

Keep your cool in the face of soaring bromine costs.

An increased demand worldwide for bromine compounds has resulted in substantial price increases by the world's biggest suppliers. This, in turn, is causing costs to skyrocket for industries and utilities that rely on sodium bromide for microbiological control in cooling towers and once-through systems. But you don't have to lose your cool. Because now there's something better.

OXAMINE[®] from Buckman

Oxamine works better than sodium bromide and other traditional treatments to control microbiological activity in cooling towers and once-through cooling water systems, improving condenser performance, reducing corrosion rates and increasing efficiency. All at less cost to your plant and the environment.

Oxamine is more stable and effective.

Oxamine is stable and isn't affected by high organic demand. Whether your water suffers from high pH, manganese, iron or biological demand, Oxamine can outperform bromine-based treatment programs, effectively controlling the broad spectrum of microorganisms that threaten your system.

Oxamine is safer for people and planet.

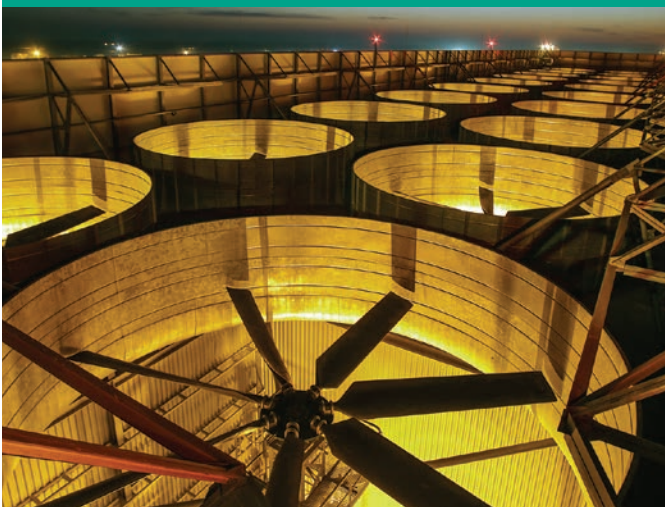
Studies show that discharges of wastewater containing bromide significantly increase the formation of carcinogenic disinfection by-products (DBPs) in finished drinking water, a real risk to human health. Oxamine, on the other hand, is more environmentally friendly, reducing the potential toxicity of your plant's effluent and producing far less potential carcinogens than other treatments.

Oxamine saves money.

The cost of Oxamine isn't subject to the bromine market. Dosage is typically much lower than with bleach and sodium bromide applications. Feed equipment is owned and maintained by Buckman, so no capital investment is necessary.

Oxamine is easy.

Upgrading your cooling water treatment program to Oxamine is easier than you think. We'll start with an in-depth Evaluation Plan Workshop to outline and streamline the process to meet your expectations. We'll do everything possible to make the transition trouble-free and worry-free. Once we're done, you'll love the way Oxamine treats your cooling water system, your people, the environment and the bottom line.



CASE STUDIES

Oxamine[®] replaces bleach and sodium bromide

The Challenge: A coal-fired power plant using bleach and sodium bromide was experiencing high chemical demand due to the high pH of the cooling water and ammonia and low efficacy during peak summer months.

The Solution: Buckman replaced their treatment program with Oxamine, improving microbiological control, which resulted in cleaner condensers and cooling tower surfaces.

Return on Investment:

- Approx. 60% reduction in mild steel and admiralty corrosion rates
- Treatment cost savings of \$30,000 per year
- Eliminated need for regular condenser cleaners

Oxamine replaces solid halogen program

The Challenge: A coal-fired power plant using a solid bromine-based halogen donor in its once-through cooling system was plagued with high pH and organic loading from the lake, resulting in high solid halogen material costs and high TRO levels in the discharge.

The Solution: Buckman implemented an Oxamine program, not affected by high pH and organic loading.

Return on Investment:

- \$330,000 per year in heat rate improvements due to improved condenser cleanliness.

Return on Environment:

- Since Oxamine does not react with organics in the water, TRO discharge levels are significantly reduced to meet new discharge permit levels.

Learn more.

To get information about replacing your bleach-and/or bromine-based treatment programs with the Oxamine system from Buckman, email us at water@buckman.com, contact your Buckman representative or visit buckman.com.

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