

Accu-Tab® System

TABLET CHLORINATION

Aquatics Applications



Improve Overall Performance and Simplify Operations





With every drop of sparkling, crystal clean water delivered from the *Accu-Tab* system comes peace of mind for pool operators and managers.

Accu-Tab® System Technology

From community swimming pools and spas to large aquatic facilities, pool operators face tough challenges in the fight for pool water clarity, safety and water balance. The everyday tests of nature—in addition to the organic and inorganic materials introduced into the water by swimmers—pose serious issues as pool operators strive to reach quality standards and maintain a healthy environment for patrons.

The *Accu-Tab*® chlorination system from PPG Industries stands up to the challenges of commercial pool environments, as well as rigorous industry and government health and performance requirements, by consistently and accurately delivering the chlorine needed to kill harmful bacteria, control algae and destroy organic contaminants. The easy-to-use calcium hypochlorite tablet-based system is built on smart engineering, proprietary tablet technology and quality construction.

Through use of the *Accu-Tab* chlorination system, which delivers exceptional performance at a great long-term value, pool operators worldwide are streamlining their maintenance duties and improving their pool operations.



These Accu-Tab chlorinators are five of many models ideal for indoor or outdoor pool and spa applications.



Model 3070 AT

Model 3012

Model 3140 AT

Model 1030

Model 100



The Accu-Tab System Advantage

Accu-Tab system technology combines specially-engineered chlorinators with quality controlled three-inch calcium hypochlorite tablets to form a complete, NSF-certified system that kills bacteria, controls algae and destroys organic contaminants. Notable advantages:

- System is rugged, compact and manageable (no containment tanks).
- Performs reliably with or without automatic controllers.
- Feeders are simple with few moving parts and no small openings that can clog.
- Metering technology helps prevent scale formations—often reducing maintenance needs to an annual cleaning.
- Transparent lid allows operators to verify tablet levels without interrupting operations.
- Tablets have a long shelflife depending on storage conditions.
- Chemical is concentrated allowing for smaller, stackable containers.



See more Accu-Tab system advantages on page 10!



This 150,000-gallon outdoor pool is serviced by the Accu-Tab® PowerBase® 3070 AT chlorination system.

Each durable, corrosion-resistant *Accu-Tab* chlorinator is handcrafted in the U.S.A. using high-quality PVC and is backed by a limited warranty. What's more, the chlorinator has few moving parts, no small openings that can clog and, for convenience, a transparent lid that allows operators to verify tablet levels without interrupting operations.

Austin Looper
PPG Market Development Engineer,
Accu-Tab system



Quality Tablets + Quality Chlorinator = Quality Performance

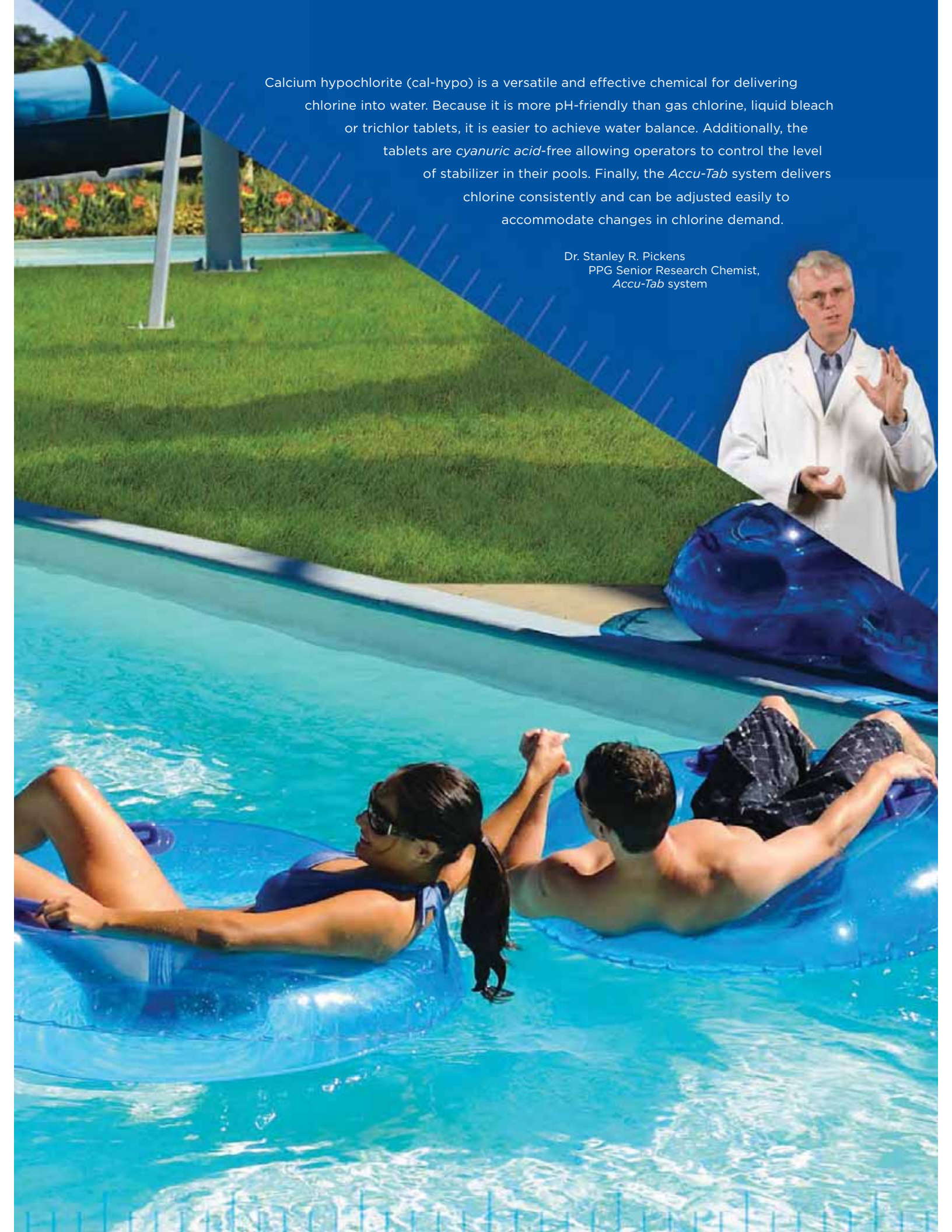
The *Accu-Tab* system is able to run consistently and predictably because *Accu-Tab* tablets undergo a multi-step manufacturing and quality control process so they will not soften and clog the system—a common problem with knock-off three-inch tablets and briquettes.

PPG makes tablets only from its own calcium hypochlorite granular lot materials at a quality-controlled chlorine content and specified particle distribution. Qualified granular material is blended with a scale inhibitor for Blue SI tablets and a colorant under a proprietary formulation and then pressed to meet erosion requirements resulting in a solid, quality product. The blue-colored *Accu-Tab* tablets are easily identifiable to minimize the risk of mixing with other chemicals and are excellent for use in indoor pools because they are *cyanuric acid-free*.

Accu-Tab Blue and Blue SI (scale inhibitor) tablets are independently tested in *Accu-Tab* systems by NSF International to meet NSF/ANSI Standard 50 certification and are the only tablets sanctioned for use in *Accu-Tab* chlorinators.



This 150,000-gallon lazy river is serviced by the *Accu-Tab*® PowerBase® 3500 chlorination system.



Calcium hypochlorite (cal-hypo) is a versatile and effective chemical for delivering chlorine into water. Because it is more pH-friendly than gas chlorine, liquid bleach or trichlor tablets, it is easier to achieve water balance. Additionally, the tablets are *cyanuric acid*-free allowing operators to control the level of stabilizer in their pools. Finally, the *Accu-Tab* system delivers chlorine consistently and can be adjusted easily to accommodate changes in chlorine demand.

Dr. Stanley R. Pickens
PPG Senior Research Chemist,
Accu-Tab system

Choosing the Right Accu-Tab System

Whether a spa, municipal pool, waterpark, spray pad or decorative fountain, there is an *Accu-Tab* system model to meet most water environments and chlorine demands. Models are designed to suit indoor or outdoor pool or spa installations. The systems can be configured to accommodate suction side, gravity flow and automated applications in an existing operation or a new facility. Once in place, the *Accu-Tab* system runs simply and efficiently with minimal maintenance.

PPG customers get the patented, trusted technology of the *Accu-Tab* system along with the support of a worldwide network of authorized *Accu-Tab* system specialists who offer years of invaluable commercial pool expertise at a local level. They work closely with operators, builders and design engineers to match the right system to specific commercial pool and spa chlorination requirements.

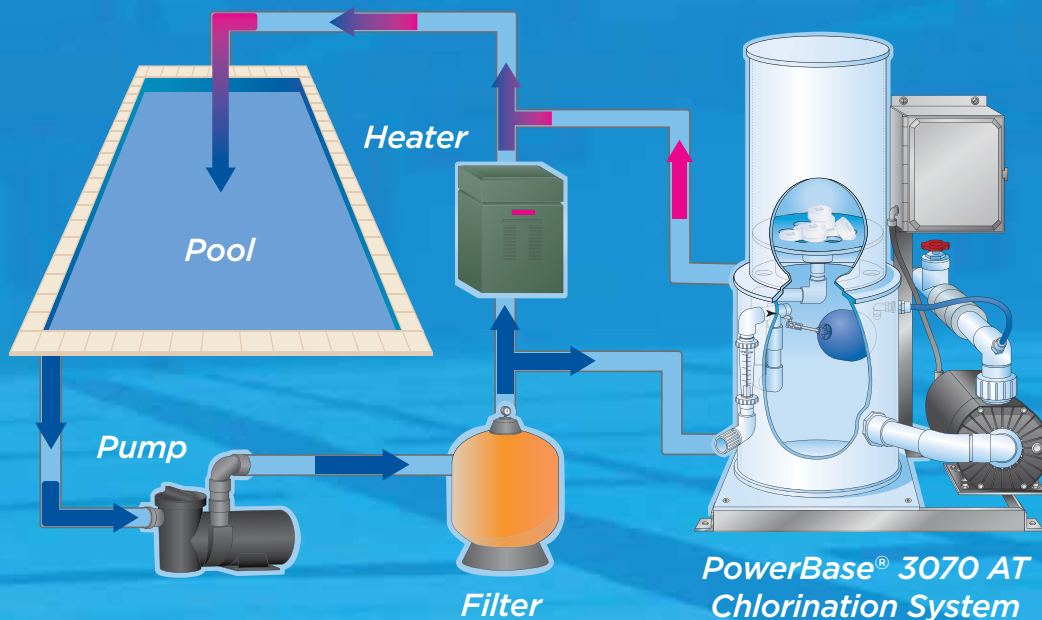


This 750,000-gallon indoor pool is serviced by the Accu-Tab® PowerBase® 3140 AT chlorination system.

Accu-Tab system specialists are trained and authorized by PPG.

Whether it's consulting on chlorinator operation, delivering tablets or helping to keep you in compliance with state and local health codes and regulations, your *Accu-Tab* system specialist can help you succeed from installation and beyond.

Water flows into the chlorinator through a flow meter and level control valve. After the chlorine solution passes through the chlorinator pump, a valve on the discharge side provides precise chlorine residual control. *Accu-Tab* tablets erode at a predictable rate based on the amount of water, allowing for a consistent delivery of chlorine. Once the water is chlorinated, it flows back into the main water line and is distributed throughout. If the water flow is shut off, the chlorinator stops automatically, ensuring the tablets above the sieve plate remain dry when the unit is not in operation.



The Power of the Accu-Tab System Over Alternatives

The *Accu-Tab* system minimizes the safety concerns typically associated with the use of liquid bleach and trichlor feeders. In addition to reducing the risk of leaks and spills, it requires only rubber gloves and safety goggles to handle calcium hypochlorite tablets. Unlike salt chlorine generators, there are no salinity issues, the system does not require costly anode cells or nearly as much electricity to operate and it can be adjusted easily to accommodate changes in chlorine demand.

The *Accu-Tab* system performs more predictably than other calcium hypochlorite systems because of the quality of tablets and the controlled high water flow/lower chlorine concentration delivery technology.

FACTORS	ACCU-TAB® SYSTEM	ALTERNATIVE CAL-HYPO SYSTEM
Design Principle	High water flow rate, low chlorine concentration ~ 200 ppm	Soaking or spraying over briquettes, high chlorine concentration ~ 10,000 ppm
Maintenance	Low chlorine concentration results in less scaling and sludge – typically once per year cleaning!	Strong chlorine solution leads to faster scaling – clean out sludge twice per month or more!
Flexibility	Chlorinators have a proportional 95% turn-down capability for small bodies of water	Chlorinators need costly controllers to chlorinate small bodies of water
Plumbing	Large (up to 2") PVC plumbing minimizes spill potential and maintenance	Small diameter tubing can plug with scale; tubing has potential to leak if pinched
Parts Replacement	Off the shelf replacement parts – fewer parts overall	Small plastic parts are proprietary and must be purchased from dealer
Chlorinator Construction	Rugged aluminum frame with schedule 40 PVC pipe; chlorinator and pump on one skid	Molded plastic chlorinator construction and separate pump installation
Tablet Quality	Tablets resist breakage and erode consistently based on proprietary manufacturing process	Small briquettes are formed, not pressed, and may break and crumble in transit

FACTORS	ACCU-TAB® SYSTEM	12% CHLORINE BLEACH	SALT CHLORINE GENERATOR	TRICHLOR TABLETS
Safety	Solid chemical – no dual containment required	Dual containment required for concentrated liquid solution	Typical 100,000-gal. pool requires ~ 4,200 lbs. of salt for initial start-up	Emits nitrogen trichloride fumes
Capacity	High instantaneous chlorine rates for peak chlorine demand	Possible bleach degradation in hot weather	Backup chlorinators often required to maintain chlorine level in certain outdoor pools	Low chlorine delivery and inconsistent
Handling	55-lb. pails	55-gal. drums weigh 500 pounds	Hundreds of pounds of salt	40-lb. pails
Water Quality	Calcium polishing results in clearer water	High total dissolved solids (TDS)	High total dissolved solids (TDS)	Over stabilization
Maintenance	Chlorinators rarely require cleaning or maintenance	Feed pumps need constant repair and tubing leaks regularly; gas locking of pump is not uncommon	Must replace expensive cells every two to four years	Low maintenance
Material Compatibility and Corrosivity	Relatively diluted 100-300 ppm hypochlorite solution	Concentrated (120,000 ppm) hypochlorite solution very corrosive to pump room equipment	Stray voltage can cause corrosion	Low chlorine can cause corrosion of pool equipment
Total Dissolved Solids (TDS) and Cyanuric Acid	No stabilizer buildup; calcium addition	High pH adds a lot of total alkalinity to the water	Must maintain ~ 3,000-9,000 ppm salt concentration in the pool; salt is converted to chlorine as it's passed through the cells	Constant buildup requires periodic draining; some states ban its use, especially in indoor public pools
Water Balance Chemicals	Provides helpful amounts of calcium and total alkalinity	Provides no calcium; often too much total alkalinity	Calcium addition will be necessary to maintain proper water balance	Must increase pH and calcium to maintain proper balance

Visit www.accu-tab.com/aquatics
for more information

Why choose the *Accu-Tab* system?

- Demonstrated reliability and cost savings
- Flexibility to suit many applications,
regardless of size and chlorine demand
- Integrates easily with existing systems
- Many models available
- Quality-controlled tablets are *cyanuric acid-free*
- NSF/ANSI Standard 50 listed

Contact an *Accu-Tab* system representative
to learn how the system can improve
your operations.



Behind Every Accu-Tab® system is the Power of PPG Industries — Innovation, Science, Engineering, Experience.

The Accu-Tab® system from PPG is a complete tablet chlorination system backed by the company's industry experts and worldwide specialist network. With more than 50 years of experience in the chlorine industry, PPG has grown to become one of the world's largest manufacturers of chlorine. PPG also makes coatings that protect your computer and car as well as energy-saving glass for your home's windows. The company has sales and manufacturing facilities in more than 60 countries.



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The Accu-Tab system is NSF/ANSI Standard 50 listed.

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