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Fire extinguishers

Unite guide for members

fire extinguishers

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This guide book is downloadable in PDF format from
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■ FIRE PRECAUTIONS

- Every year there are around 40,000 fires in the workplace, resulting in thousands of casualties and scores of deaths: a fire extinguisher can help save lives
- Before tackling a fire it should be noted that your number one priority is your own safety and that of others, not saving property
- Keep yourself on the escape route side of the fire
- No single extinguisher is effective on all fires, and using the wrong extinguisher could actually make the fire worse and increase the immediate danger to anyone using it
- Make sure you are familiar with any instructions early on – don't wait for a fire as it will be too late

Unite Reps should make sure their employer;

- has fire extinguishers appropriate to the fire risks in your workplace
- has fire extinguishers maintained at least once a year, or as the manufacturer recommends
- trains anyone who might be likely to use an extinguisher in its proper use

Fire extinguishers;

- are only capable of fighting small fires
- should not be used to tackle a fire unless it's safe to do so
- should be out of the reach of children
- should be positioned where they can be reached quickly
- should not be sited over a heater or fire

There are six main types of fire extinguisher;

- Dry Powder
- Water
- Foam
- Carbon Dioxide (CO_2)
- Wet Chemical / Class F
- Halon

Colour classifications

On older extinguishers the whole of the extinguisher is colour-coded according to the type of extinguisher. Newer extinguishers are red with a smaller strip of colour coding towards the top. Both types are still legal to use.

Fire blankets

Fire blankets are good for chip pan fires or for smothering the flames on someone whose clothing is on fire. They are ideal for kitchens but not general use. They should conform to British Standard BS 6575.

As members, as soon as you become aware of potential redundancies contact your local official for advice.

■ GUIDANCE ON THE SIX TYPES OF FIRE EXTINGUISHER

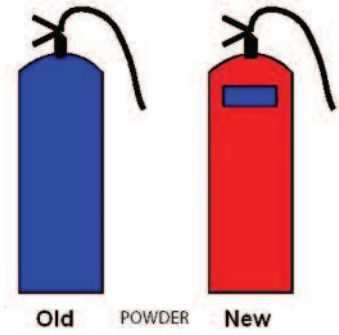
DRY POWDER – BLUE

For fires involving

- Liquid
- Electricity
- Wood
- Paper
- Textiles
- Plastics
- Coal

Not to be used on fires involving

- Metal
- Fat



There are two types of dry powder extinguisher – Standard or Multi-Purpose.

How it works

- The powder knocks down the flames. These are safe to use on most kinds of fire.
- Multi-purpose powders are more effective, especially on burning solids where the powder melts to form a layer or skin that smothers the fire.
- Standard powders work well only on burning liquids.

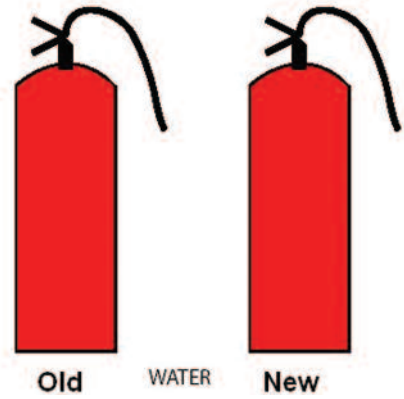
Dangers

- The powder does not cool the fire well
- Fires which seem out can re-ignite
- The powder doesn't penetrate small spaces, like inside burning equipment
- The jet could spread burning fat or oil around

How to use

Aim the jet at the base of the flames and briskly sweep it from side to side.

WATER – RED



For fires involving

- Paper
- Wood
- Textiles
- Solid Materials
- Coal
- People
- Some plastics

Not to be used on fires involving

- Liquid
- Fat
- Electricity
- Oil

How it works

- The water cools the burning material.
- Only use water on solids, like wood or paper.
- Should never be used on electrical fires or burning fat or oil

Dangers

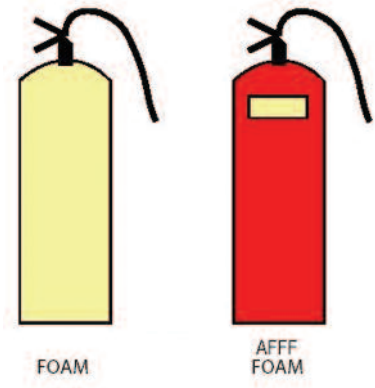
- The water can conduct electricity back to you
- Water actually makes fat or oil fires worse – they can explode as the water hits them

How to use

Aim the jet at the base of the flames and move it over the area of the fire

FOAM OR AFFF FOAM - CREAM

(Aqueous Film Forming Foam)



For fires involving

- Liquid
- Paper
- Wood
- Textiles

Not to be used on fires involving

- Electricity
- Metal
- Fat

How it works

- The foam forms a blanket or film on the surface of a burning liquid.
- Conventional foam works well only on some liquids so it's not good for home use.
- AFFF is very effective on most fires except electrical and chip pan fires.

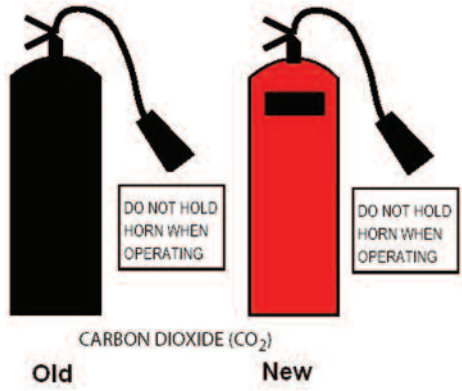
Dangers

- Jet foam can conduct electricity back to you, but spray foam is much less likely to do so.
- The foam could spread burning fat or oil around.

How to use

- For solids, aim the jet at the base of the flames and move it over the area of the fire.
- For liquids, don't aim the foam straight at the fire - aim it at a vertical surface or, if the fire is in a container, at the inside edge of the container.

CARBON DIOXIDE (CO2) – BLACK



For fires involving

- Liquid
- Electricity

Not to be used on fires involving

- Fat

How it works

- CO2 is a non-flammable gas, which is heavier than oxygen. The CO2 displaces or takes away the oxygen from the surrounding area reducing the fire's ability to burn.
- CO2 is very cold so it also cools whatever is burning.

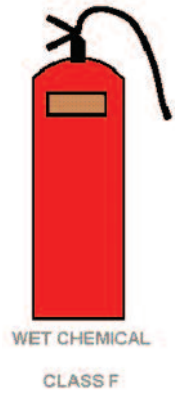
Dangers

- Not to be used on chip pan fires
- Fumes can be harmful if used in confined spaces.
- Ventilate the area after fire has been controlled.

How to use

- Aim the jet at the base of the flames and move it over the area of the fire

WET CHEMICAL / CLASS F – YELLOW



For fires involving

- Oil
- Fat

Not to be used on fires involving

- Anything but oil and fat

How it works

- A fine mist of potassium salts is sprayed over the fire
- The mist cools the flame front and helps prevent splashing of burning oil
- The potassium salts emulsify the oils and produce a layer of foam over the surface, similar to the blanketing effect of a foam extinguisher, but with a greater cooling effect, to prevent re-ignition

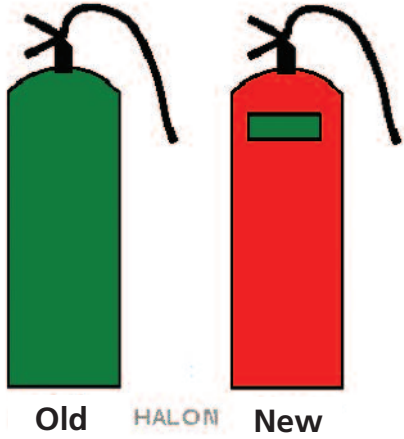
Dangers

- Only works with animal and vegetable oils

How to use

Spray in slow circular movements directly at the burning fat until the burning cooking oil changes into soap like substance.

HALON – GREEN



For fires involving

- Liquid
- Electricity
- Wood
- Paper
- Textiles
- Plastics
- Coal
- Chemicals

Not to be used on fires involving

- Metal

How it works

- Halon is a liquefied, compressed gas that becomes gas when released, stopping fire spreading by chemically disrupting combustion
- The only fire extinguisher suitable for use in aircraft
- Leaves no residue harmful to electrical equipment, paint or machinery
- Relatively safe for short-term human exposure

Dangers

- can increase the concentration of halon and other gases released during fire extinction to harmful levels
- Halon is harmful to the environment as it contains CFCs which deplete the ozone layer

How to use

- Aim jet at base of the flames and move it over the area of the fire

Environmental harm

Because of the risk of environmental harm halon extinguishers have been banned in the EU and should have been de-commissioned and disposed of safely by the end of 2003. Halon can only be used in the following "Critical Circumstances".

- In hand held fire extinguishers and fixed fire extinguisher equipment for engines for use on board aircraft
- In aircraft for the protection of crew compartments, engine nacelles, cargo bays and dry bays
- In fire extinguishers essential to personal safety used for initial extinguishing by fire brigades
- In military and police fire extinguishers for use on persons
- In military land vehicles and naval vessels for the protection of spaces occupied by personnel and engine compartments
- For the making inert of occupied spaces where flammable liquid and/or gas release could occur in the military and oil, gas and petrochemical sector and in existing cargo ships
- For the making inert of existing manned communication and command centres of the armed forces or others, essential for national security
- For the making inert of spaces where there may be a risk of dispersion of radioactive matter
- In the Channel Tunnel and associated installations and rolling stock

Further information can be obtained from **HALON USERS NATIONAL CONSORTIUM, PO Box 111, Petersfield GU31 4PL, www.hunc.org, tel 01730 264040, fax 01730 269042, or e-mail: halon@hunc.org.**

HUNC was set up in 1993 with both DTI and DETR approval and funding to assist all users of halon who either were able to dispose of its halon stockholding or installed base or required halon as Critical Users.

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