PORTABLE FIRE EXTINGUISHER AND FIRE SAFETY TIPS

Practice fire prevention at work and home. Know the location of your fire extinguishers. Where are the closest fire extinguishers? Do you have at least one fire extinguisher and a smoke detector/alarm system installed at home? Do all family members know the fire extinguisher location, how to use it, and safe evacuation routes? Are there incompatible materials in your lab that need to be isolated or separated? Are flammable and combustible materials protected from potential ignition sources?

FIRE TETRAHEDRON

Fuel, heat, and oxygen must be present to have a fire. Fire will burn until one or more of the components are removed. Traditional fire extinguishing methods involve removing the fuel, heat, or oxygen.

A fourth component – the uninhibited chain reaction – has been added to explain fire. This chain reaction is the feedback of heat to the fuel to produce the gaseous fuel used in the flame. Agents, such as Halon, were designed to break up the uninhibited chain reaction of combustion.

TYPES OF FIRES AND PORTABLE FIRE EXTINGUISHERS

- Class A = Normal combustibles, wood, paper, etc.
- Class B = Flammable liquids
- Class C = Electrical equipment
- Class D = Flammable metals, lithium, magnesium, sodium, aluminum
- Class K = Cooking oils and fats
- BC extinguisher = Flammable liquids and electrical equipment
- ABC extinguisher = Dry chemical good for all 3 classes
- K extinguisher = Cooking oil/grease fires
- Kitchen fires: Do not use water. Do not move pan with burning oil/grease. If small, cover fire with lid, shut off heat, and let cool. Use Class K extinguisher.

FIRE EMERGENCY PROCEDURE

- Inform people in your area that there is a fire.
- Activate/pull the fire alarm for the building. Call 2911 from work and 911 from home.
- Pull the alarm and call before you start using a fire extinguisher. Even small fires can get out of control very quickly. Be sure that you have a safe path to an exit before starting to fight the fire.
- Never let the fire get between you and an exit.
- Think “PASS”.
  - P is for PULL: pull the pin on the handle of the fire extinguisher.
  - A is for AIM: Aim the fire extinguisher at the base of the fire, not the flames.
  - S is for SQUEEZE THE HANDLE: squeeze the handle completely.
  - S is also for SWEEP SIDE TO SIDE: sweep the extinguisher back and forth to extinguish the fire.
  - Keep an eye on the area for re-ignition.
  - If it takes more than one fire extinguisher to put out a fire, evacuate the area.