

WITHDRAWAL OF AFFF FIRE EXTINGUISHERS

Introduction

An announcement has been made about the banning of Aqueous Film Forming Foam (AFFF) fire extinguishers and in this Bulletin, we want to give you more information about what this means in practice.

What are AFFF fire extinguishers?

There are various types of fire extinguisher with each designed to deal with putting fires out.



The fire triangle above illustrates the conditions required for a fire to break out and be sustained.

In basic terms, fire extinguishers are designed to act on one or more of the elements with the intention of eliminating the conditions that caused the fire to begin in the first place – and to stop it developing further.

In the UK, fires are allocated a classification¹:

- Class A – Combustible materials like solids (eg, wood, paper, plastic, furniture and textiles)
- Class B – Flammable liquids (such as petrol, oil, paint, diesel, turpentine, paraffin and paint)
- Class C – Flammable gases (eg, propane, butane, methane and hydrogen)

¹ For more information, see: <https://firerisk.co.uk/guide-to-classes-of-fire-from-a-to-f-in-the-uk/>

- Class D – Combustible metals (including magnesium, aluminium, lithium, titanium and potassium)
- Electrical – ('Class E' is not used) this involves fires in electrical equipment
- Class F – Cooking oils.

AFFF extinguishers can only be used to suppress Class B flammable liquid fires or fires involving combustible materials (Class A).

They should not be used in other types of fire in the same way that Water based Fire Extinguishers should only be used on Class A fires (combustible materials).

The importance of risk assessment and fire precautions

It is vitally important that reps and members are mindful that there must be adequate fire precautions where they work.

In Britain² there is legislation in place that not only requires a responsible person or duty holder to be identified in all non-domestic premises but also that risk assessments must be carried out and fire precautions implemented, managed and reviewed.

Fire extinguishers are a part of those arrangements but should only ever be used when a person has been adequately trained in their use.

Far more important is that people are able to leave the building or location of the fire in accordance with a well thought out emergency evacuation plan whilst the Fire Brigade is summoned.

Why are AFFF extinguishers being banned?

Per- and polyfluoroalkyl substances (PFAS) are known as 'forever chemicals' and are a class of thousands of synthetic chemicals that have a wide range of industrial, professional and consumer uses.

However, a majority of PFAS are known not to break down in the environment. Some PFAS are also known to 'bioaccumulate' in people, animals and plants and are linked to a range of health problems including kidney and testicular cancers, thyroid disease, ulcerative colitis, high cholesterol and pregnancy-induced hypertension.³

The reason for the ban is because many AFFF extinguishers contain PFOA⁴ (perfluorooctanoic acid, one of the PFAS substances), a chemical in the fire fighting foam also known as C8.⁵

This is why C8 has been gradually phased out since 2015 but from the start of July 2025 is now totally banned in the UK and across Europe.

² England and Wales the Fire Safety Order 2005 and the Fire (Scotland) Act 2005 (along with the Fire Safety (Scotland) Regulations 2006)

³ Senior Lawyer Aonghus Heately writing in "PFAS Regulation in the UK and European Union: August 2025 Overview" at: <https://www.fieldfisher.com/en/insights/pfas-uk-regulatory-snapshot>

⁴ See: <https://www.chsg.co.uk/chemicals-used-in-af-ff-firefighting-foam-banned-from-july-2025/>

⁵ See previous note for source

Does this mean the end of AFFF? There is another type of chemical called C6 which contains PFOS (Perfluorooctane sulfonic acid) that is less harmful but is also being phased out. PFOS can be found in fluorotelomer-based fire extinguishers. Over the last ten years, manufacturers have replaced C8 based fire fighting foam with C6 but according to the British Safety Council developments are already taking place to eliminate this chemical as well.⁶

How can I tell the difference if there is a AFFF fire extinguisher where I work?

Reps are likely to find that their employer's appointed Fire Safety Advisors/Contractors have already removed the C8 containing AFFF extinguishers, assuming that there were any present in the first place.

If the event that you find one, perhaps on an inspection in your workplace, you could check them by adopting the method⁷ recommended by the UK's Construction Health & Safety Group (CHSG). This involves:

1. Check the Label & Product Information

- Look for AFFF or fluorinated foam on the label.
- Check for PFOA, PFOS, or C8 in the listed ingredients.
- Some older labels may say "long-chain fluorotelomer", which likely indicates C8.

2. Look at the Manufacturing Date

- If the extinguisher was manufactured before 2015, it may contain C8, as these were widely used then.
- After 2015, many manufacturers switched to C6 (short-chain) foams, which have lower PFAS⁸ levels.

3. Manufacturer's Safety Data Sheet (SDS)

- Check the SDS or technical specifications for mentions of PFOA, PFOS, or perfluorinated compounds.
- If unsure, contact the manufacturer for confirmation.

If you find a C8 filled AFFF extinguisher, you should report it to your manager, explaining your concern and requesting that it is replaced.

⁶ See: <https://www.britsafe.org/safety-management/2025/the-c8-foam-ban-explained-what-it-means-for-you>

⁷ See note 4.

⁸ PFAS, or per- and polyfluoroalkyl substances, are a large group of man-made chemicals and included in the group are PFOA and PFOS.

Reps' Action

The action that we are recommending is that you check any AFFF extinguishers as described above.

Acknowledgements and further reading

In producing this Reps Bulletin, we wish to acknowledge the use of the online material that appears in the footnotes which came from the following organisations:

- Fire Risk Consultancy Services
- The British Safety Council
- The Construction Health & Safety Group
- Lawyer Aonghus Heatly from Fieldfisher Chambers writing in "PFAS Regulation in the UK and European Union: August 2025 Overview"