

# Alden Leeds, Inc.

## Manufacturer of chemicals that care for your pool Technical Document #2

### ALGAECIDES: SOME STUBBORN FACTS

Algae, algae, algae... green, black, mustard, and pink. Why do you use algaecides? When do you dose? Which one? How much? These questions are asked over and over again. It seems that everyone has their own opinions about algae control and here are some of the most widely held beliefs:

- Algaecides are not necessary because chlorine kills all. This may be true in theory, but the chlorine level must be kept high at all times (3 ppm or higher) and not permitted to slip. This can be expensive, irritating to swimmers, will lead to bleached swimwear and vinyl liners, and is difficult to maintain. Even in high chlorine, some algae "habituate" or become accustomed to a steady level. In tropical areas, for example, black algae sets "roots" and seals itself with a tar-like coating that is unaffected by high levels of chlorine. Mustard algae is another algae that seems to thrive in chlorinated water.
- Algaecides are killers and Algaestats are preventatives. This may be true by definition but one product does both jobs. The EPA does not recognize the difference between killing visible algae (Algaecide) and killing invisible algae (Algaestat). Invisible algae sounds like a contradiction but, in fact, thousands of algae are growing before they become visible in an algae bloom.
- Algae can be filtered out of water. This is true for "colonies" of algae that are visible in the water, but is not true for single cell algae, for example, that exist as small as 0.5 micron. Diatomaceous earth (DE) filters particles down to 1-3 microns, sand filters particles down to 15-20 microns, cartridge filters particles down to about 20 microns. Generally, if you can see it, you can filter it.
- Algae doesn't grow in cold water. Temperatures have to drop to near freezing before algae move into a dormant state. Studies in the Arctic Circle indicate that as long as light is present algae will grow.
- Algae doesn't grow in low pH water. Not true. The most common types of algae such as "planktonic blue-greens" prefer pH= 7.4-9.0. but many types live in pH-- 5.0-7.0. During periods of hot weather and intense sunlight, photosynthesis is at its peak. As algae grow, carbon dioxide (food for algae) is withdrawn from the water and the pH drifts upward. It is most common to see a green pool with a pH-- 8.0.
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