



**Fire Prevention
Month**

eSafetyLine

Types of Fires

For a fire to begin and continue three things must be present at the same time:

- Fuel- a material that can catch fire and burn
- Oxygen- must be present around the fuel for a fire to burn
- Heat- a heat source to raise the fuel to its ignition temperature

The combination of these things leads to the fourth element of fire, the chemical chain reaction. If one of these components is missing there can be no fire or a fire will be put out. Fire extinguishers put out a fire by removing any one of these components.

Not all fires are created equal. The type of fuel feeding the fire will determine which element can be most easily removed. Fires are divided into classes to be sure that the most efficient method is used to put out a fire. The correct type of extinguisher must be used on each class of fire, if not it is very likely that a fire will be made much worse. For example, if water is used to extinguish an oil fire, the oil may float on the water and spread the fire to other areas.

- Class A- This is the most common type. The fuel is typically wood, clothing, rubber and plastics. Class A fires are fairly easy to fight and contain by removing the heat or oxygen.
- Class B- This type involves a flammable liquid or gases. This changes how the fire will be extinguished and tends to increase the potential danger of the fire considerably. Care must be taken not to spread this type of fire while trying to extinguish it.

- Class C- These are electric fires where the heat source is energized electrical circuits. A danger associated with this type of fire is the possibility of electric shock if water is used to put it out. The easiest way to deal with a Class C fire is to turn off the electricity at a breaker. The fire will then be dealt with as a Class A fire or may die out entirely.
- Class D- Class D fires are those that use a metal as a fuel source. Although not common, these fires tend to spread easily and rapidly to surrounding Class A materials. Combustible metals include magnesium, titanium, zirconium, potassium, calcium. Water and other extinguishing methods can make metal fires worse. Each metal will require different specific extinguisher types.

An easy way to keep the fire class and its fuel connected is by linking the class letter to something about the fire's fuel source. Class A fires typically produce a lot of Ash. Class B fires use a flammable liquid or gas as a fuel. This liquid comes in Barrels. Class C fires are electric fires so a good link could be Circuit. Metals will Dent which leads you to Class D. Although somewhat simple it will allow employees a quick and easy reference to the types of fires that they may come upon on the job site.

Discussion Questions

What are the 4 necessary components of a fire?

What is the best way to put out a Class C fire?

MEETING / TRAINING ATTENDANCE ROSTER

COMPANY: _____

_____ SAFETY MEETING

JOB/DEPT: _____

_____ SAFETY TRAINING

DATE: ___/___/_____

TIME: _____

TOPICS ADDRESSED: _____

EMPLOYEE'S SIGNATURES

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: _____

ACTION TAKEN: _____

Supervisor's Signature

_____/_____/_____
Date

Safety Coordinator's Signature

_____/_____/_____
Date