

# Cupricide®

## ...the affordable algicide

Agmin Chelates complex liquid copper algicide product “**Cupricide®**” is an economical product that provides effective control of a wide spectrum of filamentous and planktonic algae. It is suitable for use in:

- irrigation canals,
- farm dams,
- ponds,
- ornamental lakes, *and*
- portable water supplies.

### The Need for Cupricide

In recent years, Australian water supplies have been increasingly threatened by nuisance algae growth caused by excessive amounts of nutrients entering water supplies. These nutrients, originating from agricultural or urban runoff, detergent wastes and/or waste water discharges can enhance the growth of aquatic algae often resulting in unsightly and unmanageable algal blooms.

Under serious infestation, algae may accumulate on the surface forming a thick scum. Such algal blooms are not only aesthetically displeasing and detrimental to the intended use of the water but may also present serious health hazards to both humans and animals, e.g., **BLUE GREEN ALGAE**. Algal contamination may discolour water, create unpleasant tastes and odours and even impart a distasteful flavour to fish.

In addition, once algae die and starts to decompose, the process may deplete dissolved oxygen levels in the water thereby threatening fish populations.

Agmin’s **Cupricide®** is an economically viable way to control algae. Supplied in an easy to use liquid form, Cupricide® effectively controls the blooming of a broad spectrum of Algae, such as:

- Planktonic (suspended), *and*
- Filamentous (mat forming) algae including:
  - Chara,
  - Spirogyra,
  - Cladophora,
  - Vaucheria,
  - Ulothrix,
  - Microcystis,
  - Anabaena,
  - Nodularia,
  - Oscillatoria.



**Cupricide®** works by systemic action, penetrating the algal cells and inhibiting photosynthesis.

## The Benefits of a Chelated Copper Algicide

Agmin Chelates Pty Ltd **Cupricide**<sup>®</sup> is supplied as a mixed copper alkanolamine complex. In this form, **Cupricide**<sup>®</sup> provides maximum algicidal efficiency but with low toxicity to fish.

The organic complexing agents used in **Cupricide**<sup>®</sup> ensure that the key active ingredient (*Copper*), remains in solution and does not precipitate out like some other copper algicides, namely copper sulphate. Although copper sulphate has been used extensively throughout Australia as an algicide, it has several drawbacks associated with its use.

**Firstly**, copper sulphate is not algal specific - in fact it can be quite toxic to other aquatic life, e.g., fish when used at high concentrations.

**Secondly**, if the water contains a high concentration of carbonate ions, the copper ions will preferentially combine with the carbonate ions and form an insoluble precipitate of copper carbonate. This precipitate sinks to the bottom of the water body where it forms a toxic slime. The formation of this precipitate also renders the copper essentially unavailable for the control of algae. To compensate, higher levels of copper sulphate are used which as stated above may seriously threaten other aquatic life.

**Finally**, sulphate containing algicides also have the disadvantage that they combine with hydrogen ions in aqueous solution to form sulphuric acid which is highly corrosive.

For the reasons stated above **Cupricide**<sup>®</sup> is a much more cost effective and efficient product for algae control than copper sulphate.



**AGMIN CHELATES PTY LTD**

For further enquiries or ordering visit:

**[www.cupricide.com.au](http://www.cupricide.com.au)**