

A straightforward guide to the new EU & IMO firefighting foam regulations for the offshore and marine sectors and SEVESO III/COMAH sites

foamtesting.com firefightingfoam.com

At Oil Technics Fire Fighting Products, we've been manufacturing and selling firefighting foams for over 30 years. We have customers all over the world and specialise in foams for high hazard areas such as offshore oil and gas installations, tank farms, marine vessels and SEVESO III/COMAH sites.

We manufacture and sell high purity AFFF-C6 foams which meet all current and draft regulations. There is a ten-year transition period before these high hazard sites are required to adopt a PFAS free type of foam, such as a fluorine free foam, so there is no immediate safety, regulatory or commercial imperative to do so. We also manufacture and sell fluorine free foams.

We believe in using the right foam in the right place. The safety of personnel and plant are paramount, but navigating through a sea of legislation from numerous agencies is often confusing. For this reason, we've produced this straightforward guide to assist you in making an informed decision.

Whether you need a fluorine free foam or a C6 AFFF foam, we can supply it.

- Q1. Can I still use a C6 AFFF firefighting foam?
- Q2. Where are we with the proposed EU/ECHA legislation?
- Q3. My sector has a long transition period: should I transition to a fluorine free foam now?
- Q4. Are there sectors where fluorine free foams are the preferred option?
- Q5. What about offshore installations and shipping?
- Q6. What about SEVESO III and COMAH sites?
- Q7. Can I still use a C8 foam?
- Q8. How can I ensure that I don't have any C8 residues contaminating my foam?
- Q9. What about the new IMO regulations?
- Q10. Where can I find out more?



Can I still use a C6 AFFF firefighting foam?

The short answer is yes. UK and EU regulations allow the continued use of C6 foams provided it meets the current ECHA and UK POPs regulations for unintentional trace contaminants (UTC) for PFOA, PFOS and PFHxS.

UTC quantities can not exceed the figures below:

Substance	EU limits*	UK limits*
PFOA, its salts	1ppm	25ppb
PF0A related substances	10ppm	1000ppb
PFOS, its salts	25ppb	10nnm
PF0S related substances	1000ppb 10ppm	
PFHxS, its salts	25ppb	100ppb
PFHxS related substances	1000ppb	τοομμο

*ppm = parts per million; ppb = parts per billion

Oil Technics' C6 foams have been tested and shown to comply with these regulations and fall well within the limits.

We specialise in AFFF foams for offshore oil and gas platforms, the marine sector, tank farms and SEVESO III/COMAH sites. In these industries, there is a 10-year period before fluorine free foams need to be adopted: find out more on page 3.



Where are we with the proposed EU/ECHA legislation?

ECHA are expected to publish their final regulations soon, and it is anticipated this would then come into force 12 to 18 months later.

At this point, different sectors have different transition periods before they are required to move away from firefighting foams which incorporate PFAS. Where the risk to human life and assets is high, the transition period is considerably longer than low risk environments. These transition periods are laid out below. It is only at the conclusion of this period that a change to fluorine free, or PFAS free foam, becomes mandatory.

It should be noted that foam technology is advancing rapidly, so it may be advisable to wait for new generation foams to be in place before transitioning, especially given the safety, commercial and operational considerations involved.

Sector	Transition period (likely to be 12-18 months after EIF)
Seveso III sites (e.g. refineries, chemical plants, bulk flammable liquid storage sites, etc)	10 years
Offshore Oil & Gas installations	10 years
Municipal Fire Brigades: responding to Seveso III sites	10 years
Launch facilities for Space Industry	10 years
Naval vessels	10 years
Civil ships – already in service	10 years
Civil ships – new builds	5 years
Portable fire extinguishers (placing on the market/selling - except alcohol resistant foam fire extinguishers)	12 months
Portable fire extinguishers: alcohol resistant foam (placing on the market/selling)	18 months
All other sectors	5 years unless specified

The transition dates below have already been confirmed under September 2024 EU PFHxA regulation:

Sector	Date transition required
Training and testing (except all releases are contained)	10 th April 2026
Municipal Fire Brigades (provided not responding to Seveso III sites)	10 th April 2026
Civil Aviation including civilian airports	10 th October 2029



My sector has a long transition period: should I transition to a fluorine free foam now?

The short answer is no. Longer transition periods have been put in place because the current generation of fluorine free foams mostly have significant performance deficits compared to C6 foams. The transition periods have been agreed to allow firefighting foam manufacturers time to develop new foams which offer the same level of effectiveness when it comes to extinguishing fires.

As well as often poorer extinguishment characteristics if used with seawater, non-aspirated delivery and at low temperatures - such as on offshore installations and shipping - switching to fluorine free foam also gives rise to commercial and operational issues which need to be resolved. A straight substitution of fluorine free foam for C6 is generally not possible. These issues often include additional expense, increased strorage facilities due to increased foam concentrate usage, potential shut downs due to equipment change, proportioning issues, clean out complexity and related costs, possible replacement of discharge devices, and foam compatibility issues as well as application concerns.

We can provide further information on the potential issues involved when switching to fluorine free foams, or you can find an independent assessment of these considerations here.

Q4

Are there sectors where fluorine free foams are the preferred option?

There are some sectors where fluorine free foams are preferred and perfectly adequate in practice. For example, fluorine free foams are suitable for most fire extinguishers and fire fighter training exercises, where the fire risk to be contained tends to be small and manageable. If your sector has a transition period of over three years, it may be better to hold off until the regulations enforce you to do so and the technology behind fluorine free foams has developed further.



What about offshore installations and shipping?

Currently, we are not aware of any fluorine free foam which performs adequately with forceful application, using seawater, in high winds and at low temperatures of -18°C. Some international standards specify testing with potable water, so it is important to check performance in the operational conditions and fuels in place, as using fluorine free foam may compromise safety. Some territories never experience such low temperatures and so this is not a concern - but fluorine free foams may still not perform adequately due to viscosity issues when used with forceful applications and seawater.

Oil Technics' C6 AFFF-LF foams are formulated and well proven for use in extreme offshore conditions. They function effectively at -18°C, in high winds and with seawater. We also offer IMO approved foams for shipping.



What about SEVESO III and COMAH sites?

Given the complexities involved in any SEVESO III or COMAH site, a 10-year transition period is proposed. Individual risk and commercial assessments would be needed before any transition to a fluorine free foam, as the changeover is likely to involve additional foam storage and changes to the delivery system to allow for potentially slower extinguishment times, higher concentrations, viscosity issues and the necessity for gentle application.

As fluorine free foams are generally incompatible with each other – unlike AFFFs - and each may require a specific delivery system, it may be wiser to wait until nearer the end of the transition period.



Can I still use a C8 foam?

THE STATE OF THE S

No: legacy C8 foams are prohibited under the Stockholm Convention and ceased manufacture back in 2015. They break down into components such as PFOA and potentially PFOS, which are both POP listed.

If purchased before 2015, your foam may be prohibited C8 foam, but if purchased after that date there's very little chance that it's a C8 foam. There is, however, a possibility that your foam tanks still contain residues of C8 foam, which could contaminate your entire foam stock above the permitted POPs levels.

If in doubt submit a sample of your foam for TOP Assay testing: further information can be seen on on page 7.



How can I ensure that I don't have any C8 residues contaminating my foam?

It's advisable to have a sample of your foam tested: we can facilitate this at <u>foamtesting.com</u>.

If your sample contains C8 foam residues, we can suggest a tank cleaning protocol. This requires that you dispose of the contaminated foam according to local regulations, clean the tank with a specialised chemical, rinse thoroughly twice with hot water and replace the foam with a compliant C6 AFFF foam or fluorine free foam as appropriate.

Using this protocol, we carried out a representative small scale tank cleaning exercise using Oil Technics' solvent cleaner Universal Tank Cleaner. After cleaning, TOP Assay results showed levels of PFOA, PFOS, PFHxS and total PFAS reduced to less than 20ppb, below detectable levels of the testing equipment and far below the EU and UK's allowable levels.



What about the new IMO regulations?

The recently issued IMO MSC 532(107) resolution applies to commercial vessels.

Clause 11.2.2 states that the 'use or storage of extinguishing media containing PFOS shall be prohibited.' This includes legacy C8 foams. Legacy PFOS is also prohibited under the Stockholm Convention as a listed Persistent Organic Pollutant (POP).

This resolution applies to new vessels from 1st January 2026. For existing vessels, C8 foams need to be replaced at their next survey.

The new EU/ECHA regulations also apply to both commercial and naval vessels.

Q10

Where can I find out more?

Our website - <u>firefightingfoam.com</u> - contains a great deal of information on upcoming legislation and the potential impact of this.

A series of videos we produced with internationally renowned consultant Mike Willson can be watched here. You can find out more about our foam testing services at foamtesting.com.

You can also get in touch by email at info@firefightingfoam.com or by telephone on +44 (0) 1561 361515.



How can we help?

There are several products and services available from OTL Group companies that can help you navigate the regulatory landscape to ensure that your foam meets the appropriate international regulations.



PFAS TOP Assay testing for C8 residues

Our ISO 17025 certified foam test laboratory can facilitate testing your foam for C8 residues.

Foam concentrates and discharge water from cleaning foam systems should be tested to ensure PFAS levels comply with local POPs regulations using TOP Assay testing.

You can arrange testing via our <u>foamtesting.com</u> website where you will find a detailed guide to preparing your samples for shipment.



Tank Cleaning protocol to remove C8 residues

Should testing show that your foam does contain C8 residues, or your foam storage tank and associated pipework would benefit from cleaning, we recommend Universal Tank Cleaner from our sister company Oiltechnics.com.

They can also provide information on a suggested cleaning protocol which involves safely removing and disposing of the existing foam according to local environmental regulations, using Universal Tank Cleaner to clean the tank and then rinsing and flushing the pipework with warm water twice.

It will become illegal to use C8 foams for firefighting on marine vessels from 1st January 2026. Legacy C8 foams are prohibited under the Stockholm Convention, ceasing manufacture in 2015, so it is advisable to have your foam tested before replacing with a new foam.

Find out more by getting in touch by email at info@oiltechnics.com or by telephone on +44 (0) 1561 361515.





Technical advice

Our highly qualified and experienced technical team are on hand if you have something you wish to discuss. You can email them at **technical@firefightingfoam.com**.



Foam concentrates

We manufacture and supply a range of foams which meets the new legislation and can be used during the relevant transition periods.

You'll find a brief summary below, or you can access information on individual foams at **firefightingfoam.com**.









Range	Aberdeen Foam Product	Fuels	operational temperature	Performance accreditations
C6-AFFF	1% AFFF-LF	Hydrocarbons	-18°C	• UL162 • IMO MSC.1/Circ.1312 • EN1568-3: 2018 (1+A/1+A) • ICAO Level B
	3% AFFF-LF	Hydrocarbons	-18°C	• IMO MSC.1/Circ.1312 • ICAO Level B • EN1568-3: 2018 (1+A/1+A)
	1% AFFF	Hydrocarbons	0°C	• UL162 • IMO MSC.1/Circ.1312 • EN1568-3: 2018 (1+A/1+A) • ICAO Level B
	3% AFFF	Hydrocarbons	2°C	• EN1568-3: 2018 (1A/1A) • ICAO Level B
	1x1% AR-AFFF	Hydrocarbons & Polar Solvents	-8°C	 IMO MSC.1/Circ.1312 EN1568-3: 2008 (1B/1B) EN1568-4: 2008 (1B/1B - IsoPropyl Alcohol) EN1568-4: 2008 (1C/1C - Acetone)
	1x3% AR-AFFF	Hydrocarbons & Polar Solvents	-7°C	 EN1568-3: 2008 (1B/1B) EN1568-4: 2008 (1B/1B - IsoPropyl Alcohol) EN1568-4: 2008 (1B/1C - Acetone)
	3x3% AR-AFFF	Hydrocarbons & Polar Solvents	-5°C	EN1568-3: 2018 (1A - Fresh water)EN1568-4: 2018 (1A - Fresh water)
F3	1% F3	Hydrocarbons	-13°C	 EN1568-3: 2018 (1B/3C) EN1568-3: 2018 (1+A/1+A - Diesel) EN1568-1: 2018 (Fresh water) EN1568-2: 2018 (Fresh water)
	3% F3	Hydrocarbons	0°C	• EN1568-3: 2018 (1B - Fresh water)
Training & Induction	1% TF	Training Foam - not for use in firefighting		
	3% TF	Training Foam - not for use in firefighting		
	Induction Foam	Induction Calibration foam - not for use in firefighting		



Universal Tank Cleaner

Solvent Cleaner for PFAS residue cleaning in foam tanks & equipment



Oil Technics (Fire Fighting Products) Ltd.

Linton Business Park, Gourdon, Aberdeenshire, Scotland UK DD10 ONH T: +44 (0) 1561 361515 E: info@firefightingfoam.com info@foamtesting.com firefightingfoam.com foamtesting.com









