

**Liquid Biocide Control for Cooling Water Systems**

**PRODUCT DESCRIPTION**

A Concentrated non-foaming, cationic polymer  
Liquid Biocide for use as a microbial control agent in Cooling Water systems, Heat Exchangers (and swimming pools)

**DIRECTION FOR USE**

BIOCIDE PQ is specifically designed to give prolonged antimicrobial protection by virtue of its slow acting biocidal activity.  
The medium to long term preservation effect conferred by BIOCIDE PQ is tailored to suit the need for microbial control in the following applications:-  
Cooling Towers, Heat Exchangers, Holding ponds & reservoirs, Industrial fresh water systems, Paper Mill waters, Spray Booth water curtains.  
BIOCIDE PQ has an outstanding effectiveness against algae & bacteria.

**DOSAGE & CONTROL**

Activity of BIOCIDE PQ is at an optimum at 80ppm of the system capacity. Allowances should be made for losses. BIOCIDE PQ is a slow acting biocide & should be dosed in slug doses every 2-5 days depending on the bleed-off and losses to maintain the 80ppm level. 70 millilitres (0.07litres) per 1000litres will provide approximately 80ppm based on the total system.

**PHYSICAL PROPERTIES**

Appearance: Mobile pale liquid.  
Stability: Stable in hard water, acidic, alkaline & neutral solution.  
pH: 6 @ 5% solution.  
Odour: Mild  
Character: Cationic

**Feature & Benefits**

- § Easy to use liquid Treatment
- § Non Foaming
- § Stable in all pH range solution ( some decomposition in strong alkaline solutions)
- § Stable in hard water

**Activity profile:**

- Anti-Algal m.i.c.  
Chlorella Saccharophilia 10ppm  
Chlorella emersonii 12.5ppm  
Chlorella vulgaris 15ppm  
Chlorella pyrenoidosa 10ppm
- Anti-fungal m.i.c.  
Fusarium soleni 67ppm
  - § Active against Pseudomonas aeruginosa and
  - § Escherichia coli
  - § Prevents algal/bacterial slime reducing efficiency of cooling towers and heat exchangers
  - § Non oxidising
  - § Non volatile
  - § Can be used in paper/paperboard manufacture for food contact material.
  - § Oral LD50:- not less than 2000mg/kg - very safe
  - § Dermal LD50:- greater than 2000mg/kg –very safe
  - § Low order of Toxicity

**Applications**

- § Heat Exchangers
- § Cooling Towers
- § Swimming Pools
- § Industrial Fresh Water
- § Paper Mill Waters
- § Holding Ponds & Reservoirs