

Fire and Burns



Fire Awareness

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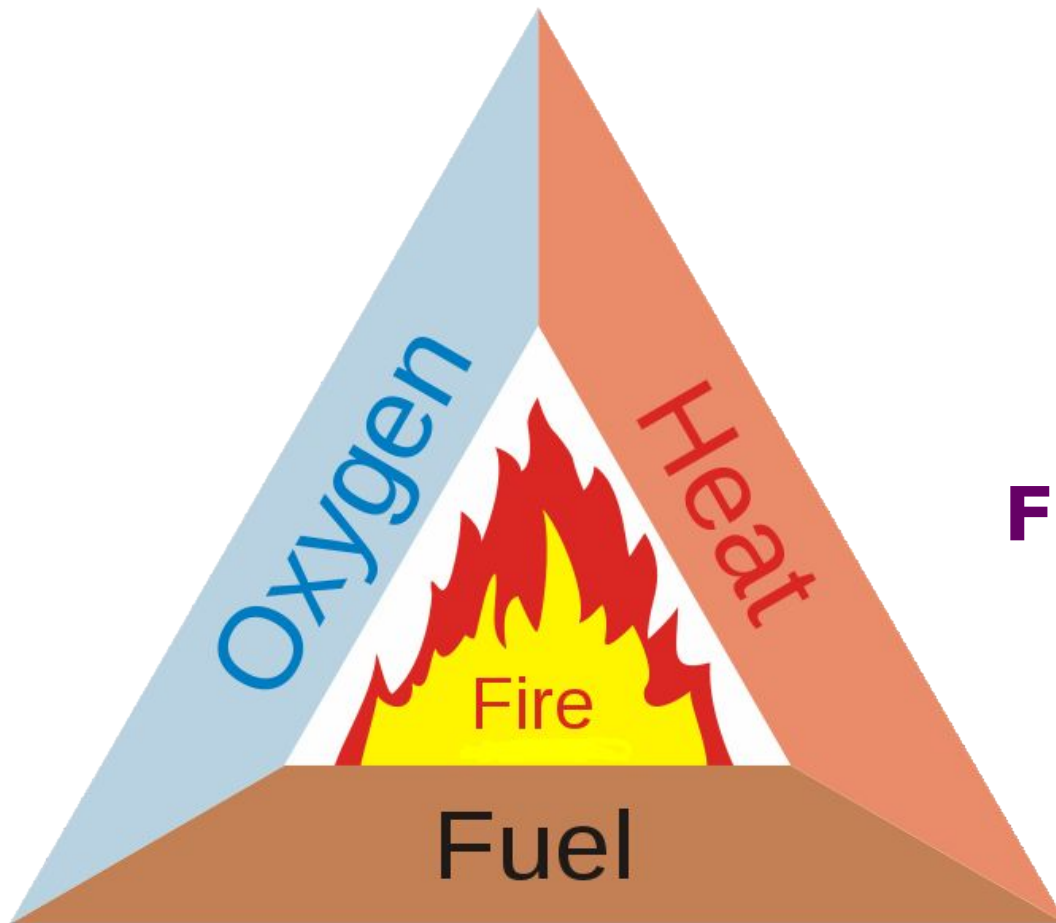


Consequences of Fire

- **Loss of life**
- **Loss of friends or family**
- **Injury or disability**
- **Loss of home, workplace, income, job**
- **Loss of irreplaceable belongings**
- **Financial (uninsured losses and premiums)**

What is Fire?

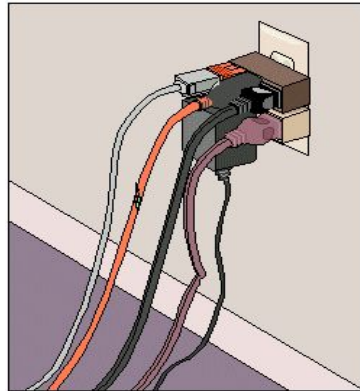
The rapid oxidation of a fuel evolving heat, particulates, gases and non-ionizing radiation



Fire Triangle

Sources of Ignition

- Smoking
- Electrical equipment
- Heaters
- Process machinery
- Contractors tools and equipment
- Arson





Fuels



- **Paper and boxes etc**
- **Packaging** (polystyrene beads etc)
- **Plastics**
- **Solvents**
- **Soft furnishings** (Mattresses, cushions)
- **Furniture**
- **Waste materials** (rubbish, old pallets)



Classes of Fire- BS En 2

- **A - Free burning materials, paper, wood, plastics etc**
- **B - Flammable liquids, petrol, solvents etc**
- **C - Flammable gases, methane, hydrogen etc**
- **D - Metals, potassium, sodium, magnesium etc**
- **F - Cooking fats**
- **Electricity can be involved in any class of fire**

Basic Fire Prevention

- **Be mindful of Fire Safety**
- **Don't block fire exits, call points or extinguishers, know your exits**
- **No smoking policy**
- **Take care with any hot process, follow manufacturers instructions**
- **Maintain any machinery**
- **Observe good security**
- **Don't wedge Fire Doors**

On Hearing the Alarm



Observe any instructions in your building evacuation plan

This may include providing assistance to other persons and evacuating area by area

But Generally

- Walk quickly but don't run, closing doors behind you
- Leave the building immediately by the nearest exit
- Do not delay your exit to collect your belongings
- Do not use lifts
- Attend the Fire Assembly Point and report to the Fire Warden or Responsible Person
- Do not return until told to do so

Do Not Fight a Fire if



- It is bigger than a waste paper bin
- One extinguisher is not enough
- Smoke is affecting your breathing
- You cannot see the way out
- Gas cylinders or chemicals are involved
- Your efforts are not reducing the size of the fire
- There is any risk to yourself

If You Discover a Fire

- **Raise the alarm**
- **Fight the fire if you are competent and you consider it safe to do so** (generally only to facilitate escape)
- **Evacuate as per normal fire procedure**
- **Inform the Fire Warden or Responsible Person**



Types of Extinguisher-Water

- **Red body**
- **Suitable for use on Class A Fires, wood and paper etc**
- **Not suitable for combustible liquids, cooking fats etc**
- **Not safe to use on fires involving electricity**
- **Extinguishes by cooling**



Types of Extinguisher-Foam

- **Red Body with Cream label**
- **Suitable for Class A and B Fires** (paper, wood and non-cooking fat flammable liquids)
- **Not suitable for use on fires involving electricity**
- **Extinguishes by cooling and sealing the surface of a burning liquid**



Types of Extinguisher-Powder

- **Red body with blue label**
- **Best on Class B**
(non-cooking fat flammable liquids) **fires**
but safe to use on any
type of fire
- **Works by chemically**
interfering with the
combustion reaction



Types of Extinguisher-Carbon Dioxide

- **Red body with black label**
- **Best on Class B** (non-cooking fat flammable liquids) **and Class C** (flammable gases) **fires but safe to use on any type of fire including those involving electricity**
- **Extinguishes by reducing oxygen levels and cooling**
- **Beware horn can become very cold** (avoid touching in use)



Types of Extinguisher-Fire Blanket

- Any colour body or label but they are usually red or white
- For use on any type of fire but best on small contained class B (flammable liquids, may include small cooking pans) fires and people on fire
- Can be used on microwaves
- Extinguishes by asphyxiating



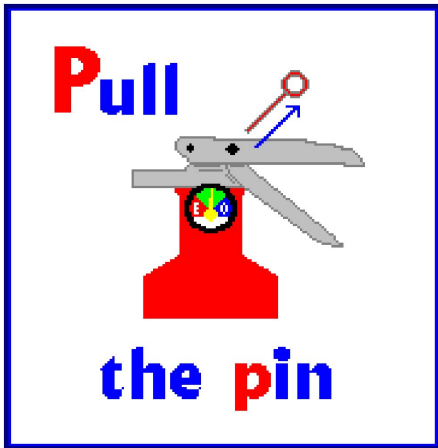
Types of Extinguisher-Wet Chemical

- Red body with Yellow Label
- Suitable for class F cooking oil fires
- Not suitable for class B fires
- Sprays foam as a fine mist to form a layer over the oil
- Extinguishes by cooling and converting the oil into a soap
- Misting action prevents splashing of the oil
- Requires specialist training to use



How to Use an Extinguisher

Pull **A**im **S**queeze **S**weep



Pull the pin this will allow you to discharge the extinguisher
Get the hose or nozzle ready for use



Aim at the base of the fire to hit the fuel...if you aim at the flames the extinguishing agent will pass through and do no good

How to Use an Extinguisher

Pull **A**im **S**queeze **S**weep



Squeeze the top handle, this depresses a button that releases the pressurised extinguishing agent



Sweep from side-to-side until the fire is completely out

Remember: Start using the extinguisher from a safe distance away, say 2-3m, and then slowly move forward. Once the fire is out, keep an eye on the area in case it reignites.

Fire Signs



Fire action

Any person discovering a fire

- 1 Sound the alarm.
- 2 to call fire brigade.
- 3 Attack the fire if possible using the appliances provided.

On hearing the fire alarm

- 4 Leave building by route.
- 5 Close all doors behind you.
- 6 Report to assembly point.



Do not take risks
Do not return to the building for any reason until authorised to do so.

Do not use lifts.



Maintenance and Inspection

- **Detection and Alarm systems should be tested weekly and inspected by a competent person periodically**
- **Fire extinguishers and other fire fighting equipment should be checked at a frequency determined by risk (but at least monthly) for location, condition and state of charge and serviced by a competent person annually**
- **Any Fire fighting device must be replaced, serviced or checked by a competent person after any use**

And Finally...

- **Most extinguishers are heavy and constructed from metal.....
They make excellent battering rams to break a window or un-jam a door**
- **But seriously the prime consideration is your safety and the only priority is to get everybody out and leave fire fighting to the professionals**