



Fires are classified into one or more fire classes when battling a fire. Each class identifies the type of fuel that contributed to the fire and, as a result, the best extinguishing agent. The classifications allow choosing extinguishing chemicals based on how well they put out the specific type of fire and how to prevent negative side effects.

To prevent electrocuting the firefighter, non-conductive extinguishing products, for instance, are approved for electrical fires. There are numerous classification schemes with various names for the various fire classes. The South African Classification System served as the source for the classifications in this bulletin (Sans 10105-1:2010)

## KNOW YOUR FIRE EXTINGUISHER COLOUR CODE

Water

Dry  
Powder

Foam

Co2  
Carbon Dioxide

Wet  
Chemicals

### Class A Fire

a fire containing solid elements, typically organic in origin, where combustion typically occurs and blazing embers are produced. These materials include cloth, rubber, wood, and some polymers, as examples. A class-A fire can quickly go out of control and turn into a wildfire if it is allowed to burn in an uncontrolled setting. A campfire with pebbles preventing the spread of the flames is an example of a confined habitat.

### Class B Fire

a fire involving liquids or solids that are liquefiable. Examples include paint, gasoline, oil, and various polymers and waxes, but not culinary fats or oils.

### Class C Fire

a fire of types A, B, and D that happens in the vicinity of electrical equipment that is activated.

### Class D Fire

a fire involving certain flammable or combustible metals. Sodium, titanium, magnesium, potassium, uranium, lithium, plutonium, and calcium are a few examples of these metals. Titanium and magnesium fires are frequent. One of these incendiary metals can easily and quickly spread an ignition to nearby common combustible materials.

### Class F Fire

F is a kitchen-related fire involving fat and cooking oil. Although these fires are essentially a subclass of flammable liquid/gas fires, their unique traits, particularly their greater flash point, are deemed significant enough to be recognized individually.

