

Lake and pond water remediation

Safe and environmentally friendly solution for lake water management

ALGAE CONTROL

Control of toxic algae is important in ornamental lakes and treatment ponds.

Ornamental lakes and treatment ponds are high in nutrients, and also tend to be stagnant due to a lack of aeration and circulation, which makes water management crucial to their longer-term health and ecosystem.

WATER CLARIFICATION

The unique properties of AQUA-Cal+ arise from the formation and optimisation of reactive superoxide species in our magnesium hydroxide particles, as well as enhanced calcium, from Calix's technology.

These special features work with the well-established acid neutralisation and water clarification properties of Magnesium Hydroxide Liquids to provide an enhanced environment for ornamental lakes and ponds.

[Read more about the Calix Technology.](#)



Calix has developed AQUA-Cal+ as a safe, environmentally friendly water conditioner to directly address problems associated with lake remediation such as fish kills, odour, bad algae blooms, little circulation, and sludge build-ups.

 pH pH and Alkalinity control

 Sludge digestion

 Removal of bad odours (H₂S and Ammonia)

 Reduction of phosphate and ammonia (Struvite reaction)

 Improve water quality and clarity

 Provide additional O₂

EUTROPHICATION AND THE RESULTING ALGAL BLOOMS CONTINUE TO BE A CAUSE OF WATER POLLUTION.

Eutrophication in ponds and lakes has become a major environmental problem. Nitrates and phosphates, especially from lawn fertilizers, grass clippings and leaves from surrounding parks, run off the land into rivers and lakes, detergents, food and human waste are often to blame. This, combined with little water movement can cause unpleasant odours and persistent blue green algal blooms.

Eutrophication can have serious effects, like algal blooms that block light from getting into the water and harm the plants and animals that need it. If there's enough overgrowth of algae, it can prevent oxygen from getting into the water, making it hypoxic and creating a dead zone where no organisms can survive.



WATER CLARIFICATION USING Aqua-Cal+

Calix has developed a solution that could address the problem of algal formation and not just treat the symptom of algal bloom. AQUA-Cal+ is a special formulated high surface area Magnesium Hydroxide and enhanced with Calcium that acts to improve the overall water quality while delivering a number of unique properties to protect and enhance the lake conditions. AQUA-Cal+ is non toxic, non-corrosive, safe to handle and environmentally friendly.

The consumption of ammonia and phosphate by Aqua-Cal+ from the aerobic sludge digestion process results in the formation of struvite, accompanied by the release of hydroxide ion (more Dissolved Oxygen in the water!), allowing the sludge to maintain the aerobic digestion process as long as the particles of magnesium hydroxide are available within the sludge.



After treatment with AQUA-Cal+, and in combination with Algae Pro and probiotic used, there was a marked reduction in blue green algae.



After treatment with AQUA-Cal+, there was no longer any foul odour emitted from the lake.

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WHY CHOOSE CALIX

FASTER REACTIVITY = COST SAVINGS

New materials produced by Calix's technology are proving to have similar properties to highly active nano-materials, without the safety concerns and high cost, but with all the benefits. This means it has the high reactivity of nano-material, without the potential health and handling issues. To learn more about Calix's technology, visit our website.

FROM MINE TO CUSTOMER

Calix is able to offer better service, reliability and performance to its customers because it controls the entire production process from mining of raw materials, processing and production.

ACTI-Mag lowers chemical consumption and ensures easier use, handling and storage, thus considerably reducing costs.

ACTI-Mag also offers the following benefits:

- Fats, oils and greases control
- Phosphate removal
- Biogas management
- Odour control cleansing the sewer
- Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) reduction

Read our other solution spec sheets or call us today to discuss the benefits of a whole-of-catchment approach.

Distribution partners

Calix has established a network of local distributors and partners who can deliver our solutions across the globe, to ensure you receive excellent customer service and support, wherever you are located.

To find a Calix office or partner near you, visit:

WWW.CALIX.GLOBAL

