

Fire Extinguishers – What to do if you have to fight a fire

In the workplace, legislation requires that all staff should be properly trained in the action they need to take in the event of fire or other emergency. This means that everyone needs to understand the emergency procedures with regard to fires, **including whether or not they should attempt to fight a fire.**

There should be clear guidance for all staff about who can operate fire extinguishers and in what circumstances. Staff who are required to operate fire fighting equipment should be given proper fire extinguisher training.

However, even if you are not intended to fight a fire, it is necessary to know the basics just in case you ever need to use one to escape from a fire

Fire extinguishers are designed to be as simple to operate as possible and you will find some basic fire extinguisher instructions on all appliances. Given the situations in which a fire extinguisher will be used, however, there are still some dangers involved so some guidance can be useful. The following guidelines are a good basis for assessing whether it is appropriate to use a fire extinguisher or not:

When NOT To attempt to fight a fire

- do not attempt to tackle a **large or well established** fire
- ***If the fire is spreading rapidly. Only consider using a fire extinguisher if the fire is in the early stages – small enough to be put out in less than 15 seconds – that's about how long the extinguisher will take to fully discharge..***
- **If you are not sure what is actually burning.** Without knowing this you cannot be sure of using the correct fire extinguisher. **If you use the wrong type you could make it worse**
- **If you do not have the proper fire extinguisher.** Using the wrong type of fire extinguisher can be very dangerous in certain circumstances. For example, using a water fire extinguisher on an electrical fire can result in electrocution and possible death.
- **If there is already a lot of smoke.** Never risk inhaling smoke – you could be overcome very quickly. **Many materials especially plastics, produce highly toxic gases.**

Burning Metals You are unlikely ever to encounter this fire EXCEPT as a laptop battery fire – it is still very rare.

No normal fire extinguisher below will tackle this type of fire - it requires special copper coated powders.

Battery metal (lithium) is so reactive **it will take oxygen from water and CO2** so these will only feed the fire. **DON'T THROW WATER ON IT!!**

WHAT SHOULD I DO THEN?

Keep at least a kilogram of **BONE DRY** SALT or SAND. These are inert to metal fires. If you have one of these types of fires, pour the sand or salt over the fire to completely bury it. This excludes oxygen. Then leave it alone and call the fire service.

	Colours						
Type		Flammable solid	Flammable Liquids	Flammable Gases	Flammable Metals	Electrical	Cooking oils and fats
Water	Red						
Foam	Cream						
Co2	Black						
Dry powder	Blue						
Wet Chemical	Yellow						
Fire Blanket	N/A						

How To Use A Fire Extinguisher Safely

- Before you tackle any fire, ensure you have a safe escape route. **Don't allow the fire to come between you and your exit route.**
- **FIGHT A FIRE WITH THE FIRE IN FRONT OF YOU AND YOUR ESCAPE ROUTE BEHIND YOU so you can RUN!**
- If at all possible, keep someone else with you, in case you need assistance or someone to get help if the fire has spread rapidly or it is starting to, give up and get out.

There is a well known acronym to help you remember the basic safety rules for using the most common types of fire extinguisher:

PASS: Pull, Aim, Squeeze, Sweep

PULL out the pin in the top of the fire extinguisher.

AIM the nozzle at the base of the fire. Stand about eight feet from the fire and

SQUEEZE the fire extinguisher handle to discharge it. Release the handle again to stop.

SWEEP the nozzle back and forth across the lower part of the fire. Watch carefully after extinguishing the fire in case it re-ignites.

How To Use A Water Extinguisher

Warning

Do not use on electrical fires or burning oil or fat.

How To Use

Direct the jet of water at the base of the fire and move it back and forth across the fire.

Ensure all areas of the fire are out and check for hot spots after it appears to be extinguished

If the fire is spreading vertically, start at the lowest point and work upwards.



How To Use A Carbon Dioxide Fire Extinguisher

Warning

Do not use on burning deep fat fryers as the force of the jet will splatter burning oil everywhere. Carbon dioxide extinguishers are not very effective at cooling fires, so check carefully afterwards in case of re-ignition. Carbon Dioxide is harmful in quantity, so care must be taken if used in a confined space. Ensure that the area is well ventilated as soon as possible after use. **Take care not to hold the discharge horn as this can become very cold and cause burns.**

How To Use

Direct the horn at the base of the fire and move across in a sweeping motion.

When the fire appears to be out, check for a while afterwards for any areas of remaining fire and use the extinguisher again if necessary.



How To Use A Foam Fire Extinguisher

Warning

Do not use on deep fat fryer fires. On burning liquids do not aim the foam directly into the liquid as this will send it into the liquid and make it ineffective. It could also cause splashing and therefore spread the fire around.

How To Use

Where the burning liquid is inside a container, direct the jet of foam at the inside edge of the container or another vertical surface joining onto the container. This breaks the jet and allows the foam to flow gently over the surface of the liquid, smothering the fire.

If the above is not possible, the jet of foam should be directed from a distance in a sweeping motion so that it drops down onto the surface of the fire without breaking it up.



How To Use A Dry Powder Fire Extinguisher

Warning

Powder fire extinguishers are very versatile, but they do not cool fires very effectively, or penetrate electrical equipment very well, so there is a danger of fires starting up again after they appear to be out.

How To Use

For fires on solid materials aim at the base of the fire and sweep across the fire in a steady motion.

On fires involving liquids in containers or spilt liquids, the jet of powder should be directed at the nearest edge of the fire, and a sweeping motion used to work backwards from there.

If the fire involves a flowing liquid, direct the jet at the base of the flames and sweep upwards.

Before using on electrical fires, disconnect the power supply.

When the fire appears to be out, allow the area to clear and check for any areas of remaining fire and use the extinguisher again.



How To Use A Wet Chemical Fire Extinguisher

Warning

These are the only type of fire extinguishers that **should** be used on deep fat fires.

How To Use

Use the extended applicator or lance to apply the chemical in a slow circular movement.



Finally

NEVER PUT WATER ON AN OIL FIRE – IT WILL EXPLODE

NEVER PUT WATER ON AN ELECTRICAL FIRE - YOU COULD ELECTROCUTE YOURSELF

Do not tackle the fire if you are not confident about how to do so.

Make sure that someone has called the emergency services.

Put your own and other people's safety first – make sure everyone gets out.

Never attempt to move anything which is on fire.