



Every day microorganisms, contaminating elements, algal spores, bacteria, dust, soot and dirt harmful to the bathers' health enter your swimming pool. Dirt particles and muddiness can be eliminated by an efficient filtration system. On the contrary a suitable chemical treatment is needed to remove microorganisms, algae, bacteria and viruses.
How to calculate the volume of your swimming pool:

Rectangular swimming pool: Length (m) x Width (m) x Mean depth = Volume of cum

Circular swimming pool: Length (m) x Width (m) x Mean depth x 0.79 = Volume of cum

Oval swimming pool: Length (m) x Width (m) x Mean depth x 0.89 = Volume of cum

Swimming pool of all shapes: Length (m) x Width (m) x Mean depth x 0.85 = Volume of cum

• **Problem: green water**

CAUSE: Proliferation of algae due to insufficient chlorination. **SOLUTION:** After having obtained a pH value between 7.2 and 7.6 carry out shock chlorination using chlorine. Increase the pump operating hours and measure out some flocculant (use a sand filter only). If the problem occurs frequently use a concentrated anti-algae agent.

• **Problem: milky water**

CAUSE: basic pH over 8. **SOLUTION:** Bring pH back to 7.2 and carry out shock chlorination.

• **Problem: cloudy water**

CAUSE: Insufficient filtration. **SOLUTION:** Increase the number of operating hours of the pump, measure out some flocculant (use a sand filter only).

• **Problem: rusty red coloured water**

CAUSE: Presence of iron and/or manganese. **SOLUTION:** Obtain a pH value of 7.2 and carry out shock chlorination.

• **Problem: unpleasant smell of chlorine, eye irritation**

CAUSE: Low chlorine content, presence of chloramines. **SOLUTION:** Obtain a pH value of 7.2. Measure out specific active oxygen in granular form to decrease chloramine concentration or carry out shock chlorination.

• **Problem: eye irritation in the absence of chlorine smell**

CAUSE: Presence of excess chlorine in the pool. **SOLUTION:** Decrease chlorine content by using a special product (chlorine reducer) and bring pH value between 7.2 and 7.6.

• **Problem: metal elements oxidized, brown spots**

CAUSE: pH too low, below 7. **SOLUTION:** Bring pH between 7.2 and 7.6.

• **Problem: spots on walls and edges**

CAUSE: Presence of algae due to insufficient chlorination. **SOLUTION:** Carry out shock chlorination, brush scrub walls, increase the maintenance chlorine content to minimum 1.5, use a concentrated anti-algae agent.

• **Problem: dark spots at the waterline**

CAUSE: Grease, oil, soot and smog residues. **SOLUTION:** Use an alkaline detergent product with a high degreasing power and an abrasive sponge for swimming pools. To prevent the problem rinse the waterline with liquid chlorine on a two weekly basis.

• **Problem: rough walls with whitish spots**

CAUSE: Highly calcareous water. **SOLUTION:** When the swimming pool is empty descale its walls by using an acid-based descaler with a high descaling power. Add a corrosion-proofing anti-scaling agent when filling the pool up.

Swimming pool opening:

1- Remove whitish deposits from the walls by using an acid-based product and the dark halo at the waterline by using an alkaline detergent product. 2- Carry out counter-washing and rinse the filtration system (sand filters); if the sand is encrusted with lime scales, wash it using a preventive detergent for filters. 3- Check the water pH and, if necessary, bring it between 7.2 and 7.6. 4- Carry out shock chlorination then make the filtration system run for at least 24 continuous hours. 5- The following day add a preventive anti-algae agent to avoid proliferation of algae.

Swimming pool maintenance:

1- Check the pH every day using a test kit, and maintain it between 7.2 – 7.6. 2- Add a trichloride tablet every day, or place it in the skimmers or measurers on a weekly basis. Doses may change according to the product used. ATTENTION: the direct contact of chlorine powder or tablet with PVC coatings can stain. Adjust the dose to obtain a chlorine value between 0.5 and 1.2 mg/l. 3- Measure out a preventive anti-algae agent once a week. 4- Carry out counter washing and rinse the filter at least on weekly basis.

When on holiday: (treatment for 2/3 weeks)

1- Adjust the water pH. 2- Carry out shock chlorination. 3- Place 2/3 trichloride tablets into the skimmers. 4- Keep the pump running for at least 8-10 hours a day. 5- If possible, cover the swimming pool with a winter cover.