



**g.c.g. risk management inc.**

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## **USING PORTABLE FIRE EXTINGUISHERS**

In the event of a fire, the correct use of a portable fire extinguisher could mean the difference between suffering a minor loss or a major one. Portable fire extinguishers, if used properly, can make that difference. But there are several things to consider in using fire extinguishers. For instance, you must know the *class* of fire involved and the correct *type* of fire extinguisher to use.

### **CLASSES OF FIRES AND FIRE EXTINGUISHERS:**

#### ***Class A***

Involves ordinary combustibles such as paper, wood, cloth, rubber or plastics. Extinguish ordinary combustibles by cooling the material below its ignition temperature and soaking the fibers to prevent re-ignition. The most common extinguishing media is pressurized water, foam or multipurpose dry chemical.

#### ***Class B***

Flammable liquids, grease or gases are covered under this category. Common extinguishing media are foam, carbon dioxide or dry chemical. These fires can be harder to extinguish and should be approached with extreme caution.

#### ***Class C***

Energized electrical fires are class C fires. Carbon dioxide or dry chemical extinguishers are commonly used. Halon extinguisher systems may still be found in special applications where sensitive computer or electronic equipment must be protected. \* This type of fire changes from "Class C" to Class "A" or "B" as soon as the power is cut off (or shorts out). DO NOT use water extinguishers on energized electrical equipment. *\*Multipurpose dry chemical extinguishers leave a residue that can be harmful to sensitive electronic and computer equipment. Carbon dioxide or Halon extinguishers are preferred in these instances because they leave very little residue.*

#### ***Class D***

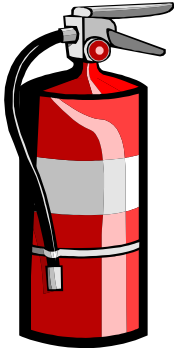
Burning materials include combustible metals such as magnesium, titanium, potassium and sodium. Special extinguishing agents, approved by recognized testing laboratories,

are needed when working with these metals. In most cases, they absorb the heat from the material, cooling it below its ignition temperature.

### *Class K*

Kitchen fires. This class was added to the NFPA portable extinguishers Standard 10 in 1998. [Kitchen extinguishers](#) installed before June 30, 1998 are "grandfathered" into the standard.

It is also important to choose a fire extinguisher that is large enough for the job. For example, an ABC multipurpose dry chemical (Sodium bicarbonate) fire extinguisher can be bought in various sizes. A 1 to 2 ½ lb extinguisher has a 5-8 foot horizontal stream range and will discharge for 8-12 seconds. A 2 ¾ to 5 lb extinguisher has a 5-20 foot horizontal stream range and will discharge for 8-20 seconds. In general, a 5lb or larger dry chemical extinguisher is recommended for general use in an office building, small shop or vehicle. Talk with your local fire inspector for their recommendations regarding the size extinguisher you should provide for the hazards in your area.



## **READY THE EXTINGUISHER**

Quickly, but carefully remove the extinguisher from its mounting bracket. It may be heavy, so use caution when lifting it. Stand at least five feet away from the fire. You are ready to release the extinguishing agent. This must be done properly. For example, if you squeeze the handle before you have aimed the nozzle properly, valuable time and extinguishing agent will be wasted. Most extinguishers will only allow about 10-seconds of extinguishing media.

## **REMEMBER P-A-S-S WHEN USING AN EXTINGUISHER:**

**P - Pull.** Pull the locking pin that secures the handle before using the fire extinguisher.

**A - Aim.** Aim the fire extinguisher nozzle at the base of the fire, not at the flames or smoke.

**S - Squeeze.** Squeeze the handle to operate and discharge. Do not be startled by the noise or velocity of the agent as it is released.

**S - Sweep.** Sweep the fire extinguisher back and forth at the *base* of the fire until it is completely out. Be alert for re-ignition.

Once the fire is out, back carefully away from the scene, watching for re-ignition. Sometimes, though, in spite of your best efforts, your attempt may fail. If you cannot extinguish the blaze, your extinguisher runs out of agent, the fire threatens your escape path, or the fire gets out of control, **evacuate** the area immediately.

The best time to familiarize yourself with potential fire hazards in your work area is before a fire happens. Knowing the hazards that exist, and what types of fires could occur are critical skills to working safely. You can also use this knowledge to make sure the proper type of fire extinguisher is available should the need arise.