

NALCO WATER ADVANCED CONDENSATE TREATMENT (ACT)





Nalco Water knows that you want safe, reliable steam. Rest assured with Nalco Water's ACT program.

Nalco Water Advanced Condensate Treatment (ACT) is a revolutionary condensate corrosion inhibition program that combines patented technology, state-of-the-art monitoring and Nalco Water's on-site service to prevent operational problems.

Condensate—steam that has condensed—is a valuable part of boiler systems. Since it has a high heat content and is extremely pure, condensate can be a readily available, economic feedwater source. Increasing the amount of condensate returned to the boiler is one way of increasing efficiency and saving operating dollars. Condensate return can help improve the economics of boiler operation through:

- Water savings
- · Improved boiler reliability
- Reduced maintenance
- Reduced capital repair costs
- Reduced fuel consumption

If left untreated or improperly treated, condensate can become very corrosive to piping and equipment. Neutralizing amines and filming amines are commonly used to control condensate system corrosion. Increasing environmental and health concerns surrounding amines prompted research into alternatives. That's how Nalco Water ACT came about. It was developed to combat corrosion, while meeting workplace safety requirements at the same time.

PROGRAM BENEFITS Let's Talk Specifics

RELIABILITY

Nalco Water ACT improves boiler reliability by reducing corrosion in your condensate system. This decreases maintenance time and pipe replacement, allowing your operations to run smoothly.

ECONOMICS

Nalco Water ACT is a cost-effective alternative to conventional condensate treatments. By reducing corrosion, the life expectancy of condensate piping is extended. You save the cost of pipe replacement as well as maintenance. Using Nalco Water ACT can allow personnel to focus on other improvement projects. The result is reduced total cost of operation that improves your bottom line.

SAFETY

Nalco Water ACT is non-toxic, odorless, contains no Volatile Organic Compounds (VOC), has a flash point above 200°F and has no "reportable quantity". Formulated from ingredients commonly used in the food industry, Nalco Water ACT has obvious safety benefits. Nalco Water ACT can often be fed in facilities prohibited from using conventional amine treatments. It is approved for use in boiler systems where the steam may contact food under 21 CFR 173.310 - Boiler Water Additives.

TECHNOLOGY

Nalco Water ACT is effective in combating both acid- and oxygen-induced corrosion and has been shown to work in systems where conventional treatments were not effective, such as high oxygen environments.

Nalco Water ACT effectively reduces condensate system maintenance costs and minimizes the potential of boiler tube failures caused by metallic corrosion products in the returned condensate. The Nalco Water ACT film is persistent. It can protect piping from oxygen corrosion in systems that run intermittently and may be shut down overnight or on weekends.



NALCO WATER, AN ECOLAB COMPANY

Nalco Water, an Ecolab company, is a leading global provider of water management solutions and expertise. A trusted partner at nearly three million customer locations, Ecolab (ECL) is the global leader in water, hygiene and infection prevention solutions and services that protect people and vital resources. With annual sales of \$12 billion and 44,000 associates, Ecolab delivers comprehensive solutions, data-driven insights and personalized service to advance food safety, maintain clean and safe environments, optimize water and energy use, and improve operational efficiencies and sustainability for customers in the food, healthcare, hospitality and industrial markets in more than 170 countries around the world.

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