

Guide to UK Fire Classes From A to F

	 A Carbonaceous Materials	 B Flammable Liquids	 C Flammable Gases	 D Electrical Equipment	 F Cooking Oils
Water	✓	✗	✗	✗	✗
Foam	✓	✓	✗	✗	✗
CO2	✗	✓	✗	✓	✗
Wet Chemical	✓	✗	✗	✗	✓
Dry Powder	✓	✓	✓	✓	✗

Learning to recognise and react to different fire class is an essential requirement of [fire safety training](#) and specifically [fire extinguisher training](#).

Each fire type must be tackled using a specific fire extinguisher. Under the [Regulatory Reform \(Fire Safety\) Order 2005](#) employers must provide the correct fire extinguisher suitable for the type of fire likely to occur on their premises. For instance, a fire likely to start in a restaurant is very different to the type of fire likely to start in an office complex.

Both types of fire require a totally different type of fire extinguisher. Using a fire extinguisher designed to tackle an office fire would only aggravate an oil or fat fuelled kitchen fire.

When you carry out a [fire risk assessment](#) you must identify each class of fire that may ignite given the nature of your particular business. You must then select the appropriate form of extinguisher that is designed to tackle this particular class of fire. In a nutshell, you must be able to match the correct fire extinguisher according to the class of fire you or your staff potentially must tackle.

Be sure to read our accompanying guide to [fire extinguisher types](#), also published on this blog.

Now it's time to review each class of fire...!

Currently there exists **six classes of fire** i.e., class A, B, C, D, E and K. Fires are classified according to the material that ignites the fire.

Below we outline each class of fire. We outline why each fire is classed as it is. Finally we match the appropriate extinguisher designed to tackle each class of fire.

Class A Fire

Class A fires are fuelled by solid materials such as plastic, wood, paper, textiles and furniture. Most of these materials are organic in nature.

The appropriate extinguishers used to tackle a class A fire include dry powder, water, foam and wet chemical extinguishers.

Class B Fire

Class B fires are fuelled by flammable liquids such as oil, paraffin or petrol.

The appropriate extinguishers used to tackle a class B fire include CO₂ gas, foam and dry powder extinguishers.

Class C Fire

Class C fires are fuelled by flammable gases such as methane, propane or butane.

The appropriate extinguisher used to tackle a class C fire is a 'dry powder' extinguisher.

Class D Fire

Class D fires are fuelled by ignited metals such as titanium, aluminium or magnesium.

The appropriate extinguishers used to tackle a class D fire include L2 or M28 dry powder extinguishers.

Class E Fire

Class E fires are fuelled by electrical appliances such as TVs, computers and hair dryers.

The appropriate extinguishers used to tackle a class E fire include CO₂ gas or a dry powder extinguisher.

Class F Fire





















Class F fires are fuelled by cooking fats or oils e.g. in a kitchen setting.

The appropriate extinguisher used to tackle a class F fire is a 'wet chemical' extinguisher.

Fire extinguisher chart

Please read the below fire extinguisher chart. Please read this chart with reference to the information provided above.

Extinguisher Quick Guide (Always check manufacturer's instructions & specifications):

						
Old Colour BS 5406	New Colour BS EN3	Class A Paper or Wood etc.	Class B Flammable Liquids	Class C Flammable Gas Fires	Class D Metal Fires	Electrical Fires
		<input checked="" type="checkbox"/>	Do Not Use <input type="checkbox"/>			Do Not Use <input type="checkbox"/>
	*6 Litre - Water Mist multi- purpose extinguish- er	<input checked="" type="checkbox"/>	*Note - can be used on up to 21 Litres (21B rating). <input checked="" type="checkbox"/>			*Note - safe to use on up to 35Kv <input checked="" type="checkbox"/>
		<input checked="" type="checkbox"/>	Do Not Use <input type="checkbox"/>			Do Not Use <input type="checkbox"/>
		Note: Multi-Purpose Foams may be used. <input checked="" type="checkbox"/>	Note: Specialist Foams (Polar) required for industrial alcohol. <input checked="" type="checkbox"/>			Do Not Use <input type="checkbox"/>
			Secondary <input checked="" type="checkbox"/>			Primary <input checked="" type="checkbox"/>
		<input checked="" type="checkbox"/>	Note: specialist dry powder required for Solvents & Esters (Mannex). <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Note: specialist dry powders may be required (M2B / L2): <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			Primary <input checked="" type="checkbox"/>	General Note - may be used in conjunction with other extinguishing agents / or fire extinguishing techniques.		
	*75F Rating 		SPECIALIST HOT COOKING OIL FIRES ONLY 6 Litre Class F extinguisher specifically for dealing with large high temperature (360°C+) cooking oils used in large industrial size catering kitchens, restaurants and takeaway establishments with deep fat frying facilities. *Water Mist Safe to use on Class F fires - this includes small domestic size containers of high temperature (360°C+) cooking oils used in food frying (this unit has a 75F rating).			

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