## POOL CHEMICAL BASICS LOTS OF WATER=GOOD LITTLE WATER=BAD

Pool Chemicals are:

Oxidizers/Highly Reactive to Water
Can generate high heat
Can create toxic gas
Corrosive to metals

#### **POOL CHEMICAL HEALTH HAZARDS**

- Contact can severely irritate and burn the eyes and skin
- Low exposures can irritate the nose and throat
- Higher exposures may cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath

#### **RESOURCES**

- 2009 International Fire Code
- National Fire Protection Association Standards 10 & 430
- Environmental Protection Association Safe Storage and Handling of Swimming Pool Chemicals www.epa.gov/oem/docs/chem/spalert.pdf

This pamphlet is a summary of the basics for pool chemical storage and use. For specific details refer to the MSDS (<a href="www.msds.com">www.msds.com</a>) and manufacturer directions for your specific chemicals

# POOL CHEMICAL USE & STORAGE





Vancouver Fire Department Fire Marshal's Office 7110 NE 63<sup>rd</sup> Street Vancouver WA 98661 360.487.7260 www.vanfire.org

#### STORAGE AREAS

- Keep storage areas cool and dry
- Permit Required (IFC 105.6.20)
  - o Class II solids over 100 pounds needs permit
    - Maximum allowed 250 lbs
    - ex. Calcium hypochlorite under 50% chlorine
  - Class III solids over 10 pounds needs permit
    - Maximum allowed 10 lbs
    - Calcium hypochlorite over 50% chlorine
- Hazardous Materials Inventory Statement (HMIS) Shall be included with permit application and maintained onsite. (IFC 2701.5.2)
- Material Safety Data Sheets (MSDS) for all hazardous materials shall be readily available on the premises. (IFC 2703.4)
- Identification (IFC 2703.5)
  - Individual containers of hazardous materials, cartons or packages shall be marked or labeled
  - Hazard Identification Signs shall be placed at the entrances to locations where hazardous materials are stored, used or handled. (NFPA 704)
  - All storage areas containing oxidizers shall be identified as to the hazard class by the words "Class [appropriate classification number]
     Oxidizers. Refer to MSDS. (NFPA 430)
- Only water-type fire extinguishers shall be installed. Multipurpose dry chemical fire extinguishers are prohibited. (NFPA 10)
- No Smoking Signs posted and smoking shall be prohibited. (IFC 2703.7.1)
- **Separation of Incompatible materials** is required. Refer to MSDS for information. (IFC 2703.9.8)





### SAFETY PRECAUTIONS FOR POOL CHEMICALS

#### DO

- Read and follow instructions carefully
- Protect chemicals from moisture and water
- Keep containers closed when not in use
- Use separate, clean metal or plastic measuring cups for each chemical to transfer or measure
- Wear appropriate <u>protective equipment and</u> <u>clothing</u> including gloves and footwear
- Separate incompatible substances (see MSDS)
- Make chemical storage area housekeeping a priority
- Know what to do in the event of a leak, spill or fire
- Only clean pool areas with cleaners that are compatible with pool chemicals
- · Wash your hands thoroughly after handling

#### DO NOT

- Do not use contents of unlabeled containers
- Do not put pool chemicals in unlabeled containers
- Do not mix different chemicals together
- Do not mix old chemicals with fresh chemical, even if they are the same type
- 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
- Do not store pool chemicals with incompatible or flammable materials, such as gasoline, oil, grease, fertilizer, herbicides, paint, solvents (for example, turpentine), oily rags, and alcohol
- If a fire breaks out, leave the area and call the fire department. Do not use a dry chemical extinguisher.