

# Workshop Fire Safety

Just as there are various types of fires, there are various types of fire extinguishers.

**CLASS A FIRES** involve wood, paper and rubbish and require a “quenching/cooling” effect to be extinguished. Class A extinguishers typically contain water (sometimes with an anti-freeze of some sort) or foam. They are always liquid filled.

**CLASS B FIRES** involve flammable liquids such as grease, gasoline, oil and other flammable products and require a “blanketing/smothering” effect to be extinguished. Class B extinguishers contain a dry chemical of some sort.

**CLASS C FIRES** involve electrical current and require a “cooling” effect to be extinguished. Class C extinguishers typically contain Carbon Dioxide (CO<sub>2</sub>) to cool the fire temperature and put it out.

**CLASS D FIRES** involve flammable metals and their extinguishers are often designed to work with a specific type of metal. These fires are not common in a workshop environment.

Multi-class fire extinguishers (such as A/B/C) types have been proven effective on the three most common classes of fires. These A/B/C extinguishers dispense a powder that reacts with each type of fire to produce a cooling, smothering effect to kill the fire.

Halon extinguishers are also excellent on A, B, & C type fires. They contain a gas that produces a mixture of liquid and vapor to smother the fire. The chemicals in these extinguishers will not corrode metals like the chemicals in other types of extinguishers. Halon extinguishers should be aimed at the base of the fire and are only good at distances of 4 to 6 feet.

Carbon Dioxide (CO<sub>2</sub>) extinguishers are the most effective on Class B & C fires. They “cool” the fires and are best when used at distances of 3 to 6 feet. Often, ice will form around the nozzle of these extinguishers during use. This is normal. Since these classes of fires can often re-ignite themselves, it’s best to keep applying the extinguisher, even after the fire first appears to be out.

Older type Soda-Acid fire extinguishers should not be used. Typically, they are made of copper or brass with a small diameter rubber hose on the side or a pump-type handle. These extinguishers should be discarded by contacting your local fire department, since they have been known to explode.

## Using Fire Extinguishers

There are four steps to the effective use of fire extinguishers – which can be easily remembered through the acronym –

***P. A. S. S. – PULL, AIM, SQUEEZE & SWEEP***

**PULL** the safety pin at the top of the extinguisher that’s used to keep the handle accidentally activated.

**AIM** the extinguisher’s nozzle toward the base of the fire.

Stand about 8-feet from the fire and **SQUEEZE** the extinguisher’s handle to dispense the extinguishing agent. Remember that releasing the handle will stop the dispensing of the agent.

**SWEEP** the extinguisher’s nozzle back-and-forth across the base of the fire. Once the fire is extinguished, watch it carefully for a few minutes before walking away. Fires may frequently re-ignite.