initial Dose: When the system is noticeably fouled, add 0.048-0.095 gal. Formula 300/1,000 gal. of water to the system.

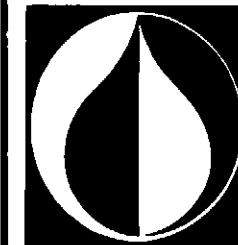
Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 0.029-0.095 gal. Formula 300/1,000 gal. of water lost by bleed and windage.

Badly fouled systems must be cleaned before treatment is begun.

**GARRATT-CALLAHAN
FORMULA 300
ANTIMICROBIAL
EPA REG. NO. 8540-21**

Active Ingredient
2,2-dibromo-3-nitropropionamide.....20
Inert Ingredients:.....80

GARRATT-CALLAHAN CO.
WATER TREATMENT PRODUCTS AND SERVICES SINCE 1964



OFFICES IN PRINCIPAL
CITIES AND STRATEGIC
INDUSTRIAL AREA
HOME OFFICE
111 ROLLINS ROAD
MILLBRAE
CALIFORNIA 9403

DANGER

**FOR INDUSTRIAL USE ONLY
SEE PANELS FOR ADDITIONAL
PRECAUTIONARY STATEMENTS**

ACCEPTED
8540-21
JAN 5 1984
Under the Federal
Pesticide Act
as amended
Federal Insecticide,
Fungicide, and
Rodenticide Act

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2/2
**ing water, and enhanced oil recovery systems:
water cooling towers**

CONTROL OF BACTERIA

Formula 300/1,000 gal. of water in the system depending on the severity of contamination.

Method
If the system is noticeably fouled, add Formula 300/1,000 gal of water in the system until control is achieved.

If microbial control is evident add Formula 300/1,000 gal. of water in the system as needed to maintain control.

Systems must be cleaned before treatment is begun.

Method
If the system is noticeably fouled, add Formula 300/1,000 gal. of water to the system.

To maintain this level by pumping a continuous feed of 0.0048 gal Formula 300/1,000 gal of water and windage.

Systems must be cleaned before treatment is begun.

CONTROL OF ALGAE

Formula 300/1,000 gal. of water in the system depending on the severity of contamination.

Method
If the system is noticeably fouled add Formula 300/1,000 gal. of water in the system until control is achieved.

If algae control is evident add 0.029-0.000 gal of water in the system until control is achieved.

Systems must be cleaned before treatment is begun.

Method
If the system is noticeably fouled add Formula 300/1,000 gal of water to the system.

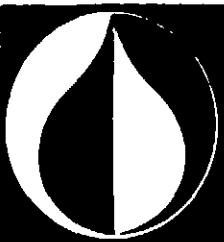
To maintain this treatment level by pumping a continuous feed of 0.029-0.095 gal Formula 300/1,000 gal of water and windage.

Systems must be cleaned before treatment is begun.

GARRATT-CALLAHAN
FORMULA 300
ANTIMICROBIAL
EPA REG. NO. 8540-21

Active Ingredient
2,2-dibromo-3-nitropropionamide.....20%
Inert Ingredients:.....80%

GARRATT-CALLAHAN CO.
WATER TREATMENT PRODUCTS AND SERVICES SINCE 1904



OFFICES IN PRINCIPAL
CITIES AND STRATEGIC
INDUSTRIAL AREAS

HOME OFFICE
111 ROLLINS ROAD
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CALIFORNIA 94030

DANGER
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ONCE THROUGH INDUSTRIAL COOLING WATER SYSTEMS

For controlling bacteria, fungi, and algae in once-through and recirculated fresh and sea water cooling systems, cooling ponds, canals, and lagoons, add Formula 300 to the system inlet water or before any other contaminated area in the system. Addition should be made with a metering pump. It may be continuous or intermittent depending on the severity of the contamination when treatment is begun, and the retention time in the system.

FOR CONTROL OF BACTERIA

Add 1-12 ppm Formula 300 based on the flow rate through the system, depending on the severity of contamination.

Intermittent Method
Initial Dose: When the system is noticeably fouled, add 6-12 ppm Formula 300. Minimum treatment intervals should be 15 minutes. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 3-12 ppm Formula 300 intermittently as needed to maintain control.

Continuous Feed Method
Initial Dose: When the system is noticeably fouled, add 6-12 ppm Formula 300 continuously to the system.

Subsequent Dose: When microbial control is evident, pump a continuous feed of 1-6 ppm Formula 300 to the system.

Intermittent Method
Initial Dose: When the system is noticeably fouled, add 60-118 ppm Formula 300 to the system. The minimum treatment interval should be 15 minutes. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 36-118 ppm Formula 300 to the system daily or as needed to maintain control. The minimum treatment interval should be 15 minutes.

Continuous Feed Method
Initial Dose: When the system is noticeably fouled, add 60-118 ppm Formula 300 to the system.

Subsequent Dose: When microbial control is evident, pump a continuous feed of 36-118 ppm Formula 300 to the system.

AIR WASHER SYSTEMS

Add 0.0015 gal Formula 300/1,000 gal of water in the system depending on the severity of contamination to control slime-forming bacteria and fungi in industrial air-washer systems.

Intermittent or Slug Method
Initial Dose: When the system is noticeably fouled, add 0.003 gal to 0.095 gal Formula 300/1,000 gal of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.0015 gal to 0.047 gal Formula 300/1,000 gal of water in the system every 2 days or as needed to maintain control. **BADLY FOULED SYSTEMS must be cleaned before treatment is begun.**

Continuous Feed Method
Initial Dose: When the system is noticeably fouled, add 0.003 gal to 0.095 gal Formula 300/1,000 gal of water in the system.

Subsequent Dose: Maintain this level by pumping a continuous feed of 0.0015 gal to 0.047 gal Formula 300/1,000 gal of water in the system per day.

METALWORKING FLUIDS CONTAINING WATER

This product is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:100-1:4. For controlling (or inhibiting) the growth of bacteria, fungi, and yeasts that may deteriorate metalworking fluids containing water, add Formula 300 to the fluid in the collection tank. Additions should be made with a metering pump.

Initial or Slug Dose: When the system is just noticeably fouled, add 0.25 gal Formula 300/1,000 gal of metalworking fluid per day, or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.

ENHANCED OIL RECOVERY SYSTEMS

For controlling slime-forming bacteria, sulfide-producing bacteria, yeasts, and fungi in oil field water, polymer or mycelial floods, water disposal systems or other oil field water systems, add 1-80 ppm Formula 300 (0.1-8.4 gal Formula 300 per 2400 barrels of water) depending on the severity of contamination. Additions should be made with a metering pump either continuously or intermittently.

Continuous Feed Method
When the system is noticeably fouled, add 10-80 ppm Formula 300 (0.8-8.4 gal Formula 300 per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1-15 ppm Formula 300 (0.1-1.2 gal of Formula 300 per 2400 barrels of water) continuously or as needed to maintain control.

Intermittent or Slug Method
When the system is noticeably fouled, or to maintain control of the system, add 10-80 ppm Formula 300 (0.8-8.4 gal Formula 300 per 2400 barrels of water) intermittently for 4-8 hours per day and from 1-4 times per week, or as needed depending on the severity of contamination. Addition of Formula 300 may be made at the free water knockouts, before or after the injection pumps and injection well headers.

NOTE: For control of bacteria, yeast, and fungi in aqueous solutions of biopolymer used in flooding operation, add 15-50 ppm Formula 300 (1.2-8.4 gal Formula 300 per 2400 barrels of water). Additions of Formula 300 should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

STORAGE AND DISPOSAL

Do not reuse empty container. Destroy it by burying it with waste, or by burning it. Stay out of smoke or fumes.