



IS AMMONIA
FERTILIZING
YOUR COOLING
WATER?



OXAMINE[®]

Stop Microbiological growth and high chlorine demand with Oxamine[®] from Buckman.

Ammonia contamination is rampant in fertilizer plants.

It gets into your cooling waters, accelerates bacterial growth and undermines the effectiveness of chlorine bleach and other conventional oxidizers. And that costs you time, money and lost production. That's why Buckman, a pioneer in cooling and process water protection since 1945, has developed Oxamine. Oxamine works better than conventional oxidizing microbicides in high demand systems to keep cooling water systems cleaner, reduce the use of chlorine/chlorides, and improve overall efficiency.

Grow profits, not microorganisms.

Call Buckman and switch to Oxamine, the better oxidizer for fertilizer plants.

Buckman[™]
Chemistry, connected.



Get performance that leaves conventional microbicides in the dust.

Don't let fertilizer dust or ammonia leaks adversely affect your microbicide program. Switch to stable, long-lasting Oxamine® for unmatched cooling water protection and big savings.

Greater stability

Oxamine is more stable and not affected by the high organic demand that often plagues fertilizer plants. So you'll use less of it and save money. Whether your system suffers from high pH, manganese, iron or biological demand, Oxamine can outperform traditional chlorine or bromide treatments.

Better penetration

Effective against a broad range of microorganisms, Oxamine penetrates the colony, instead of just reacting with the surface. So your plant benefits from cleaner cooling tower fill and improved all-around performance in your water systems.

Unmatched safety

Oxamine utilizes Buckman's proprietary feed equipment designed for industry-leading safety and reduced human-chemical contact.

Advanced safety features include:

- Leak detection
- Automatic flushing in case power is lost
- Regular inspection by Buckman personnel to ensure efficient, safe operation

Plus the Oxamine system can be linked to your DCS or remotely monitored so you can track vital activity.

Lower total cost

Oxamine increases efficiency, so your plant can use less energy, reduce operating costs and reduce downtime.

You save on:

- Equipment—feed technology is owned and maintained by Buckman, so no capital investment is necessary.
- Chlorine and other chemistries—cut bleach use by 60–70%.
- Chemical interference—Oxamine won't undermine the efficacy of your other chemistries.
- Maintenance & repair—reduce the corrosion that causes downtime and expense.

Reduced environmental impact

Oxamine is more environmentally friendly than conventional halogen treatments, lowering the potential toxicity of your plant's effluent. Chemical discharge to lakes and rivers can be significantly reduced.

Start treating your water, your plant, and the environment better with Oxamine

The sooner you switch, the sooner you can start saving. Buckman makes it easy. Contact a Buckman representative or visit buckman.com for more information.



CASE STUDY

Controlling Bacteria. Controlling Costs.

The Challenge: A large urea/ammonia fertilizer plant was using an average of three tons of sodium hypochlorite per day to control bacterial activity and satisfy cooling tower demand. This increased the chlorine level in the cooling water resulting in excessive blowdown, which in turn restricted the cycles of concentration and increased the need for corrosion and scale inhibitors.

The Solution: Buckman replaced their microbiological control regimen with a customized Oxamine program, which

successfully controlled microbiological activity while decreasing sodium hypochlorite use 60–70%. The switch allowed the cycles of concentration to rise from 3.5 to 5.

Return on Investment (ROI):

- Reduced sodium hypochlorite consumption by 767 tons per year
- Reduced bromine use by 73 tons per year
- Improved microbiological control
- Reduced fresh water consumption costs
- Approximate savings: US \$1 Million per year

Return on Environment (ROE):

- Reduced water consumption by 717,444 m³ per year
- Reduced CO₂ emissions associated with water pumping and chemical transportation
- Reduced raw water treatment chemicals
- Reduced waste water handling
- Improved safety due to automatic dosing equipment and lower potential for human contact

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Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions. Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE.** No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. W966H (05/18)

Argentina +54 11 4701-6415; Australia +61 (2) 6923 5888; Belgium +32 9 257 92 11; Brasil +55 (19) 3864-5000; Chile +56-2) 2946-1000; China +86-21) 6921-0188; India +91) 44-2648 0220; Indonesia +62) 21-2988 8288; Japan +81) 3 6202 1515; Korea +82) 31-416 8991; Mexico +52 (777) 329 3740; Singapore +65) 6891 9200; South Africa +27 (31) 736 8800; United States +1 (901) 278-0330

Global Headquarters at 1256 N. McLean Blvd., Memphis, TN 38108, USA