## **Troubleshooting Guide 1**



Although algae exists in many forms, the most common found in our swimming pools in this region is green algae (Chlorella).

### **Probable causes**

- Low free chlorine level
- High pH
- High stabiliser (cyanuric acid) level
- Phosphate levels too high

The chlorine, which is normally an effective algicide may not have been maintained at recommended levels or not be acting as efficiently as it should. This can happen if for instance the pH of the pool water is outside recommended parameters or the stabiliser (cyanuric acid) level is too high. Phosphates from various sources, if uncontrolled, can be a major nutrient source for algae growth.

The use of a test kit or test strips may help to establish the most likely cause.





## Troubleshooting Guide 1: ALGAE

## What you may need...

#### **Fi-Clor Superfast Granules**

- To shock chlorinate the pool
- Extra strength (78% available chlorine)
- Fast dissolving, quick acting
- Stabiliser-free, no chlorine lock



#### **Fi-Clor Rapid Clarifier**

# To clarify the pool water after killing the algae

- Clarifies and helps prevent algae
- No vacuuming required
- Adds sparkle to water surface
- No sulphates to attack grouting and render



#### Fi-Clor Granular Floc

# Clarifies pool water by total floc treatment

- Removes large quantities of suspended debris
- Ideal following shock treatment

**Fi-Clor Liquid Floc** 

· Heavy duty treatment

Granular Floc

Convenient alternative to

Clears very cloudy pool water

 Removes dead algae following shock treatment







#### Fi-Clor Extra Strong Algicide

To help prevent a recurrence of algae

- Highly concentrated copper based formulation
- Destroys even the most resistant algae

# Fi-Clor Multi-Functional Algicide

#### 5 actions in one treatment

- Eliminates algae
- Clarifies water
- Anti-stain
- Anti-scale
- Protects the pool for a season
- Copper-free

#### Fi-Clor Phosphate Test Strips

Easy to use test to determine levels of phosphate

**Fi-Clor Phosphate Remover** 

Reduces algicide consumption

Could solve recurring algae

problems

Concentrated

- Contains 10 reagent strips
- Full instructions included











### Action to be taken

Before adding any chemicals to your pool, ensure nobody is swimming. Keep the circulation running to ensure adequate dispersion of the chemicals.

#### 1. If due to low free chlorine

- Adjust the pH to as near 7.2 as possible this will make the chlorine much more effective for the task in hand. To lower the pH, dose Fi-Clor pH & Alkalinity Reducer at a rate of 500g per 50m<sup>3</sup> (11,000 gallons). Dose no more than 1kg at a time. With the circulation running, distribute around the pool, avoiding the skimmers. Do not dose it in one spot otherwise some alkalinity may be destroyed.
- Shock treat the pool using Fi-Clor Superfast Granules. Dose at the rate of 1.1kg per 50m<sup>3</sup> (11,000 gallons). Distribute the product evenly over a wide area in the deepest part of the pool and keep the circulation running. There is no need to predissolve in water due to its good solubility. It will dissolve rapidly to form free chlorine which helps kill algae.

#### WARNING: Do not mix Fi-Clor Superfast products with any other types of chlorinating compounds (even other products in the Fi-Clor range) either in the dry state, or in the skimmer. Fire or explosion may result. If using with other products, dose them separately into different areas of the pool.

- Brush off any algae that may be clinging to the pool surfaces.
- Run the filter for 24 hours and then backwash to remove dead algae from the top of the filter.
- Vacuum the pool.
- As the algae is killed off, the pool will probably turn milky. This can be cleared with an initial dose of 100ml per 50m<sup>3</sup> (11,000 gallons) of Fi-Clor Rapid Clarifier. A second dose of 100ml may be required depending on the amount of suspended material (dead algae cells) to be cleared. In order to remove large quantities of dead algae cells, it may be necessary to carry out a total floc using Fi-Clor Granular or Liquid Floc.
- To prevent a recurrence, dose the pool with either Fi-Clor Multi-Functional Algicide (without copper) or Fi-Clor Extra Strong Algicide (with copper). Refer to back of pack for detailed dosing instructions.
- Thereafter, ensure that free chlorine levels never fall below 1.5mg/l (ppm) whether the pool is in use or not.

#### 2. If due to high stabiliser level

- Stabiliser is essential in an outdoor pool but if you are using either stabilised chlorine granules, Maxi or Mini-Tabs (including multifunctional products), the level will increase if water replacement has been insufficient during backwashing.
- Take a sample of water to your approved Fi-Clor dealer who will test it and advise how much of the pool's contents (if any) you will need to replace with fresh water.
- Due to structural considerations relating to the pool design etc, great care should be exercised if draining large quantities of water. Your dealer's advice should be sought on the maximum quantity of water that can be safely replaced in one operation.

- The stabiliser level should be between 30-60mg/l (ppm), but ideally at the lower end of this range following a water replacement.
- If you find it difficult to keep the stabiliser level below 100mg/l (ppm), try sanitising your pool either with Fi-Clor Superfast Granules or Fi-Clor Supercapsules which are completely stabiliser free.

#### 3. If due to high phosphate levels

Phosphates are chemical compounds containing phosphorus and oxygen. They are essential nutrients needed to support life and form part of the process used to fuel cell growth and maintenance. Phosphates are therefore a major nutrient source for algae growth in swimming pool water, supporting their development even in the presence of chlorine. Removing them will dramatically reduce the potential for algae growth.

They can enter the swimming pool via mains top-up water, plant waste, urine, agricultural and garden run-off following heavy rain and even airborne dust.

It is essential to measure the amount of phosphate in your pool water to allow its control. This can easily be performed using Fi-Clor Phosphate Test Strips.

For further information on phosphates in swimming pool water, please refer to our leaflet; Does Your Pool Keep Going Green, available from your Fi-Clor dealer.

#### Initial treatment

- First measure the phosphate level (ppb) in the water using Fi-Clor Phosphate Test Strips, it is generally considered that the concentration of phosphate should be maintained at less than 100ppb.
- 75ml of Fi-Clor Phosphate Remover will remove 100ppb of phosphate in 50m<sup>3</sup> (11,000 gals).
- Quantity of product required (ml) = 0.015 x volume of pool (m<sup>3</sup>) x phosphate level (ppb).
- · Backwash the filter.
- With the filter running, add the product directly to the pool at the inlets.
- Run filtration for at least 24 hrs, check filter pressure and if needed backwash the filter again.
- After 48 hrs, measure the phosphate level again and if necessary add further phosphate remover following the instructions above.

#### Regular treatment

 Measure the phosphate level in the pool once a month except when not in use in the winter and dose as per instructions.





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