



Revised April 2005

## UNDERSTANDING ALGAECIDES

### WHAT DO ALGAE REQUIRE TO LIVE?

The basic requirements are:

1. Water - Must have water in the pool.
2. Food - High T.D.S. can be responsible.
3. Light - Required by most types of algae.
4. Warmth - More warmth = more growth.
5. A point of attachment for fixed algae.

### ALGAE CONTROL MEASURES. PHYSICAL

1. Reduce food supply to minimum by backwashing regularly to remove nitrogenous materials and other food components in T.D.S.
2. Repair cracks or crevices where algae can breed.
3. After superchlorinating, circulate water through the main drain to flush out any reservoirs of infection.

### ALGAE CONTROL MEASURES. CHEMICAL

1. Regular superchlorination to 5 PPM free chlorine every 7-10 days in Summer and at least monthly in Winter. If algae are present increase dose to "shock" level i.e. 10PPM.
2. Q.A.C, Quaternary or "Quat" Algaecides. These are long lasting and give back-up protection against algae during holidays or over winter. Overdosing may cause foaming.
3. Triazines. Zed Zed is a very different type of product to the Quats.
  - (a) Very stable in presence of chlorine (Salt Chlorinator).
  - (b) Compatible with Biocides eg. Baquacil.
  - (c) Low toxicity to humans.
  - (d) Low solubility prevents overdosing e.g. 3-6mg/l.
4. Polymeric Algaecides. R70 Premium\*, Algo\* etc. These are best regarded as super Quats as they perform like quats but are of improved performance at lower dose rates with less foaming properties.



5. Heavy Metals. Copper as copper sulphate (Bluestone) is a very effective algaecide. To kill existing algae use copper at 2.5 – 5.0 mg/l. To prevent algae growing copper levels of 0.05-1.0 mg/l are adequate. Green hair and discolouration of the pool surface finish – particularly marblesheen are problems associated with copper. Chlorine will gradually oxidise the copper to an insoluble form. If copper levels are causing problems dump the pool water. Copper plates out on stainless steel.
6. Metal Complexes. Metals such as copper and tin are complexed with organic compounds to make materials with exhibit good algaecidal activity without the drawbacks of the simple metal salt. Due to the variation in formulation technique there can be a variation in field performance of ostensibly similar products from different manufactures.