

# TRIS NITRO

BRAND OF 50% AQUEOUS TRIS(HYDROXYMETHYL)NITROMETHANE  
INDUSTRIAL BACTERIOSTAT

ACTIVE INGREDIENT:	
2-Hydroxymethyl-2-nitro-1,3-propanediol	50%
INERT INGREDIENTS:	50%
	TOTAL 100%

## PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS.**  
**KEEP OUT OF REACH OF CHILDREN.**

### CAUTION

**AVOID CONTACT WITH EYES.**  
**HARMFUL IF SWALLOWED. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING AND BEFORE EATING OR SMOKING.**  
**HARMFUL IF INHALED. AVOID BREATHING SPRAY MIST. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.**

## STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**IN EYES:** Flush with plenty of water. Call a physician.

**IF ON SKIN:** Wash thoroughly with soap and water.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration and get medical attention.

ANGUS Chemical Company assumes no responsibility when this product is not used in accordance with the instructions and information contained on this label.

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product 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 notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

## STORAGE AND DISPOSAL

**STORAGE:** Freezes at 32°F.

Store in a warm place.

TRIS NITRO decomposes in the presence of alkaline materials. Protect from vapors, fumes and animals during handling and storage to prevent deterioration and release of formaldehyde.

**PESTICIDE DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

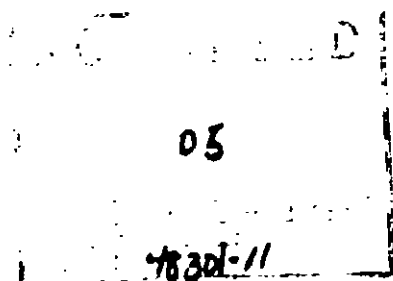
**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

See Additional Precautionary Statements on Side Panel and in Technical Bulletin.

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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.

## USE IN PAINTS, EMULSIONS, AND THICKENER SOLUTIONS

TRIS NITRO is effective as a preservative in water-containing systems, such as latex paints, resin emulsions, and thickener solutions at a concentration of 0.2 to 1.0 lb per 100 lb total formulation weight. TRIS NITRO may be added at any point in the manufacturing cycle. The recommended rate for preservation of a latex paint is 0.2 to 0.4 lb per 100 lb of the formulation. The recommended rate for preservation of resin emulsions and thickener solutions is approximately 0.4 lb per 100 lb of the formulation.

## USE IN METALWORKING FLUIDS

**In Diluted Fluids:** A concentration of 1000 to 2000 ppm of active TRIS NITRO in the fluid is sufficient to control gross bacterial growth. Add 1-2 quarts of 50% aqueous TRIS NITRO per each 100 gallons of fluid.

**Maintenance Dosage:** Add 250 to 500 ppm of active TRIS NITRO weekly as required to maintain control of the system. The addition of 0.25 quart of 50% aqueous TRIS NITRO to each 100 gallons of fluid will provide a 250 ppm concentration.

**In Concentrates:** TRIS NITRO may be incorporated by the manufacturer in metalworking fluid concentrate. The higher levels required in such concentrates will be stable as long as the pH is maintained in the range of 6 to 8. Above such pH levels rapid deterioration of TRIS NITRO may result in the release of noticeable levels of formaldehyde. Long-term stability tests should be carried out by the manufacturer on his specific formulation to ensure that the concentrate does not contain ingredients incompatible with TRIS NITRO stability. The amount to be incorporated will depend on the dilution factor recommended to be used when the concentrate is diluted for use. For efficient bacteriostatic activity, a concentration of 1000 to 2000 ppm of active TRIS NITRO in the diluted fluid is suggested.

## USE IN INDUSTRIAL RECIRCULATING WATER SYSTEMS — Not for use in California.

For control of bacteria in industrial cooling towers and evaporative condensers, treat the system with 5 — 1000 ppm of active TRIS NITRO.

**Initial dose:** When the system is noticeably fouled, add 1 gallon of 50% aqueous TRIS NITRO per 1000 gallons of water in the system. Repeat until control is achieved. Badly fouled systems must be cleaned before initial treatment.

**Subsequent dose:** Add 2 1/2 quarts of 50% aqueous TRIS NITRO per 1000 gallons of water in the system as needed to maintain control.

## USE IN OILFIELD WATER SYSTEMS

For controlling aerobic slime-forming bacteria (*Pseudomonas* sp.) and anaerobic sulfate-reducing bacteria (*Desulfotribrio desulfuricans*) in oilfield water systems, such as subsurface injection water, add 500-1000 ppm active TRIS NITRO depending on the severity of the contamination. Additions should be made with a metering pump at the free-water knockouts before or after injection pumps and injection well headers.

**Continuous-feed method:** If the system is noticeably fouled, add 500-1000 ppm active TRIS NITRO (80-160 gallons of 50% aqueous TRIS NITRO per 2000 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 500 ppm active TRIS NITRO (80 gallons of 50% aqueous TRIS NITRO per 2000 barrels of water) continuously as needed to maintain control.

**Intermittent or slug method:** If the system is noticeably fouled, or to maintain control of the system, add 500-1000 ppm active TRIS NITRO (80-160 gallons of 50% aqueous TRIS NITRO per 2000 barrels of water) intermittently for 2-8 hours per day on from 1-4 days per week, depending on the severity of contamination.

## USE AS A PRESERVATIVE FOR PACKAGED EMULSIONS, SOLUTIONS, OR SUSPENSIONS SUCH AS DETERGENTS AND POLISHES CONTAINING WATER. — Not for use in California.

For control of bacterial contamination add 500-1000 ppm of active TRIS NITRO (1-2 gallons of 50% aqueous TRIS NITRO) per 1000 gallons of formulation.

## USE IN DRILLING MUDS

For control of sulfate-reducing bacteria in water-based drilling muds, add 0.5 quart-1 gallon of 50% aqueous TRIS NITRO to 1000 gallons of drilling mud.

## USE IN PULP AND PAPERMILL PROCESS WATER SYSTEMS — Not for use in California.

Do not use this product in any process which makes paper or paperboard that will come in contact with food or feed.

For control of bacterial growth in pulp, paper, and paperboard mills, add 50% aqueous TRIS NITRO at the rate of 0.25-1.0 gallon per 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 TRIS NITRO in the mass of fiber and water, such as at the beaters, jordan inlet or discharge, broke chests, furnish chests, save-alls and white-water tanks.

Heavily fouled systems should be boiled out; then treat with 1 gallon 50% aqueous TRIS NITRO per ton of paper (dry basis) as necessary for control.

Moderately fouled systems should be treated continuously with 0.25-1.0 gallon 50% aqueous TRIS NITRO per ton of paper (dry basis) on a continuous or intermittent basis as needed for control.

Slightly fouled systems should be treated continuously with 0.25 gallon 50% aqueous TRIS NITRO per ton of paper (dry basis) until control is achieved.

ANGUS CHEMICAL COMPANY

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