



# CAMPUS FIRE FACTS

## Residential Pool and Spa Safety

For students moving off-campus to housing with pools or spas, there is a new level of safety and responsibility that must be recognized. Please note the following safety tips and enjoy your off-campus oasis.

### Cleaning

- When preparing to open the pool for the season, remove all leaves and other debris from the cover, and around the deck.
- Empty the skimmer baskets frequently. This helps reduce the amount of debris that gets into the pump basket, and helps maintain proper water flow through the system.
- Keep the trees and shrubs around your pool trimmed back to minimize the amount of leaves and debris that end up in the pool.
- An automatic pool cleaner will dramatically reduce the time spent on maintenance.

### Water clarity

- When opening the pool at the beginning of the season, run the filter continuously, until the water is completely clear.
- If the pool water appears green or has an unpleasant odor, algae are probably the cause of the problem. First test for proper chlorine level, then add an algaecide, flocculant, or clarifier,

and vacuum to waste. If the problem persists, consult a pool professional.

- Keep your recirculation system (filter, pump, lint trap, and skimmer baskets) clean and in proper working condition to help ensure that your pool water remains clear.
- Pool inlets should be adjusted so the water is circulated throughout the basin to avoid stagnant areas ("dead spots").
- If you use well water to fill the pool, you may need to add a metal remover.

### Water testing

- To ensure accurate readings, replace all test kit reagents at the beginning of each swimming season, or on an annual basis.
- To ensure the highest water quality, test the pool's pH and free chlorine levels daily, and add chemicals as needed.
- Maintain a residual chlorine level of consistent with the product's label directions. pH should be maintained between 7.4-7.6. A pH range of 7.2-7.8 is considered acceptable.
- Proper chemical usage is important for maintaining stable water chemistry in the pool. Be sure to follow the chemical manufacturers' instructions closely regarding proper dosage for your size pool.

### Chlorine

- To maintain the proper level of residual chlorine when bather load is heavy, you may need to add large doses of chlorinating chemicals (shock, super chlorinate or breakpoint chlorinate) to the water. Follow the directions for the type of "chlorine or "shock" used since some oxidizing chemicals do not kill algae or bacteria, they react with and oxidize chemicals in the water. Do not allow bathers to enter the pool until the chlorine is back to the proper level.
- Maintain a residual chlorine level consistent with the product's label directions.

### pH level

- The ideal range for pH of pool water is 7.4-7.6. A pH range of 7.2-7.8 is considered acceptable.
- Maintaining a total alkalinity (T.A.) range from 80-120 ppm (parts per million) will help minimize changes in pH, which can result in scaling and corrosion. Frequent testing can help prevent these problems before they get out of hand.

### Chemical storage

- Keep chemicals out of the reach of children and pets.
- Store in a cool, dry place, and out of direct sunlight.
- Store in their original containers.

- Do not use contents of unlabeled containers.
- Containers should always be kept closed when not in use.
- Be sure storage area is well ventilated.
- Never store chlorinating chemicals near acid. Chlorinating chemicals will release toxic chlorine gas if they come in contact with acids.
- Do not store liquids above powders or solids. Do not stack containers.
- Do not store materials or chemicals above your head.
- Do not store pool chemicals near gasoline, fertilizers, herbicides, grease, paints, tile cleaners, turpentine, flammable materials, or other chemicals if possible. This tip is especially important when pool chemicals are stored in sheds or small storage rooms.
- Do not reuse containers.

#### Handling chemicals

- Always read and follow the chemical's instructions to ensure safe use of chemicals.
- Wear appropriate protective equipment and clothing including gloves, footwear and eyewear.
- Handle chemicals in a well-ventilated area.
- Use separate, clean metal or plastic measuring cups for each chemical to transfer or measure chemicals. Never use wood scoops.
- Protect chemicals from moisture and water -- such as a cup of water or coffee. Even putting the wet scoop back in the pail may cause a reaction.
- When applicable, always dilute chemicals by adding to water, never the other way around unless the container's label instructs you to do so.
- Do not mix different chemicals together.
- Do not put spilled chemicals back into their containers.
- Do not smoke when handling chemicals.
- Do not expose to heat or flames.

#### Filters

- When cleaning cartridge filters, follow the product label directions. Not following directions can cause the cartridge to plug and no longer be effective.
- If the sand in the filter is 3-5 years old, ask your pool professional if it's time to replace the sand.
- If your filter pressure gauge indicates that pressure has dropped below the normal reading for a clean filter, check to see if you have a clogged pump or skimmer basket.
- Clean your sand filters when you close your pool for the season.
- To obtain maximum filtration and energy efficiency, backwash or clean your filter regularly, as required.

#### Heaters

- To maintain your heater's efficiency, follow a regular program of preventive maintenance described in the heater's installation and operations manual including annual inspection and de-liming of the heat exchanger when necessary. Maintaining water balance is important to make sure that scale does not form on the heater elements reducing energy transfer and increasing energy cost.

#### Pumps

- Turn the pool pump off before operating the multi-port valve.
- If your pump starts running louder or making unusual noises, shut it off and contact your pool professional.
- Make a habit of checking and emptying pump baskets regularly.

#### Skimmers

- Check to make sure the skimmer weir is in place and is moving freely.
- Make a habit of checking and emptying skimmer baskets regularly.
- Maintain your pool water level halfway up the skimmer box opening.

## Leaks

- A pool may typically lose a minimal amount of water each day (no more than ¼ inch) due to evaporation and/or splash out. If your pool is losing more water than that, there could possibly be a leak. Monitor closely and consult your pool professional if you suspect a leak.
- Loose tiles in the pool, or cracks in the pool deck may be an indication of a leaking pool.
- If you notice water-saturated soils in the area around the pool, pool pumps or plumbing, your pool may be leaking.
- If you see bubbles in the return water when the pool's pump is running, it's likely there's a leak in the suction side of the filtration system.

## Spas and hot tubs

- An emergency shut-off switch for the pool circulation pump and the spa jet pump in an easily accessible, obvious place near the pool or spa. Make sure bathers know where it is, and how to use it in case of emergency.

- Get out of the spa or hot tub immediately if you experience nausea, dizziness or fainting. These are signs of hyperthermia, which can be fatal. Cool your body with cold towels or a cool shower. Call a doctor or 9-1-1 if the symptoms do not go away.
- Keep the water temperature in your spa below 104°F (40°C). Age or health conditions (especially pregnancy) may require a lower temperature. Consult your physician for more information.
- Never use the spa or hot tub if you are using alcohol or drugs. The combination of hot water and alcohol and/or drugs can cause dizziness, falling, unconsciousness or a heart attack.
- Make sure your spa or hot tub has dual suction outlets. All tub suction fittings should be certified to meet the current ASME/ANSI Standards that apply.
- Never alter the electrical cord or plug on the spa system.
- Never use an extension cord to connect a spa system to an existing electrical outlet. A spa system must operate from a GFCI-protected circuit or outlet. If in doubt, consult a licensed electrician.
- Maintain proper disinfection and pH at all times.



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