

What gathers dust on your shelf may be hazardous to your health . . .

Many chemicals are safely used to sanitize, clean or balance the water in swimming pools, hot tubs and spas. CAUTION!!! These exact same pool chemicals, which include different types of chlorine, can react violently when mixed, producing toxic gases, fire and/or an explosion. Chemicals that release chlorine are among the group of chemicals classified as “oxidizers.” Pool and spa chemicals may be corrosive, meaning they may cause skin and eye damage.

Remember that ALL forms of acids react DANGEROUSLY with all forms of chlorine or bromine, Never, never, NEVER mix swimming pool chemicals of any type. Chlorine compounds that look or smell alike may not be the same; you have to know the actual chemicals. Allowing even small amounts of different chlorine sanitizers to touch each other can be REALLY dangerous. In particular, trichlor and calcium hypochlorite can react dangerously on contact with each other. Once they are dissolved in the pool, though, they get along fine.

Be sure to store and use pool chemicals according to manufacture’s recommendations. Never store them inside the home or near heat or flame sources. If the container is punctured or otherwise damaged, dispose of the chemicals properly and replace them.

Liquid and solid chlorine-based oxidizers are commonly sold for home pool and spa care as hydrogen chlorine products. These chemicals can combust spontaneously if contaminated by organic materials (body fluids, acid rain, etc.) or hydrocarbons (fuel or motor oil). Such fires will result in toxic fumes that can be extremely dangerous and require evacuation of the area!

Below are some guidelines for safely transporting, storing, using and disposing of pool chemicals.

Transporting New Pool Chemicals

- Keep your vehicle clean and organized.
- Separate incompatible chemicals, distribute between front seat, back seat, and/or trunk.
- Don’t purchase or carry dangerous containers.
- Anchor your load securely, so that it won’t move around.
- Ask your pool/spa supply dealer for Material Safety Data Sheets (MSDS) to be used for your information and by HAZMAT personnel in case of an accident or emergency.

Storing Pool Chemicals

- Store chemicals in a cool, dry, well-ventilated area, with locked entry. Do not set outside in the sun.
- Keep out of reach of children.
- Keep pool and spa chemicals separate from each other and from other chemicals. Violent reactions, such as explosions, fire or noxious gas production can occur when incompatible chemicals contact each other. Never, ever mix any chemicals together!
- Do not stack chemical containers on top of one another.
- Do not store near metal tools or mechanisms because pool chemicals can cause corrosion.
- Replace lids and caps firmly and securely immediately after opening.
- Post MSDS, emergency information and phone numbers nearby.

Using Pool Chemicals

- Follow label directions carefully and read the instructions! If the label is faded or torn don’t guess what it is. Return it to your dealer.

- Add chemicals to pool water; not the other way around. Chemicals should be added directly to the pool or through a feeder designed for that type of chemical. Chemicals added directly to the skimmer could allow strong concentrations to harm pool equipment and/or swimmers. If the instructions suggest diluting with water first, use a clean oversized bucket with water in it, then add chemicals to the water in the bucket. Read the instructions carefully!
- Wear safety gear when handling chemicals.
- Do not mix chemicals ... EVER! This includes direct mixing of full strength chemicals in a bucket, diluting concentrations and even adding chemicals to the same location of the pool. At the very least, you may get a water quality problem, or worse, you may endanger the health or lives of others. Chemicals can dangerously and accidentally mix with each other by using containers or scoops which were previously used for other chemicals. Always use a clean bucket and scoop, which were designed for use on the chemicals.

Disposing of Pool Chemicals

- Dispose of wastes and spills safely and properly. Immediately clean up any chemical spills. If a violent reaction occurs, contact fire department immediately, and they will instruct you on steps to take until their arrival. If the spilled chemical is a solid, carefully sweep it up using a clean broom and shovel, and place it in a clean, dry plastic container. Avoid breathing the dust. If possible, dilute the chemical in water and add it to the pool or spa. Then, test and balance the water. If this is not possible, contact your local solid waste or health department for instructions on disposal. Do not put floor sweepings of chemicals back into the original container. Any foreign substance, such as dust, dirt, or water, can cause a reaction inside the container. Do not use a vacuum cleaner or shop vac to clean up the spilled substances. If the

spilled substance is a liquid, it should be soaked up with clean absorbent materials and put inside a clean plastic or plastic-lined container. Flush the area with large amounts of water.

- Never smoke around chemicals. Fire or explosion could result.
- Do not breath chemical fumes or dust. Wash skin if contact occurs. If chemicals splash in eyes, flush eyes for 15 minutes and see a physician immediately.
- Use ONLY a water-filled fire extinguisher on a chlorine chemical fire. Never use the dry chemical type of extinguisher.
- The very best way to dispose of pool chemicals is to use them up or give them to someone who will.
- If you cannot use them up or give them to someone who can, you may take them to the Morris County Municipal Utilities Authority (MCMUA) Household Hazardous Waste Facility which is located in Mount Olive and open by appointment on most Tuesday, Friday and Saturday mornings. Please call 973-829-8006 for more information or to schedule and appointment.
- Please take note that the MCMUA also sponsors individual household hazardous waste and electronic drop-off events several times a year at locations throughout Morris County. Please contact the MCMUA at 973-829-8006 or visit our Web site at www.MCMUA.com for more information on HHW disposal.



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MORRIS COUNTY



MUNICIPAL UTILITIES AUTHORITY



**Pool, Spa
And Hot Tub
Chemical Safety**



Prepared by the

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