

# **Safe Use of Swimming Pool Chemicals**

There are two main types of chlorinating agents:

- Inorganic chlorinating agents such as calcium hypochlorite, lithium hypochlorite, and sodium hypochlorite
- Organic chlorinating agents such as trichloroisocyanuric acid, potassium dichloroisocyanurate, and sodium dichlorocyanurate

Organic and inorganic chlorinating agents <u>are not compatible with each other</u>. Many incidents have occurred due to mixing of these chemicals. When combined they can form an explosive mixture.

### Tips for handling pool chemicals

#### DO

- Read and follow instructions carefully. If there is anything you do not understand, ask your pool chemical supplier for help.
- Keep all chemicals out of the reach of children and pets.
- Containers should always be kept closed when not in use.
- Use separate, clean metal or plastic measuring cups for each chemical to transfer or measure chemicals. (Scoops should not be made of wood.)
- Wear appropriate <u>protective equipment and clothing</u> including gloves and footwear.
- Protect chemicals from moisture and water such as water, coffee, pop! Even putting the wet scoop back into the pail may cause a reaction.
- Always add the chemical to the pool water never the other way around (never add water to the chemical) unless instructed to do so on the container label.
- Wash your hands thoroughly after handling any chemicals.

### DO NOT

- Do not use contents of unlabeled containers
- Do not mix different chemicals together.
- Do not put spilled chemicals back into their containers.
- Avoid touching the undiluted chemicals with your hands.
- Do not smoke when handling chemicals.
- Do not expose to heat or flame.
- If a fire breaks out, do not use a "dry chemical" fire extinguisher. Only use large amounts of water. If you cannot extinguish the flame immediately, leave the area and call the fire department.





## Tips for safe storage of pool chemicals

- Store in a cool, dry place away from sunlight.
- Keep out of reach of children and pets.
- Store chemicals in the original containers.
- Be sure your storage area is well ventilated.
- Never store oxidizers and acid near each other. Oxidizers release 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, or flammable materials. This tip is especially important when pool chemicals are stored in sheds or small storage rooms.
- Do not reuse containers. Wash out the container when empty and then dispose of it.

### Cleaning up small spills

### Before cleaning up a small spill:

- Make sure that the material is dry and has not mixed with other chemicals.
- Do not clean if the chemicals has mixed with other materials (such as grass, paper, etc) or if the material is reacting (hissing, bubbling, smoking, gassing, burning) or the containers are bulging.
- If there is any sign that a chemical reaction is happening, evacuate the area immediately and contact your local fire department for help.

### DO

- Wear protective gloves, boots and aprons made of butyl rubber or neoprene (or other material specified in the MSDS).
- Wear safety glasses or goggles goggles offer better protection against liquid splashes and airborne dust than glasses.
- Ventilate the area if indoors.
- Carefully place the spilled material in a clean, dry plastic bag or container. Place this filled plastic bag inside another bag when finished.
- Keep an eye on the material once it has been picked up. A reaction may be delayed.
- Dispose of the material according to manufacturer instructions and according to local regulations.

#### DO NOT

- Do not place spilled material back in the original container.
- Do not generate dust when cleaning up a powder or solid. The dust may react with the moisture on your skin and cause injury.
- If using a container to hold the spill, do not seal.