Pool Chemicals and Your Health

A pool manager was mixing chemicals in the pool house to treat a pool and there was a reaction causing an explosion. The maintenance assistant was cleaning the pool when the explosion occurred. He went into the pool house and was exposed to fumes. Both workers became ill and were taken to the emergency department. The manager had symptoms of eye irritation, coughing and skin burns and the assistant had symptoms of coughing and difficulty breathing. Pool chemicals were mixed in pails with residues of other chemicals still present inside.

Swimming pool maintenance requires the addition of pool chemicals such as chlorine tablets, shock, algaecides, clarifiers, and pH balancers. These chemicals can be dangerous if not mixed and stored correctly. Under certain conditions they can release toxic vapors or cause explosions. For example, accidents can occur when a chemical gets wet or mixed with the wrong chemical. Use these chemicals with care! Here are some things to keep in mind.

Always open chemicals away from your face! Humid, damp and wet conditions cause the release of toxic chlorine vapor.

TIPS

Mixing Pool Chemicals:

- $\sqrt{}$ Follow label and safety information.
- $\sqrt{}$ Use a clean and dry mixing location.
- ✓ Use a well-ventilated space, away from gusts of wind.
- Use separate mixing tools and containers for each chemical.
- ✓ Handle one chemical at a time, even when cleaning up.
- $\sqrt{}$ Wear protection according to the label.
- Keep all chemicals away from water until directed by label.



Storage of Pool Chemicals:

- $\sqrt{}$ Seal containers completely.
- $\sqrt{}$ Store away from children, use safety locks.
- $\sqrt{}$ Store in a waterproof location.
- Store away from flammable materials and cleaning supplies.

Environmental Protection Agency, Safe Storage and Handling of Swimming Pool Chemicals http://www.epa.gov/swercepp/web/docs/chem/spalert.pdf National Swimming Pool Foundation, Certified Pool Operator Training, http://nspf.org/en/home.aspx State of North Carolina | Department of Health and Human Services | Division of Public Health | Occupational and Environmental Epidemiology www.ncdhhs.gov • www.publichealth.nc.gov



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