

Evade Algae with Trusted Taylor® Testing



K-1582

Where does algae come from? Everywhere. Algae spores are in the wind and in rain. They can be in the water supply used to fill the pool (or spa). They can leapfrog from one pool to another via a swimsuit or pool brush. **Once in the pool**, surrounded by all their favorite things—water, light, heat, and nutrients such as carbon, nitrogen, and phosphate—the **spores begin to bloom and multiply.**

Bacteria and other **potentially harmful microorganisms** find shelter in these **algae colonies.** The pool's chemistry goes totally out of whack and the filter clogs. **No one wants to swim.**

Taylor offers a **wide variety of kits** for analyzing sanitizers and oxidizers, as well as the elements of water balance. **Water** that is **properly sanitized** and **chemically balanced** is **less hospitable to algae** than imbalanced water.

QUATS AND POLYQUATS

Quaternary ammonium compounds (commonly referred to as "quats" or abbreviated as QAC) are organic nitrogen substances that kill algae by disrupting the function of their cell membranes. **Quats work best on green algae.** Their structurally longer cousins, the **polyquats, affect all algae types.**

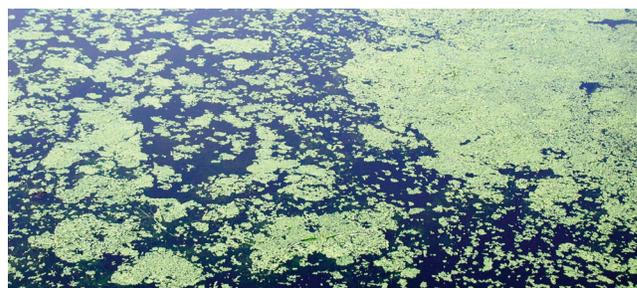
Test quat and polyquat levels with the drop-count test below that most closely corresponds to the range of the algacide in use:

K-1582

1 drop = 10 or 25 ppm QAC / 1 drop = 3.5 or 9 ppm polyquat

K-9065

1 drop = 1.25 ppm QAC / 1 drop = 0.5 ppm polyquat



High temperatures, a sunny day, and the presence of phosphates and nitrates will energize this group of nasty intruders: algae.

PHOSPHATE REMOVERS

Remove phosphate and you **remove one of algae's primary food sources.** Phosphates enter the pool from the natural environment and from man-made sources. Manufacturers of phosphate removers claim **algae can begin to thrive above 125 parts per billion of orthophosphate**, the form of phosphate that results from the breakdown of more complex phosphorous compounds.

Taylor's phosphate test kit measures this elementary "free" form. Users match the developed color to a waterproof color chart:

K-1106

Color Card comparator (printed-color standards), 0–6000 ppb PO₄³⁻



For commercial use only: the reagents in the K-1106 are not appropriate for use by homeowners.

COPPER-BASED TREATMENT CHEMICALS

Copper is a **proven algaecide** (killer) and **algaestat** (preventive). Copper salts deposited on pool walls cause a noticeable blueing. In the presence of a strong oxidizer, **like chlorine**, they can convert to cupric oxide, **leaving a grey-to-black stain**. Care must be taken to **maintain balanced water** and to follow dosage directions, keeping the copper at the **algaecide manufacturer's recommended level** (generally below 1 ppm).

To avoid stains, monitor the copper concentration with a simple color-matching test:



Matching the blue of the treated water sample to one of the eight liquid-color standards in the K-1738's Midget comparator is easy.

K-1738

Midget™ comparator (liquid-color standards), 0.2–3.0 ppm Cu

COPPER/SILVER IONIZATION

Ionizers produce small positively charged particles (“ions”) of **copper** and **silver** that act as a **potent biocide** at even trace levels.

Ionization systems are designed so that **only the copper-ion level needs monitoring**; when it is correct, the silver level will be too. Our kit for low-level copper employs a color-matching test:

K-1730

Color Card comparator (printed-color standards), 0.05–1.0 ppm free Cu

When the ionization method is employed, the water's **pH** should be **kept between 7.2 and 7.4 to prevent metal stains**. All of Taylor's combination test kits for analyzing pool water contain a pH test in this range. The Myron L ULTRAPEN™ PT2 (M-6556) that we carry is also handy for testing pH.

Some manufacturers of ionization systems also recommend **keeping total dissolved solids (TDS) at 500 ppm or higher** to enhance conductivity. TDS can be tested with either a drop test or a handheld meter:

K-1764

Drop test, 1 drop = 50 ppm TDS as CaCO₃

M-6542

Myron L meter 512T5D, 0–5000 ppm TDS; 0–5000 ppm NaCl

M-6555

Myron L ULTRAPEN™ PT1, 1–10,000 ppm TDS; 0.0010–10,000 ppt salinity

M-6556

Myron L ULTRAPEN™ PT2, 0.00–14.00 pH, 32–160°F/ 0–71°C temperature

ALSO AVAILABLE

- A wide range of testing products for professional and homeowner use, ranging from simple two-way (pH and sanitizer) liquid test kits, to dip-n-read test strips for multiple parameters, to portable laboratories for comprehensive analysis, to specialty tests such as iron and monopersulfate.
- Replacement reagents and components for all kits.
- Free technical assistance at **800-TEST KIT**.
- Our water analysis treatment software is available at www.sureTREAT.com

M-6555: Myron L's PT1 pocket tester—easy to use and extremely accurate.

